McGraw-Hill Publication

### November, 1927 The Business Magazine of the Radio Industry

### GENERAL ELECTRIC BATTERY CHARGERS Tungars"

Are selling faster than ever under the Three Punch Plan

Advertised for eleven years More than a million in use

Guaranteed by General Electric

Get full information today



Tungar—a registered trademark—is found only on the genuine. Look for it on the name plate.

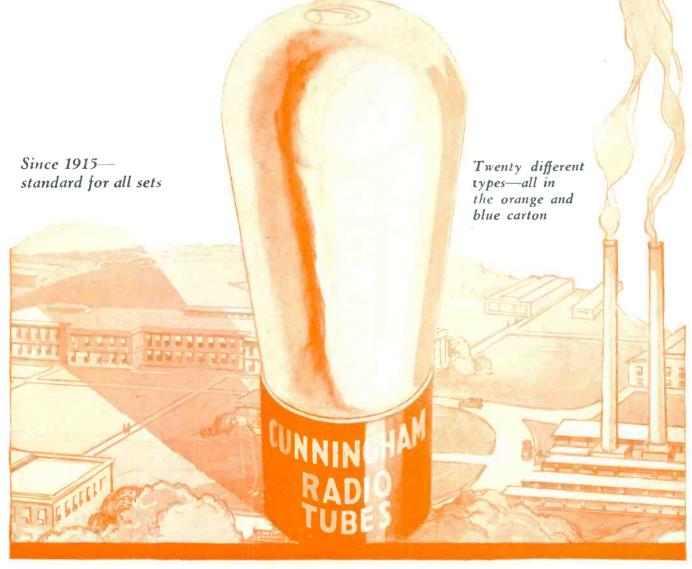
WRITE TO Merchandise Department General Electric Company Bridgeport, Connecticut

GENERAL ELECTRIC

### Cunningham RADIO TUBES

are designed and built to combine all the qualities which 1927 broadcast reception demands

E. T. CUNNINGHAM, INC.
New York Chicago San Francisco



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### 

### Distributors Are Urging Their Dealers to Read "Radio Retailing"

ANY times during the past few months prominent distributors of radio apparatus have urged their dealers to subscribe to, and read, *Radio Retailing*. It is a graceful tribute to the value of this magazine in aiding the radio trade "to sell more radio, more profitably."

Reproduced above is a bulletin recently sent to its entire list of dealers by the Braid Electric Company, Nashville, Tenn., urging them to subscribe to Radio Retailing. It is typical of many similar bulletins which have been sent to dealers by radio distributors. In many instances, also, distributors have paid for subscriptions for groups of their dealers whom they think would benefit by reading Radio Retailing, and distributors have also subscribed for their entire staff of salesmen.

Member Audit Bureau of Circulations

Circulation of This Issue, 30,000 Copies

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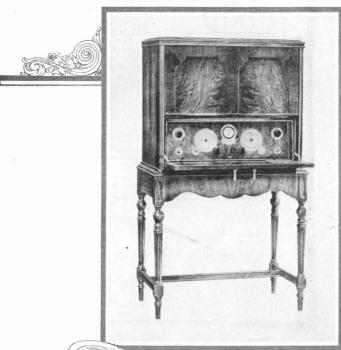
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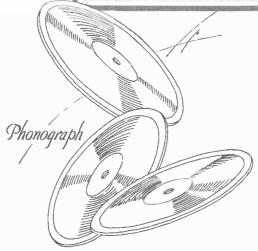
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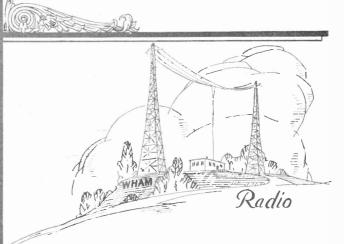
WASHINGTON, National Press Bldg. CHICAGO, 7 South Dearborn St. PHILADELPBIA, 1600 Arch St. CLEVELAND, Guardian Bldg. ST. LOUIS, Bell Telephone Bldg. SAN FRANCISCO, 833 Mission Street LONDON, E. C. 8 Bouverle St.

## A.C. Receivers that play Phonograph Records, too





The Stromberg-Carlson Hour
Tuesday Evenings 8 to 9
Eastern Standard Time
through
WJZ, WBZ-WBZA, KDKA, KYW, WJR,
WBAL and the new StrombergCarlson Station WHAM



POPULAR feature of the new Stromberg-Carlson Receivers is their ability to play phonograph records through the audio system of the Receiver itself, as well as to receive broadcasting—a telling sales argument.

Another feature is the operation entirely direct from A. C. lighting supply without recourse to any "indirect" makeshifts; batteries, chargers, so called dry rectifiers or dry "C" batteries—they are fool-proof.

Besides these features there is the new Stromberg-Carlson financing plan which makes the purchase of a Receiver easy—helpful both to dealer and customer.

A. C. Stromberg-Carlsons range in price: East of Rockies, Radio Sets, equipped with phonograph input jack, \$295 to \$755—Radio and Phonograph Combined \$1245; Rockies and West \$315 to \$1299; Canada \$390 to \$1650.

STROMBERG-CARLSON TELEPHONE MFG. Co., ROCHESTER, N.Y.

### Stromberg-Carlson

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





cabinet design of figured walnut, with rich overlay of fiddle-back mahogany. Built-in coupler, giving finest tone quality. Without tubes..... \$460.00

### Where did you ever see more attractive radio cabinets?



E-45-60
6 tubes. Operated from light socket. Has current supply equipment eliminating all batteries. Single control. Very selective. Built-in speaker. Set is completely shielded. Splendedoriginal

### The Sign of the Designated Federal Retailer

This sign, displayed by all Federal designated retailers, will swing you into line for the profits yielded by this desirable and unusual combination of Federal advantages.

Institutional stability

Sets A.C. and battery operated

Price range \$100 to \$1,250 (Higher in Canada) The only Ortho-sonic radio

VDistinctive beauty of cabinet

\* \* \*

Advertised nationally

The enticing beauty of Federal Radio Cabinets is as difficult to resist as the incomparably rich and lifelike *tones* reproduced by Federal's patented all-metal, multi-shielded Ortho-sonic circuit.

The designs are varied, ranging from simplicity to elegance. But all are distinctive and characterized by such beauty and refinement of woodwork and finish as hitherto found only in fine furniture. Federal sets are the product of pioneer radio engineers collaborating with some of the best known designers and furniture craftsmen in the industry. No other sets are more sure to gain attention, create desire and produce sales results.

Here is truly distinctive radio—radio with something definite to back up its claims for tonal superiority—the Ortho-sonic method of sound reproduction. Here is radio with every qualification, including wide range of models and prices, for the building of a permanently flourshing radio business.

Every day you put off is costing you money. Write today to your wholesaler for details of the liberal Federal Designation; or write us.

### Federal Radio Corporation Buffalo, N. Y.

(Division of the Federal Telephone Mfg. Corp.)

Operating broadcast station WGR at Buffalo
Federal Ortho-sonic Radio, Ltd.
Bridgeburg, Ont.



### F-5 Console

Specially designed and finished to match F-10. Ample space for all batteries or current supply equipment. Equipped with rubber tired casters.......\$50.00

### ORTHO-SONIC\*

Licensed under patents owned and/or controlled by Radio Corporation of America and in Canada by Canadian Radio Patents, Ltd.

### Federal Radio

\*Federal's fundamental exclusive development making possible Ortho-sonic reproduction is patented under U. S. Letters Patent No. 1,582,470.

# Why Not?

—eliminate returns, cut servicing to a minimum, assure customers the utmost satisfaction and make real profits?

All this and more the complete Grebe Line will do for you.

Get the facts—in Booklet RR

A. H. Grebe & Company, Inc., 109 West 57th St., New York City Factory: Richmond Hill, N. Y. Western Branch:

443 So. San Pedro St., Los Angeles, Cal.

Makers of quality radio since 1909



Grebe Natural Speaker



Grebe Socket Power

Type 671-B-"B" and 
"C" Supply {less tube}

50













### THE New FRESHMAN

## RADIO

Freshman EQUAPHASE

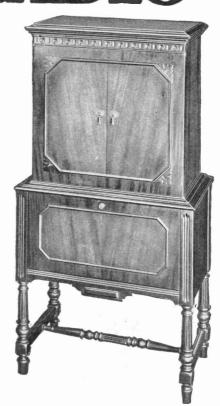
The artistic chest type design, illustrated here, is panelled entirely of finely selected, genuine mahogany. It is one of the most popular of the FRESHMAN EQUAPHASE. It is Model G-4. The price is

\$225 Res

COM PLETE
Ready to Operate

A Freshman development—licensed under patents; R C A—General Electric Co.—Westinghouse Electric & Mfg. Co. and American Tel. & Tel. Co.

THE LIGHT SOCKET
SUPPLIES
ALL POWER



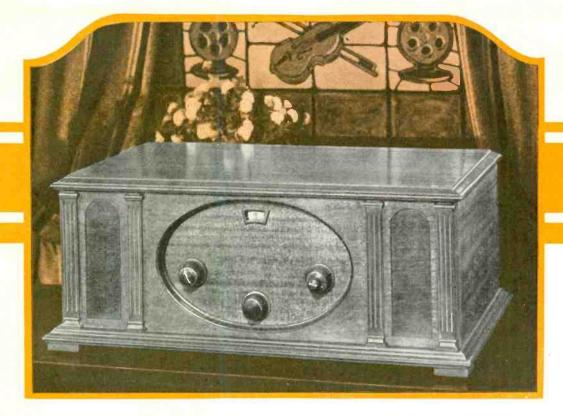
### Always Ready .. Ahvays Right

acids trouble batteries water excuses makeshifts

Sold to Authorized Freshman Dealers Only

CHAS. FRESHMAN, Inc., Freshman Building, New York
CHICAGO
LOS ANGELES

The Radio of Superior Performance



### Meet the Demand for Quality at a Reasonable Price

Quality receivers at reasonable prices are today building greater volume and more profits for thousands of King dealers. That's why live, alert radio dealers everywhere are signing up with King.

Every model in the complete line of King receivers gives more dollar for dollar value than has ever been offered before. Naturally, King dealers

are selling more sets. They meet the great demand for a quality radio reasonably priced.

A King franchise will enable you to cash in on this great volume business. Write today for the name of the King distributor in your territory.

### The Crusader

A popular six tube completely shielded table model with single dial station selector. Handsome cabinet, two tone finish. Unusually attractive panel to match cabinet. Price without accessories, \$115.00.

The complete King line contains table, console and highboy models, priced from \$70.00 to \$210.00.

King Manufacturing Corporation, Buffalo, New York



### ond great wave

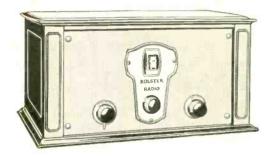
Kolster 6-H - - \$295.00

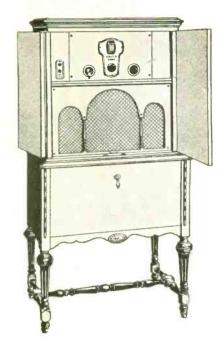
With Power Cone Reproducer: Tubes and "A" Supply extra

Kolster 6-F - \$160.00

For Electric Operation

Kolster 6-D - \$89.50 For Battery Operation





RADIO for ELECTRIC and BATTERY OPERATION

The radio market is headed for the second great wave of prosperity, which is a selling wave. A selling wave based on the retailer showing more interest in the consumer's preferences and desires!

The public is more interested in radio today than ever it was, but intelligent selling and intelligent service are required. The public is learning value per dollar spent and discovering it in Kolster.

The retailer who will go to twenty homes and ask whether the family is interested in improved radio reception, will pave the way to a demonstration of Kolster, and will learn the meaning of the second wave of radio prosperity in his locality.

Try it! The fact that you are looked on as the local expert on radio is worth money to you.

\* \* \* \*

If you wish to join the regiment of Kolster dealers who are reporting bigger and bigger sales, sign the coupon below. This may give you the right to display the Authorized Kolster Dealer Sign.



DEALER

FEDERAL-BRANDES, Inc.

200 MT. PLEASANT AVENUE

NEWARK, N. J.

Please let me know if there is room for another Kolster dealer in my locality.

City.....State.

### THE COUNTERPHASE [ELECTRIC]



These new additions to the B-T Line are genuine A.C. sets operating direct from the A.C. Line without batteries or battery substitutes.



All B-T "Electric" sets use the real A.C. tubes, (Radio-tron or Cunningham) which our test thru many months, proved dependable and



A wonderful, improved audio output system, with 210 tube. Phonograph pick-up connection. Everything controlled from panel switch.



Counterphase



A console design of superior attractions, Same chassis as the 8-13, using genuine A.C. tubes. No batteries, chargers or eliminators to buy. Good enough for finest home in America.

Price, less tubes \$365.

8-13 is illustrated with No. 14 Table for set and A-B-C power pack. Also includes grille and compartment for speaker. Price \$50.

### Order Now

B-T A.C. Receivers have been thoroughly tested during many months. B-T engineering genius is behind

them,—as well as the combined experience of the world's best, largest and most experienced tube laboratories.



We sincerely believe there is no A.C. set that will equal the "Electric" Counterphase.

### The demand will continue

B-T Products are never affected by "unloading" sales. The demand for these

sets will continue and increase.

Those who know real radio results will find the 6-38, on the left, radio's greatest A.C. value.

Four tuned stages, 210 audio output system,-positively wonderful efficiency. Price, less tubes, \$230.00.



**BREMER-TULLY** 

Bremer-Tully	Mfg.	Co.,	520	S.	Canal	St.,	Chi	icago,	III.
Send full info	rmati	on ai	nd B-	T	franchi	se p	Ian	auick	to:

M'F'G. CO.



### PERRYMAN RADIO TUBES



### Build Tube Sales—on a Firm Foundation PERRYMAN DEALERS DO

### They have an excellent tube to sell

No tube made by anyone, anywhere, at any price gives better performance than a Perryman Tube

### They have a complete line to sell

There is a Perryman Tube for every radio purpose

### They control sales, repeat business and good will

All your competitors do not have Perryman tubes and you do not have to cut the price to sell them

### They make more profit per sale

Generous dealer discounts give more profit on each sale

### They have no replacement worries

We guarantee complete satisfaction at our expense—not theirs

In short—selling Perryman Radio Tubes is a griefless proposition

### PERRYMAN ELECTRIC COMPANY, Inc.

33 West 60th Street, New York PLANT: NORTH BERGEN, N. J.









### Power Unit builders are keen for these APPROVED CONDENSER BLOCKS



### MICADON won't fail you

Sales of "The Standard Fixed Condenser of Radio" are just as dependable as Micadon itself. In its new shape and moulded Bakelite case Micadon finds ready acceptance with ameteurs who build with care. It is compact in size, neat in appearance and, as always, highly efficient in performance. Terminals are adaptable to either screwed or soldered connections.

All Standard Capacities from .00005 to .02 mfd.

List Prices 45c to \$1.50

When the experienced amateur thinks of condensers the name Dubilier is uppermost in his mind. Since "wireless" days Dubilier condensers have been used and recommended by radio authorities in the development of new circuits and approved as standard in their published articles. Light-socket power units are swiftly "coming into their own." More and more experimenters are replacing batteries with power supplies of their own construction. Condenser blocks for these units must be rugged and dependable, with a factor of safety that means something. Dubilier makes just such condensers and the amateur knows it. Why not sell him what he wants?

Complete Instructions Packed With Each Unit



### What a Difference Grid Leaks Can Make!

METALEAR is a little thing to look at but a big thing to make. Few, if any, manufacturers take the precautions Dubilier does to insure extreme accuracy of ratings and noiseless performance. The set owner appreciates the difference in grid leaks and knows he can depend on Metaleak. See that your supply is adequate to meet the reliable demand for this small but important radio part.

List Prices

20,000 ohms to 200,000 ohms 75c 2 meg. ohms to 5 meg. ohms 50c

DUBILIER CONDENSER CORPORATION

4377 Bronx Blvd., New York





More dealers than you can count are showing off their receivers to best advantage with this unique aerial, and then selling them at good profit with every set. Others are including the Dubilier Light Socket Aerial in the purchase price

of equipped sets as an added inducement. Have you tried out either of these plans? If you're not equipped to collect on this nationally-advertised aerial, phone your jobber to-day for a trial supply. Packed individually in attractive counter display cartons of ten. They are available through any good radio distributor.



Dubilier LIGHT-SOCKET AERIAL





### The better you know radio the more you appreciate FADA

THE same millions who have heard ROXY and RESER on the air for years are now reading their public endorsements of Fada. These famous pioneers of broadcasting, knowing radio as only they could know it, are both satisfied owners of Fada Console 8's and enthusiastic boosters of Fada Harmonated

Reception. We are proud of these testimonials and of the public response to them, as reflected in Fada retail sales.

In a few localities there are still opportunities for Fada distributors or dealers. Yours may be among them. Wire or write for details on the most profitable radio franchise in America.

### F.A.D. ANDREA, Inc., LONG ISLAND CITY, NEW YORK

Licensed under Hazeltine, Latour, R. C. A., Gen. Elec. Co., Westinghouse Elec. & Mfg. Co., Amer. Tel. & Tel. Co., patents, only for Radio Amateur, Experimental and Broadcast Recention.

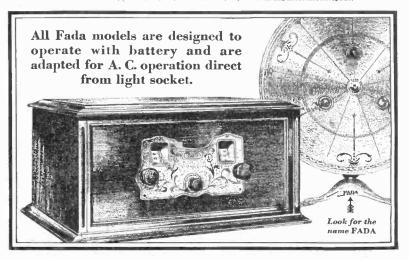
### The Fada Special

6tube-3 radio frequency stages-detector-2 audio amplification stages. Shielded. Equalized amplification.

\$95

There are five Fada models—all NEUTRODYNE receivers—priced from \$95 to \$400.

Prices slightly higher West of the Rockies.



The Fada 17" Cone

17" free floating cone. Permanent Parkerized magnet. Antique bronze finished trifoot.

\$25



17 inch \$30.00 List Slightly higher west the Mississippl.

The Pal line includes table, wall and pedestal models from \$12.50 upward. All prices are slightly higher west of the Mississippi.

## off to dealers! We pay the freight! Send for decor LIBERI

The Palcone Liberty is unsurpassed in excellence of conquality of tone reproduction and decorative struction, beauty.

### **Exclusive Service Feature**

Every Pal dealer is supplied with a stock of repair parts, without cost to him, and is authorized to replace any part from any Pal speaker which is unsatisfactory, regardless of the cause of the trouble.

You, as a Pal dealer, are thereby saved the annoyance of returning speakers to the factory-bothersome letterwriting-fretful customers!

### PAL RADIO COMPANY, Inc.

1200-08 Summit Ave., Jersey City, N. J.

### Silent Magic



Here is the Eveready Layerbilt "B" Battery No. 486, Eveready's longest-lasting provider of Battery Power.

TURN a radio dial, and presto! the home becomes a theater, a concert hall, a lecture room, a cabaret, a church, or whatever your customers will. Turn the dial and their attentive ears do the rest. That is all there is to this magic of radio.

Or almost all. If a radio set is to work at its very best, attracting no attention to itself, creating the illusion that can be so convincing, your customers should pay a little attention to the kind of power they use. There is but one direction, a simple one—use Battery Power. Only such power is steady, uniform, silent. It is called by scientists pure Direct Current. Any other kind of current in a radio





### Radio is better with Battery Power

set may put a hum into the purest note of a flute, a scratch into the song of the greatest singer, a rattle into the voice of any orator.

Don't let your customers tamper with tone. Beware of interfering with illusion. Power that reveals its presence by its noise is like a magician's assistant who gives the trick away. Recommend batteries — sell the Eveready Layerbilt "B" Battery No. 486, the remarkable battery whose exclusive, patented construction makes it last longest. It offers users the gift of

convenience, a gift that they will appreciate almost as much as they will cherish the perfection of reception that only Battery Power makes possible.

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 WOC-Davenport Minneapolis

WEAF-New York WJAR-Providence WEEL-Boston WFI-Philadelphia WGR-Buffalo WCAE-Pittsburgh WSAI-Cincinnati WTAM-Cleveland WWJ-Detroit WGN-Chicago

rk WOC-Davenport
rce WCCO-{Minneapolis}
St. Paul
hia KSD-St. Louis
WDAF-Kansas City
WRC-Washington
ti WGY-Schenectady
nd WHAS-Louisville
WSM-Atlanta
WSM-Nashville
WMC-Memphis

Pacific Coast Stations—
9 P. M., Pacific Standard Time
KPO-KGO-San Francisco
KFOA-KOMO-Seattle
KGW-Portland

### YOUR MARK

PERMANENTLY placed right on your product—to identify you, to sell for you, to accumulate good will for you.

Novar Transfer Nameplates are doing that for many radio manufacturers and for hundreds of other manufacturers throughout the nation. These transfer nameplates in full color go on your product to stay—to bring repeat orders—the final link in all your advertising that keeps the customer you make.

INEXPENSIVE EASILY APPLIED DISTINCTIVE DURABLE

These transfer signs that now identify so many nationally known products are easily applied to wood, glass, metal and other substances. Made in any size, design, color and quantity.

### OVAR

Transfer Nameplates

Let us send you samples or a sketch to fit your product. No obligation.

Palm Fechteler & Co. 67 Fifth Avenue, New York

Largest Decalcomanie Manufacturing Organization in the World



Some of the Radio Manufacturers we serve:

> Sonora Columbia

> > Garod

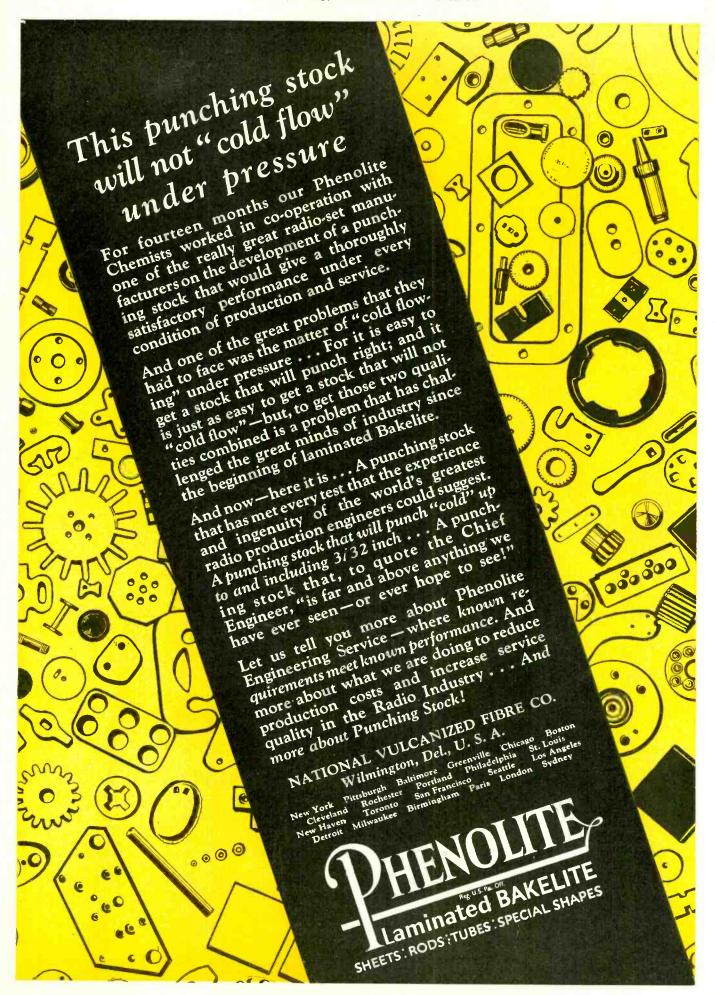
Freed-Eisemann

Federal Radio

Radio Corp. of America

All-American

Bosch



### Meet us at Jobbers' Convention, Detroit, in November

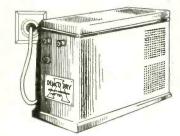
### reams Have Come True!

Aladdin has again rubbed his magic lamp of science and brought into being the long dreamed of "A" battery eliminator, doing away forever with the troublesome, charging, watering and acid-spilling storage batteries. The Demco Dry "A" stands forth as the ultimate realization of that dream. By the untiring efforts of one of the world's greatest radio laboratories comes the process which makes possible the construction of a dry, metallic rectifying element which is practically ever-lasting. Not a replaceable element guaranteed for a certain number of hours, but an element which makes possible the Demco dry "A" battery eliminator. This unit is designed and built to outlast the best radio set that the greatest engineers of the country have been able, so far, to design. It is hum-free, service-free and practically everlasting. Jobbers and Dealers who do not have our socket powers in stock will lose dollars, good will and prestige. Public opinion demands this type of socket power. Every customer who uses a Demco product sells his neighbor.

### DEMCO DRY "A" POWER UNIT

Contains no batteries, tubes, acids or disguised trickle chargers of any description. Guaranteed to deliver 2½ amperes filtered A supply free from any hum or distortion at 6 volts D.C. Automatically disconnects power supply from eliminator and A unit by operation of set switch. The rectifying element in this unit is of the permanent dry type. No replacements necessary—practically indestructible—permanent "A" power—will last a lifetime. time.

Can be had for 25, 30, 40, 50 and 60 cycles. Direct current models are also available. 4 volt models for sets using 199 tubes.



The country-wide acceptance of the Demco Socket Powers has far surpassed our fondest expectations. The wise men of the Radio Dealers and Jobbers have placed their commitments in sufficient quantities to meet the great demand for the ultimate in socket powers, knowing that the radio public will accept no substitute for these trouble-free, fool-proof socket powers.

Commitments will be filled in order received,

### ENDURING AS THE ROCK OF GIBRALTA'R—UNFAILING AS NIAGARA'S POWER

### **DEMCO LINE**

†\*Eureka Universal B Demco Automatic Dry Charger Eureka B

Eureka BC Dreadnaught

Demco A Eliminator

Demco A-B-C Master

Demco A-B-C De Luxe

Demco A-B-C De Luxe 4

\*Alternating or Direct Cur-

†All Frequencies

All our 25 cycle models are interchangeable on 25, 30, 40, 50 and 60 cycle A.C. current.

Write or Wire for Particulars Today-or mail coupon

**BATTERIES** TUBES **CARTRIDGES** ACIDS **PASTE** 

DOOLEY ELECTRICAL MFG. CO. WHEELING, WEST VIRGINIA

Manufacturers of

A-B-C SOCKET POWER UNITS

SCORET RECEIVEMENTS: CO	DOOLEY	ELECTRICAL	MFG.	CO.
-------------------------	--------	------------	------	-----

Wheeling, West Virginia

Send me address nearest Jobber [

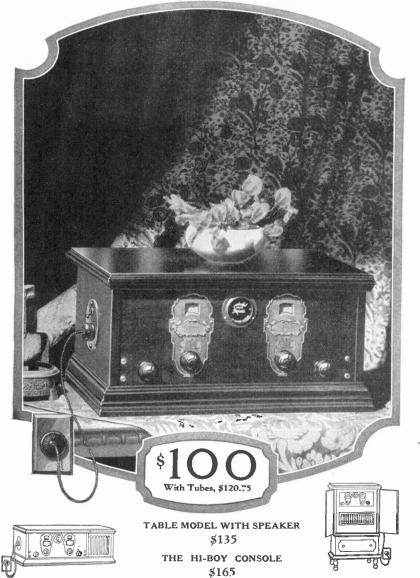
Send me information regarding Socket Powers.

Dealer ☐ Distributor

Address

State ....

### America's Lowest Priced



## Electric Radio!

TEINITE for 1927-28 offers the O oldest electric set at a price that simply eliminates competition. It has power in abundance. Rich, pure tone. The ability to pull in the far stations. Two table models, one with and one without speaker, and a smart hi-boy console, all in genuine solid Philippine mahogany, meets the whole range of public demand . . . that simplifies your stock problem! The only time-tested set available to you, it is also the simplest—completely self-contained - using standard tubes - with no outside attachments, no acids, no water! STEINITE will be backed by strong national advertising. The STEINITE franchise is too valuable—too vital—for you to lose—write for our proposition today!

NO Batteries Eliminators Acids Water or Attachments

## Stellite

STEINITE RADIO COMPANY
506 SOUTH WABASH AVE., CHICAGO

Licensed by R. C. A.—
only for Radio amateur, experimental and broadcast reception.



The STEINITE PROPOSITION is Ready—Write for it!

STEINITE offers a sound, well-rounded proposition to dealers. It presents the possibilities of a line that offers Electric Radio at a price that most people can afford. It has been put into a circular which you should have—write for it today! There is a STEINITE jobber in your territory, ready to serve you—his name will be sent on request.

### NOW A Mohawk Electric YOU CAN SELL FOR

And a complete line of Mohawk Console Electrics to sell for only \$72.00 more than Mohawk battery models

Electric radio! The radio public wants it. And Mohawk, Originator of One Dial Radio, is first to offer it at a price within reach of every purse.

Every Mohawk One Dial Radio is now available in an Electric model that you

can sell for \$72.00 more than the standard battery models. This means that the Navajo, the popular Mohawk table model, can be sold for the astounding price of \$139.50 (speaker additional). Other models to \$347.00.

The Mohawk Electric is not a makeshift. It is a real electric receiver, operated by AC tubes, complete and re dy to connect to the light socket, with nothing more to buy. Nor has performance been sacrificed. The convenience of AC operation has merely been added to the standard Mohawk features.

The quality of Mohawk Electric is not to be judged by its price. Just as Mohawk battery models are the greatest values in their field, for performance, Mohawk Electric can be matched against any Electric Receiver at any price.

With the Mohawk Electric at this

price Electric Radio ceases to be a freak product that can be sold only to wealthy customers. It becomes a reality that will bring you tremendous volume sales. It makes the Mohawk franchise even more valuable than it has been in the past. Wire for details!

MOHAWK CORPORATION of Illinois . . CHICAGO

Monawk Electrics	2	OF			
Pawnee Console Electric -	-	E	\$179.50		
Iroquois Console Electric -	-	-	\$202,00		
Hiawatha Console Electric		-	\$237.00		
Cortes Console Electric -	-	-	\$267.00		
Seminole Console Electric	-		\$347.00		
All Consoles complete with built-in					
Dwamonic Sheeber-nothing more to her					

This is what you get
for \$72.00

Mohawk Radio wired for AC operation extra over battery wired set. \$10.00

7 RCA or Cunningham AC Tubes
(4 No. 226 or 336 at \$3.00, \$12.00.
1 No. 171A or 371A, \$4.50.
1 No. 280 or 380, \$5.00)

An Approved Power Pack, furnishing all A, B and C power from the light socket





Radio Tube quality depends upon "vacuum." It is more important than any other factor. Certain slow, costly processes are required to create an almost perfect vacuum. All are employed in the manufacture of La Salle High-Vacuum Tubes. For instance, the liquid air and mercury vapor pump processes, and special scientific apparatus for heating the glass almost to the melting point . . . plus . . . the new discovery for creating even higher-vacuum by passing through the glass a high-frequency electric current of ten to twelve thousand volts. These methods explain the superiority in tone volume and richness secured through the use of La Salle High-Vacuum Radio Tubes.

### Bridge Construction

A Mica bridge separates the main support wires to which the grid, the plate and the filament are spot-welded at the correct distance. Rigidity is thus assured, also exact spacing of the grid to the filament and the grid to the plate. Such construction is added assurance for the uniformity in results obtained with La Salle Tubes. It also makes short-circuiting virtually impossible and eliminates microphonic noises insofar as they affect reception.

### Jobbers and Dealers

Jobbers are being selected in each distributing center according to the class of trade served. Only one jobber, serving one class of trade, will be appointed in any distributing center. This policy assures jobbers absolute protection and more than justifies the

01-A

All

Popular

Sizes

jobber concentrating his sales efforts back of the La Salle High-Vacuum Radio Tube. All dealer orders obtained by us are filled through the jobber. Jobbers and dealers are urged to write at once for our sales proposition, prices, etc.

Manufacturers

### LA SALLE RADIO CORPORATION

149 West Austin Avenue, Chicago, Illinois

Sole Distributors

Matchless Electric Company, 145 West Austin Avenue, Chicago, Illinois

## High-Vacuum Tigh-Vacuum

## A Better Tube—made by an experienced, financially responsible concern

La Salle Radio Corporation makes its own tubes in its own factory. No tubes are sold that are not made in its own factory. This fact guarantees uniformity in quality. The President, Mr. Paul Dittman, for 20 years has been engaged in the electric light bulb industry... which parallels closely that of the radio tube. Associated with him are a group of keen, experienced men who have proven their ability in the radio tube industry. Ample finances assure jobbers, dealers and radio fans that the strongest guarantee ever made on a quality radio tube can be backed up without limit.

### Better Tubes Create New Customers

Jobbers will find dealers fully aware of the exclusive advantages of La Salle High-Vacuum Radio Tubes. A great selling program, to dealers, has now been under way for some time. Dealers will find ready sales for these tubes, too, as we will back them with the closest co-operation. Also the better results obtainable from La Salle High-Vacuum Radio Tubes in any type of receiving set will be "broadcast" by word-of-mouth quickly... and dealers will benefit accordingly. La Salle Tubes offer both jobbers and dealers one of the keenest money-making propositions in the industry, and both are urged to write at once for details. Write, telephone or wire us today.

### Guarantee

We guarantee that La Salle High-Vacuum Radio Tubes will give satisfactory results if used at the correct filament and plate voltage. If, for any reason, the tube fails to give absolute satisfaction it may be returned for exchange or credit.

La Salle Radio Corporation Manufacturers 149 West Austin Avenue Chicago, Ill.

Matchless Electric Company Sole Distributors 145 West Austin Avenue Chicago, Ill.

Write Quick for Sales Proposition to Jobbers and Dealers

Manufacturers

### LA SALLE RADIO CORPORATION

149 West Austin Avenue, Chicago, Illinois

Sole Distributors

Matchless Electric Company, 145 West Austin Avenue, Chicago, Illinois



English Electric De Luxe Model 10 Tubes

Model 16 8 Tubes



Licensed only for Radio amateur, experimental and broadcast reception. Western United States prices slightly higher.

THE radio industry has reached its quality stage! Cheapness, novelty and mediocrity are out-the demand for quality and superior radio performance is the outstanding feature of the radio market for 1927-28. This situation finds the Zenith dealer ready with the finest line of high grade instruments ever offered to the public—and a reputation for quality manufacture unsurpassed in radio. Zenith has never built a mediocre instrument and this season utterly proves the wisdom of Zenith's policy.

World's largest manufacturers of High Grade Radio—3 different circuits—6, 8 and 10 tubes—battery or electric—some with antenna—some with loop—others without loop or antenna—16 Models.

\$100 to \$2500

ZENITH RADIO CORPORATION
3620 IRON STREET - CHICAGO



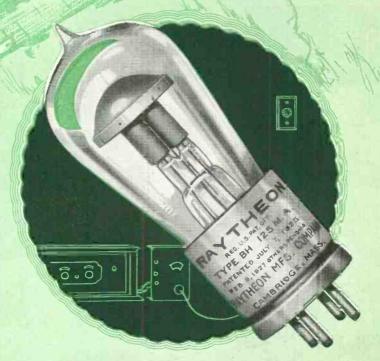
### The Future of Air Commerce— The Future of Radio Power is Written in One Word— "HELIUM"

Science gave to the world a new gas — helium. And the day when great air liners shall connect our shores with Europe was

With that same gift of science began a new era in the rectification of light-socket power for radio use. For, it was the discovery of helium that made possible the Raytheon Rectifying Tube.

The active principle of Raytheon is not a filament which may burn out—but ionized helium gas, a substance possessing 80 times the conductivity of copper wire. It is this ionized helium which gives Raytheon its sustained voltage throughout the longest life of any rectifying tube on the market.

This story of the Raytheon Ionized Helium Principle and its sustained voltage is an effective selling argument. When demonstrating any one of the forty different makes of Raytheon-equipped power units to a customer — show him the green Raytheon Seal and tell him what it means.



### Raytheon |

Type BH
Standard for "B"
Power Units
125 m.a.
300 volts

Price, \$4.50

Type BA
For Complete
A-B-C Power
350 m.a.

Price, \$7.50

Type R
Voltage Regulator
90 Volts
60 m.a.

Price, \$4.00

RAYTHEON MANUFACTURING CO. CAMBRIDGE, MASS.



The green Raytheon Seal identifies a Raytheonequipped power finit. It is found on the profuses of forty leading manufacturers

### Red Lion Cabinets

Built exclusively for ATWATER KENT RADIO



to trade and public through the three most powerful channels of publicity—the trade publication, the national magazine and the great daily newspaper—

Red Lion Cabinets are quick and easy sellers. Their sales, practically every month, have far exceeded the somewhat optimistic quota which we set for them.

Retail Prices slightly higher west of Rocky Mountains

By the makers of the Famous Red Lion Furniture





RED LION CABINET COMPANY .... RED LION, PA.

## PEPPESS REPRODUCER The Fastest Selling Speaker

in America

Among speakers, Peerless Reproducer has proved to be

predominant in popularity. In a single season, *Peerless* Reproducer has captured the speaker market. It is the most talked of, the most sought-after speaker in America. Its amazing results on the longlost low notes; its remarkable efficiency at all audible frequencies; the striking beauty of its classic Gothic cabinet—have won jobbers, retailers, listeners—everywhere. Dealers not handling *Peerless* Reproducer may still be able to get a stock from their jobber. *Write for the name of the nearest.* 



Under the famous *Peerless* banner comes a revolutionary new product —

### An Audio Transformer with Cast Core

Employs a solid core of an amazing new high resistance metal cast on a radically new and different design, that does away with punched laminations forever.



UNITED RADIO CORPORATION

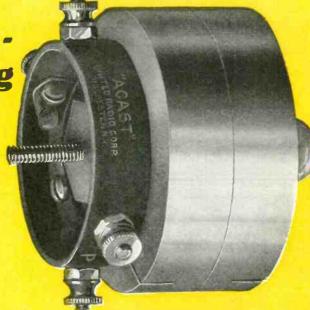
Dept. RR-11 15 Caledonia Avenue ROCHESTER, N. Y.

> Self-Shielding

THE core of this new "Acast" Transformer is cast from "A" Metal in two pieces, secured together by a single screw to form a "cup"—inside of which is the transformer coil.

The cup serves not only as core, but as a complete shield for the transformer. The cast core completely encloses the winding, eliminating all need for a metal box for either electrical or magnetic shielding, The "Acast" Transformer may be used equally well in either the first or second stage with a remarkable improvement in volume and quality.

Made in style shown here, for set builders and amateurs. Can also be supplied to radio set manufacturers in factory model. Parts distributors and dealers—or set makers are invited to write for complete descriptive folder, RR-11, with prices and discounts.



Acast-Cransformer

## Sentinel-

### "Bone-Dry" Guaranteed RADIO POWER UNITS Now Available!

The day of battery operated radio sets has gone by. They're obsolete—no one wants to be bothered with strong acids or liquid containers of any kind. With the perfection of Sentinel "Bone-Dry" "A" and "B" Power Units comes a new era in satisfactory radio operation. They end the power problem for all time. These units are so good that we positively guarantee their performance under all conditions and on any set, regardless of circuit or number of tubes employed. You can guarantee them to your customers just as we guarantee them to you.



SENTINEL "BONE-DRY" A-B-C

Here, in one handsome pack is contained every power essential of radio. No acids, electrolytes or liquids of any kind used. The "A" element delivers a constant 6 volts up to 2½ amperes. The "B" element furnishes plate voltages for the largest sets =80 mils. at 180 volts with ample reserve. Simply connect to set and plug in light socket—then forget it. Beautifully and durably made. Price

### IMPORTANT to Manufacturers of Radio Receiving Sets

The public demands socket power. Nothing else will do. Our engineering department, working in cooperation with you, will provide your receivers with a specially designed power pack guaranteed to give satisfaction. We build "bonedry" power packs for receivers using either A. C. or D. C. Tubes. Let us cooperate with you.



### Sentinel Division

UNITED STATES **ELECTRIC CORPORATION** 

9705 Cottage Grove Ave., Chicago

Licensed under patents of Radio Corporation of America, Westinghouse Company, General Electric Company, American Telephone & Telegraph Company.



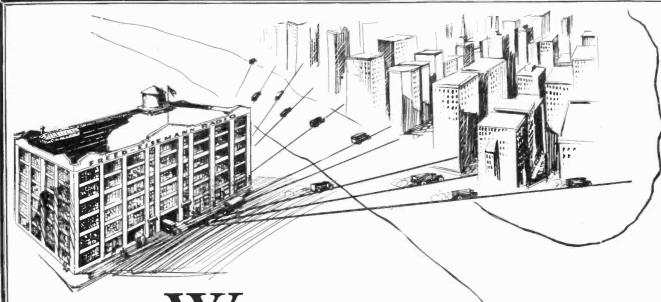


### The Van Doorn Company 160 N.LA SAILE ST. FACTORIES

160N.LA SAILE ST. Chicago, Illinois



Quincy, Illinois



### WALKING AWAY with the NEW YORK market!

In the crucible of the world's most competitive market—New York—where many manufacturers' hopes are shattered, the new

## FREED EISEMANN

Electrics 57 and 60

Using the new AC Tubes-226 and 227

Have swung into unquestioned leadership and unparalleled demand, establishing a new low-priced standard for highest quality electric Radio—compartment shielded.

These new models have jumped into a sensational success. 1229 sets were bought by dealers the first day following the announcement of these new models. Since then the huge modern plant a block long and 7 stories high, has been working day and night to try to cope with the enormous demand.

WRITE OR WIRE YOUR DISTRIBUTOR TODAY!

Licensed under Latour, Hazeltine-Neutrodyne and Radio Corp. of America Patents

FREED-EISEMANN RADIO CORPORATION, Junius Street & Liberty Avenue, BROOKLYN, N. Y.

### AERIALS

The
Steadiest
Selling
RADIO
Items



### Outdoor Aerial Kit

Frankly, this nationally advertised Aerial Kit has been selling in such big quantities that it is the backbone of our business.

Why buy your aerial equipment in pieces and be bothered with duplicate book accounts, short ends, left overs and finally no profit when you can get it packaged ready to sell in attractive over-the-counter cartons. Three
Types of
Aerials
Satisfy
All



### Indoor Aerial Kit

Put up in cartons like the popular outdoor kit. Contains 100 ft. of insulated aerial cord and 12 enameled thumb tacks for easy installation. A convenient aerial for local reception. Different from all other tapes and cords because a new idea in insulation forms a positive low loss covering.



### AERO

Light

Sock<mark>et</mark> Antenna



List Price

Interests those people who haven't the space for an outdoor aerial. The S-H Light Socket Antenna screwed into the nearest 110 A. C. or D. C. outlet keeps down static and interference and does away with the lightning hazard. Note the low price!

Aerials are the safest bet in radio today! All the freak radio inventions yet to come cannot hurt a good stock of aerials. And with a supply of all three types of S-H aerials in stock you can sell every type of aerial prospect within trading distance of your store. Let your store be known as "aerial headquarters"! Your jobber will help you put in a well-rounded S-H stock—with a very small investment on your part.

If your jobber doesn't carry our products write us direct

SH

SWAN-HAVERSTICK, Inc., Trenton, N. J.

Manufacturers of the Nationally Advertised Automatic "A" Power Unit

SH



### ARBOR

### **EXCLUSIVE**

Only set with Loftin-White circuit which receives all stations with equal volume regardless of wavelength.

Only set which automatically maintains the tubes at the point of maximum amplification at all dial settings without oscillation.

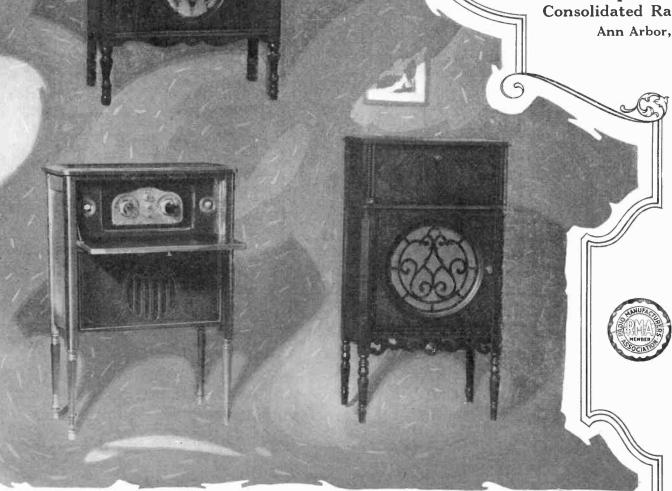
Only set which is neutralized against oscillation irrespective of tube capacities. The patented non-reactive plate circuit gets more out of any tube.

(Conly set with optional audio output transformer, making it possible to get the very best quality out of your favorite speaker.

### **DEALERS!**

Write for details about the new A. C. operated Arborphone.

Arborphone Consolidated Ra



### PHONE

### **FEATURES:**

Only set with balancing adjustments, making it possible to correct the circuit for each different location. This is new in radio sets.

One of the very few sets with 100% double shielding—only set with full-floating gang-condenser shaft that always stays in alignment—Real single dial control—6 tubes—Power tube—Low "B" battery consumption.

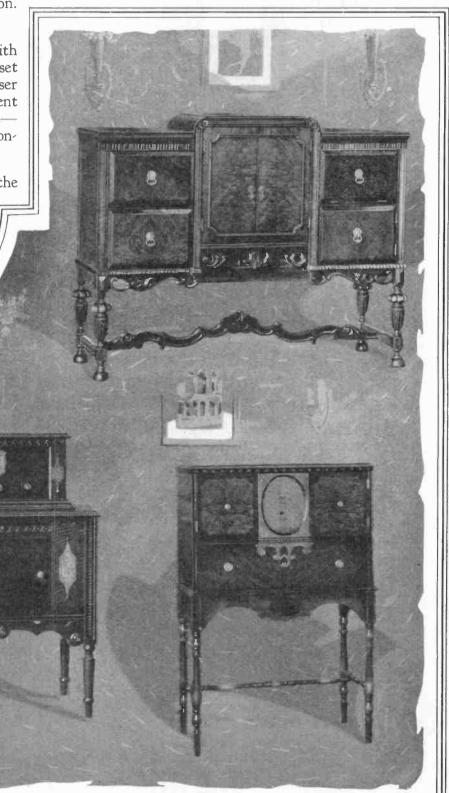
The only set for those who sell the best.

Licensed under R. C. A., General Electric, Westinghouse, American Telephone and Telegraph, and Loftin-White patents.

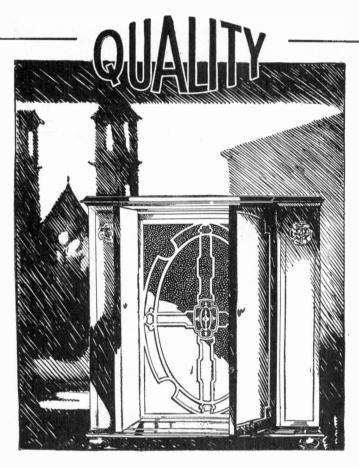
Division dio Corporation Michigan

From \$65 to \$600





"Amplion is pleasant to listen to"



#### AMPLION GRAND AC15-\$145.00

Walnut cabinet with fine plano finish and polychrome decoration, 34 in.x33 in.x18 in. New Amplion balanced armature unit with straight bar Cobalt steel magnets. Cobalt steel has the highest magnetic flux density of any metal. It is used in all the most delicate measuring instruments.

### Every dealer should use an AMPLION GRAND for showroom demonstrations

HIS magnificent model brings to radio reproduction new standards of quality and efficiency. New Amplion balanced armature unit with straight bar Cobalt steel magnets, new double curve cone assembled on a laminated sound-board and resonating chamber.

Impartial tests by a well-known set manufacturer who wanted the best reproducer to demonstrate his sets, showed the Amplion Grand reproduced without distortion 100% of the frequencies delivered by his set.

Production of the Amplion Grand is limited by the fact that each model is personally tested and adjusted by Amplion's chief Research Engineer—each one is a laboratory model.

The Amplion Grand will be the feature of our December consumer national advertising.

The Lion Cone and Colonial Cone are the two models featured in current newspaper advertising.

Other Amplion models from \$12.00 to \$97.50



AMPLION CORPORATION OF AMERICA 531-535 West 37th Street, New York

AMPLION CORPORATION of CANADA

Ltd., Toronto

The NEW AMPLION REVELAPHONE

converts any phonograph, old or new, into the most modern reproducing instrument.

The Amplion Revelaphone is the lightest electric pick-up made—the same weight as the phonograph sound-box. Cobalt Steel magnets.

Cobalt Steel magnets.

Volume and tone control, to suit the requirements of the listener. Equipped with a twenty-foot cord which makes it possible to have the phonograph and the radio in different parts of the room. Handsome antique bronze finish. Send for descriptive booklet.



Operates directly from the electric light circuit without batteries or battery eliminators or other camouflaged methods of electrification. Employs new R C A or Cunningham alternating current tubes, is tuned with one knob and entire set and power unit are self-contained in a mahogany finished cabinet.

Less Accessories, \$135 With Tubes, \$162,50

### The Pfanstiehl Gives No Service Trouble!

Look at the record! One dealer sold 3000 Pfanstiehl Radio Sets last year, and he tells us he has not had a single complaint so far Think of it—not one service call out of 3000 sets! Another dealer actually advertises a reward of \$10 for any Pfanstiehl service call.

The world's most dependable radio set—one that keeps your profit in the cash drawer No wasting away of profits through continuous, annoying service calls.

### Tone, Selectivity, Distance

Beautiful tone, perfect sound reproduction, selectivity, wide distance range and "electrified" operation! That's what the public wants! And don't you make the mistake of trying to sell your customers the thing they do not want.

your customers the thing they do not want.

The Pfanstiehl Radio Set is a tried and proven set—durable and dependable. The public knows that. You will find the public also has absolute confidence in the Pfanstiehl.

### **Full License Protection**

We are licensed for amateur, experimental and broadcast reception under patents of Radio Corporation of America and associated companies. The wise radio dealer knows that he must have this important license protection. Pfanstiehl gives it to you.

### Pfanstiehl Radio Company Waukegan, Ill.

### Cash In On This Enormous Money-Making Proposition

Here is one of the greatest dealer sales opportunities ever offered, because Pfanstiehl has for you and your customers a radio set of every type. No matter what your customers want, Pfanstiehl has it from a \$65 battery operated set to a thoroughly perfected Pfanstiehl A. C. Electric at \$350.

### Jobbers and Dealers

There is some advantageous territory still available to progressive jobbers. Here is a big opportunity for responsible radio dealers to cash in big on a franchise for a superb radio set that is an enormous success.

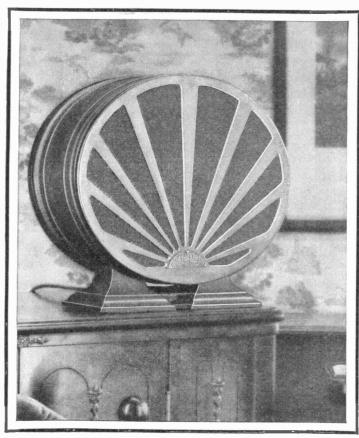
### Our Big Advertising Will Be Done In Your Own Town

Business-getting advertisements in your own newspapers that will bring the actual sales into your own particular store.

Pfanstiehl advertising will **not** be spread thinly over the United States. It will be done right where Pfanstiehl dealers are located with Pfanstiehl sets to sell and deliver. And we pay for it all.

### MAIL THIS COUPON

O COLOR		in your name : n to us today s Pfanstiehl fra	and address to t Get all the fac nchise for your co	his coupon ets at once ommunity
	ehi Radio Com Waukegan, III.	pany		
GENTLE tion, the Overton	EMEN: — Please se ne complete deta ne Radio Sets. A zed Pfanstiehl D	ails of the r lso tell me he	new line of P ow I may beco	fanstiehl
Name_				
Address				
City		S	tate	



THE SENIOR MODEL

### A Better Speaker---priced right, and backed by a workable Sales Plan!

THE Operadio Speaker is epoch-making in its achievement. It is better! Not just another speaker, but an entirely new type with definite and original superiorities over old types. The Bloc-type is unique ---a coiled exponential air column cast en bloc in Stonite---infinitely better than any kind of horn or cone and never affected by weather. Just demonstrate it, compare it with any speaker at any price to prove it.

And it is backed by a Sales Plan that assures your profit. Dealer helps, effectively designed, newspaper ads, etc., help you bring prospects in--and Operadio performance clinches the sale. Have something new, different, better, to offer--that means Operadio Bloc-Type Speakers this year!

The line is complete. A model for every price. Eye-value inherent value, performance—all there! Supremely! Junior Model sells at \$15.00. Senior Model, \$25.00.

Write today for interesting details of our jobber-dealer plan. Act quickly—and reap the profit Radio offers always to those who handle the newest and best developments.

## velopments. OPLYAI OC. BLOCTVPF SPFA

BLOC-TYPE SPEAKERS

PATENTED

# you know it is BETTER

WHEN you first hear an Operadio Speaker, you instantly remark the completeness of the sound reproduction---the tone values are all there. True beauty in the recreation of music or the spoken voices is at last made possible by Stonite---the inert material of which the unique

material of tone cham it prohibits and wave eliminates which the unique bers are made----false vibration absorption, distortion.



The largest edition of the Operadio line. The last word in tone chambers—power, volume, beauty of performance—plus wonderful exterior beauty. Has 84 inch exponential air column of Stonite—no vibration, distortion or wave absorption. Not affected by weather. Easily handles power amplification.

Price \$80.00

Prices slightly higher west of the Rockies and in Canada

Sales Dept.
THE ZINKE CO.
1323 South Michigan Avenue
CHICAGO, ILL.

Manufactured by
OPERADIO MFG. CO.
704 East 40th Street
CHICAGO, ILL.





# housands of doors, open to Basco dealers,

THE doors of thousands of radio homes are open to Basco dealers because: National and localized metropolitan newspaper advertising has pre-sold the radio public on Basco Radio Power Units. People know about Basco Units—want them—open their doors to Basco!

Basco basic quality and the thoroughly satisfactory performance it assures, makes the customer glad he bought a "Basco". The merchandise is acceptable to the point of enthusiastic endorsement. That opens more doors to the Basco dealer.

Basco sales helps — attractive folders, booklets, window display, newspaper electros, dealer sign — win for the Basco dealer admission to still other homes.

And every door opened to Basco spells "profit" for some live dealer. Get your Basco credentials from your jobber — without further delay!

BRIGGS & STRATTON CORPORATION, Milwaukee, Wisconsin





This attractive sign will guide interested prospects to your store — will identify you as the Basco dealer in your community. Ask your jobber for one of these signs.

### CRUSADING FOR MAXIMUM SALES



### Guaranteed Reinforced Tubes

Good-Will Getters and Profit Producers

This is the only tube unconditionally guaranteed for one year's time. Skeptical customers who want to be sure of their purchase will buy the CRUSADER when they would consider no other tube. All customers know they are taking no chances whatever with a tube fully insured for 12 months or more.

CRUSADERS build goodwill for you.

They challenge comparison in quality and tone value with any tube on the market. The special reinforced construction not only means protection against abuse, but it also largely eliminates microphonic noises.

Are you Crusading for all the tube sales you can get?

### CRUSADER RADIO Guaranteed TUBES

These newspaper ads lend local support to the trade.



Attractive dealer helps and other sales support.

# A Chas Stampeded the Market the Market the Market Rellogg Leads as the Quality Set of the AC Field Quality Set of the AC Field ALECTRIC IRadio

In addition to the A. C. line we also offer a D. C. line priced from \$125 up. These lower priced Kellogg sets are unquestionably the greatest values of the season.

Kellogg cooperative merchandising plans have proved their genuine selling value. A few Kellogg distributors are in a position to accept limited commitments for pre-holiday business. Write us for details and the name of your territorial distributor.

KELLOGG SWITCHBOARD & SUPPLY COMPANY

Dept. 5478, 1066 W. Adams Street, Chicago, Illinois

# A SIGNAL for those who know

THIS SEASON is recognized by industrial economists as a critical one in Radio development. The same economic forces that stabilized the automotive industry are bringing order out of Radio chaos. The unwritten law of the survival of the fittest is operating with irresistible force.

Among those who know, United States Electric is accepted as an organization that will endure. In its comprehensive price range and patent coverage, in the strategical location of its divisional factories, it reveals the unmistakable quality of leadership.

The emblem of United States Electric is a signal of stability, prosperity and progress among those who know.

UNITED STATES ELECTRIC CORPORATION

General Offices

1910 Bell Building · 307 No. Michigan Boul.

CHICAGO

Divisions of United States Electric Corporation

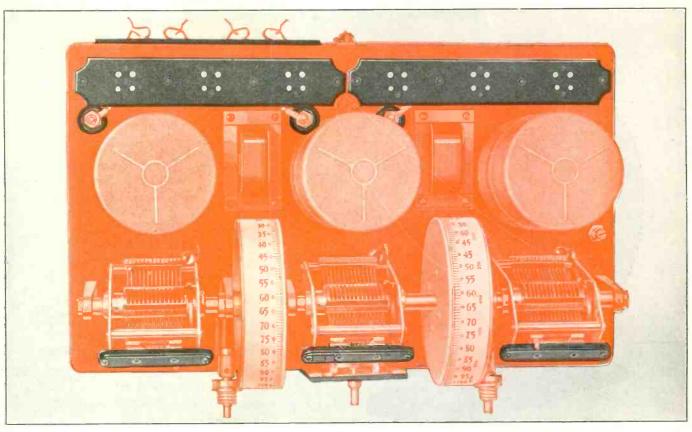
APEX DIVISION
Formerly Apex Electric Manufacturing Co., Chicago

CASE DIVISION
Formerly Indiana Electric & Mfg. Company, Marion

SENTINEL DIVISION
Formerly Sentinel Manufacturing Company, Chicago

SLAGLE DIVISION Formerly Slagle Radio Company, Fort Wayne, Ind.

WORKRITE DIVISION
Formerly Work Rite Manufacturing Co., Cleveland, O.



Chassis of Fada Special Receiver, with Bakelite Insulation shown in black. In addition to the parts illustrated, Bakelite Materials are also used for socket lower plate, R. F. transformer, condenser and leak mounting strips and minimum adjustor base. This Receiver is made by F. A. D. Andrea, Inc., Long Island City, N. Y.

# Consider the advantages of Bakelite Materials from the dealer's standpoint

REGARDLESS of how perfect the design of a radio set, or part, its performance is dependent upon proper insulation—and sustained excellence of performance may only be assured through the use of an insulation whose properties are unimpaired by time, exposure or use. Because Bakelite Materials, laminated and molded, provide permanent insulation they are used by F. A. D. Andrea, Inc., and practically all other leading radio manufacturers.

Few materials will retain their initial color and lustre, when exposed to hard use and adverse conditions Bakelite Molded is a striking example of a material which is unharmed by exposure to moisture, light, heat or cold. Such conspicuous and frequently handled parts of a receiver as dials and knobs would quickly become shabby if made of most materials. When made of Bakelite Molded, an almost universal practice, these parts retain their original color, lustre and beauty for the full life of a set.

By their extensive use of Bakelite Materials radio manufacturers are protecting your interests as well as their own, and are assuring you of the good will that comes from customer satisfaction. Look for the trade-mark **BAKELITE** on radio goods that you buy. Write for Booklet No. 39.

### BAKELITE CORPORATION

247: Park Avenue, New York, N. Y. Chicago Office, 635 West 22nd Street BAKELITE CORPORATION OF CANADA, LTD., 163 Dufferin Street, Toronto, Ont.



"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



### A Wonderful "NEW VOICE" for Radio

The Quam Loud Speaker introduces a new and startling improvement in Loud Speaker construction. Instead of a floating reed secured at only one end, the Quam Speaker has a Stretched Reedlike the human vocal cords. The result is amazingly superior to any you have heard before.

The Read What "Built on the Stretched Reed Principle"

-Gives a much wider range of accurate tone

- reproduction.
- -Picks up and reproduces the highest tones of the violin as faithfully and fully as the deeper tones of the pipe organ.
- -Has unmatched range—and gives you all.
- -Is free from "blasting."

The matchless quality and popular price of the Quam Loud Speaker make it highly profitable and easily salable. It is a product of a factory that has been supplying parts to America's leading radio manufacturers for years. This Speaker is beautifully and permanently made-requiring no adjustment at any time.

> Write for circular and discounts, or better still, send for a personal trial.

Hub Cycle & Auto Supply Co., Inc., Boston, Mass., say about the

QUAM Speaker

"We are receiving excellent reports regarding the performance of this fine Speaker, and would like the opportunity of satisfy-ing our brisk dealer demand."

> Hub Cycle & Auto Supply Co., Inc., (Signed) James J. Nolan

Retails at

Slightly higher West of the Rockies In Canada \$22.50

### QUAM RADIO CORPORATION

9718 Cottage Grove Ave. Chicago, Ill., U. S. A.

# You can now sell a POWERIZED A. C. electric ATWATER KENT for \$109.00

AND A

# POWERIZED A. C. all electric RADIOLA "20" for --- \$137.00

Sets equipped with the famous POWERIZER use the new A.C. Radiotrons which require no batteries or trickle charger and B Eliminator units - - - the tone quality is comparable only with the \$500 and \$800 electric receivers - - - with the POWERIZER the Rolls Royce of tone tubes is used - - - the UX-210- - and no rewiring is required.

Wire for name of nearest distributor.

RADIO RECEPTOR COMPANY, 106 Seventh Avenue, New York LICENSED BY RADIO CORPORATION OF AMERICA AND ASSOCIATED COMPANIES

Model for Atwater Kent and other standard sets, \$60.00. Radiotrons UX-280 and UX-210, \$14.00



Radiola "20" Model—List without tubes. \$59.00. Radiotrons UX-280 and UX-210, \$14.00

# ATWATER KENT RADIO

1928

### An Announcement by

### A. ATWATER KENT

IT IS only right that purchasers should share in the results of up-to-date manufacturing methods. This is the tendency of the times.

In our 15½ acre factory our production engineers and other experts, since the inception of radio, have been working out manufacturing economies, possible only with operations on a large scale.

These advancements have enabled us not only to maintain but constantly to improve the quality of Atwater Kent Radio.

Therefore the public will receive the benefits of a 20 per cent average reduction on all our radio products, beginning immediately.

The new prices are in keeping with the long established Atwater Kent policy of sharing with the public the results of economies as fast as they are put into practical operation.

a. atuatos Kent.

ATWATER KENT MANUFACTURING COMPANY,

# ATWATER KENT RADIO

The vast momentum of popular demand makes possible amazing new prices for 1928

### RECEIVING SETS

Model	35		•	\$49	Model 33	٠	\$75
Model	30			65	Model 32		90

### RADIO SPEAKERS

### "B" POWER UNIT

Type R . . . \$39.50 Type S . . . \$44.50

### Effective Now

Prices slightly higher from the Rockies West, and in Canada

A. Atwater Kent, President, 4700 Wissahickon Ave., Philadelphia, Pa.

# ATWATER KENT RADIO

Have you seen

Mr. A. Atwater Kent's

1928 Announcement?

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ATWATER KENT MANUFACTURING COMPANY

A. Atwater Kent, President, 4700 Wissahickon Avenue, Philadelphia, Pa.

# Radio Retailing The Business Margains of the Badio Industry

McGraw-Hill Publishing Co., Inc. James H. McGraw, President Edgar Kobak, Vice-President

WILLIAM C. ALLEY
Managing Editor

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No. 5

patents or no patents
lawsuits or no lawsuits
cross-licensing or no cross-licensing

the immediate job ahead of this big industry of ours is to sell radio products.

manufacturers will take care of the patent situation.

so far as the retail trade is concerned it has nothing to worry about except selling, more selling and continued selling.

agreed? fine. let's go!

# SUBTLE



# SUBSTITUTION Sells A. C. Sets

Leaving a new model "for use" while the old one is "being repaired" is the way this Illinois dealer does it

By RAY V. SUTLIFFE

HERE is, beyond a doubt, a substantial market for selling new model radio receivers just as there is a market for new model automobiles. Particularly is this true among owners of radio sets who have not yet had an opportunity to listen to the new A.C. sets in their own homes.

The difficulty in obtaining this business lies, as in the case of the motor car industry, in finding an immediate market for the new models. According to Robert J. Lumley, radio dealer of Watseka, Ill., a great part of this market can be found among the vast number of radio owners whose sets are now rapidly becoming out of date.

The problem is how to get a new electric set into the home of a prospect who already owns a set. Lumley has solved it in part by taking advantage of every opportunity, while on service calls, to take the old set back to the shop "for repairs," meanwhile leaving the new set for the customer "to use" until his old set is returned. He finds that for every twelve service calls he makes he is able to discover a legitimate excuse to take the old set back with him "for bench inspection" and generously offer the use of one of his brand new sets as a temporary substitute. It is this "subtle substitution" that sells them.

For this purpose he always carries an electrically-operated receiver, ready to run, in a special box in the rear of his service car. He says nothing about the superiority of the new apparatus—lets it sell itself. Seventy per cent of these customers place themeslyes open to a sale, when he calls the following week with the old set, by dropping some such remark as: "By the way, what's the price of that new A.C. set?"

This is the opening Mr. Lumley has been striving for

and he casually unlimbers his talking points on the advantages of the newer product. However, it's mainly a matter of terms from that time on. The desire to possess has had a full week to take root and grow.

"What will you allow me for the old set?" asks the customer.

This Watseka dealer seldom finds it necessary to name a price over 25 per cent of the original purchase investment. He states that he has actually developed a market for these used sets, most of which are in excellent condition and not very antiquated, and all of which have been thoroughly repaired as soon as received. He has sold every one of them so far, and for from 30 to 100 per cent more than he allowed the original owner.

THE reason one out of every three latest model sets, loaned in this manner, "stick" is due to the fact, Mr. Lumley says, that he picks his prospects. When he finds a radio set owner whose set needs servicing, and whose pocketbook will stand the price of a new set, Lumley is generally able to discover some good reason for recommending a bench repair job—better facilities, more thorough soldering, better testing equipment.

Mark this point: he takes everything back to the shop

with him except the aerial and grounding wiring. Batteries and accessories of all kinds are all grist to his mill—and they come in handy when bargaining with the used set customer. In place of this assemblage he substitutes one mahogany cabinet. "Simply put this plug in your electric socket," he says, "and I think you will be able to get along until I am able to get this set of yours back."

And "four out of five" never leave the customer's home.

### Old Customers

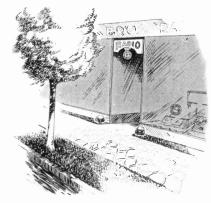
constitute the best immediate market for the new electric sets, according to Lumley.

He uses service calls as a means of entry, takes the old set back to the shop for repair, and substitutes an electric set "to use temporarily." Most of them stick, permanently.

# Small Town Methods

"Make yourself and your store a part of your community life," is the philosophy of Eric Unmack, of California

HAT is the greatest advantage the radio dealer in the small town has over the merchant in the large city? Isn't it because he can know his customers personally, and can win their trust, so that they come to him for



friendly advice? That he can make himself a good citizen of his community and the welfare of his business therefore becomes an element of community pride so that his neighbors feel, when they are boosting for him, that they are boosting for the town and for themselves?

All of these advantages can belong as well to the radio dealer in the large city, believes E. M. Unmack of the Westwood Radio and Electric Company, San Francisco, if he will serve with loyalty the district where he lives.

To begin with, Unmack's shop is located in one of those comparatively new residential districts which are part of all growing American cities. Beauty of architectural design and home-owning are featured and the population is made up mostly of citizens with moderate incomes. The residents therefore, are good, substantial people with pride in their surroundings and a wish for better things.

From the beginning of his residence in this section, Unmack has made himself a good citizen of the district. He belongs to the local welfare organizations, the American Legion, the local movements which make for social unity and for better conditions where he lives. And not only he himself, but his store, is a good citizen as well. He is one of a group of local merchants who maintain a strip of flower planted garden along the edge of their sidewalks—a very attractive feature in a district which specializes in gardens and beauty of surroundings.

His store windows stand out among that neighborhood, and can compare favorably with those of progressive stores anywhere in the city. In other words, it is a business of which the district may be proud—one of the assets which the man selling real estate, for instance, can use as an argument—"There are excellent stores in the neighborhood—no need to go downtown." It is a reputation Unmack has striven to build during the entire five years he has been in business.

Aside from these fundamental things which establish confidence and friendliness, Unmack has neglected no means of bringing his name to local attention. Slides are run in the nearby motion picture theater and arrangements made with other neighborhood dealers for purposes of mutual advertising. One of the better radio sets is operated almost continuously in the store, although the speaker which stands in the doorway is not continuously functioning, by any means. And when it does function it is tuned down so that radio MUSIC and not

radio noise, is heard by the passersby. Only the better class of program, preferably music, is permitted to be associated in the minds of the public with the establishment.

The local barber shop and the nearby drug s t o r e and ice cream parlor have been wired, however, with the co-operation of their owners, and a speaker put in these



places where people congregate. Here a different type of program, such as reports of sports events and other popular material, is sent. A well-lettered and conspicuously placed card, as well as the friendly co-operation of the proprietors of these establishments, insures that the listeners know it is Unmack's radio which is furnishing their entertainment. Each speaker is provided with a switch so that it can be turned off when desired. So satisfactory has this arrangement proved in attracting people (and therefore, also, as an advertisement for the radio shop) that Unmack was approached the other day

by the owner of the local butcher shop who desired a similar connection. This resulted in the sale of a speaker and still a fourth outlet wired up.

Window displays are regarded by Unmack as the most important and desirable form of publicity. They are changed at least once a week. To make window dressing convenient, he has had built a neat set of shelves adjacent to the windows in which he keeps the essential materials, such as drapes, lighting adjuncts and window cards. In this way they suffer from no unnecessary handling but can be used again



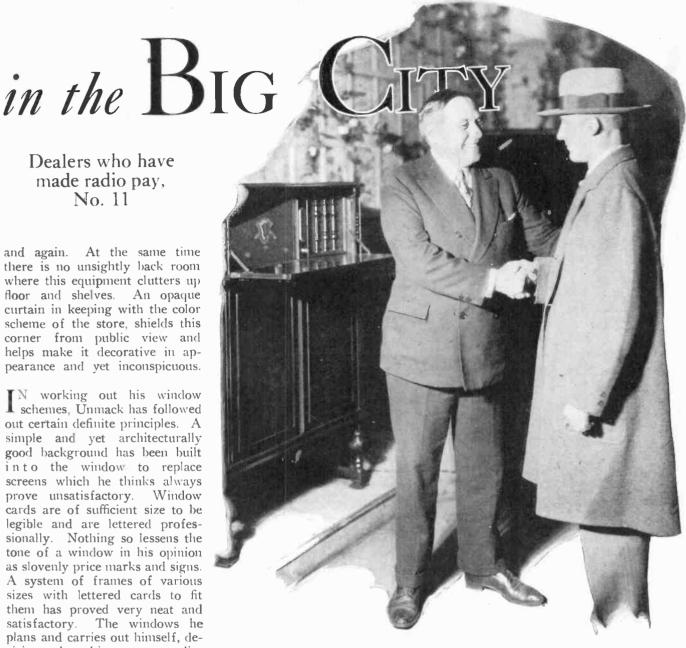
Dealers who have made radio pay,

No. 11

and again. At the same time there is no unsightly back room where this equipment clutters up floor and shelves. An opaque curtain in keeping with the color scheme of the store, shields this corner from public view and helps make it decorative in appearance and yet inconspicuous.

I N working out his window schemes, Unmack has followed out certain definite principles. A simple and yet architecturally good background has been built into the window to replace screens which he thinks always prove unsatisfactory. Window cards are of sufficient size to be legible and are lettered professionally. Nothing so lessens the tone of a window in his opinion as slovenly price marks and signs. A system of frames of various sizes with lettered cards to fit them has proved very neat and satisfactory. The windows he plans and carries out himself, desiring to have his own personality expressed and identified with his store.

This same idea is carried out in the direct-by-mail advertising in which he is a consistent believer. Through careful study of the telephone book, checked by the postoffice and through personal investigation he has built up a selected list of about 2,000 names which represent the householders of his district. For these he keeps addressograph plates, adding to them from time to time as new people come into the neighborhood or subtracting as they move. A small addressograph in the workshop makes it possible to send out a batch of literature periodically to this list without any special effort. These people Unmack thinks of as his clientele—to them he expects to sell at least \$10 worth of radio equipment, on an average. in the year—and he does not let them forget that he exists. Each month some folder or letter goes out to each of these names to remind them of the service available and to keep up the association in their minds between this radio shop and the welfare of the entire district. For this is the idea which Unmack keeps uppermost. He either writes these letters himself or so adapts the



material available that it reads personally and expresses just the friendly good humor and the local idea which he wishes to get over.

One letter, for instance, was headed "YOUR HOME -YOU ARE PROUD OF IT" and emphasizes the fact that the store is at hand to meet emergency needs and to attend to home troubles at once. It goes on:

"Don't trade downtown. Make your own home more valuable by trading in this district. We are your community's leading store. This letter is to let you know we are here—what we do—and what we sell. We are proud of our business, of the goods we sell, of the service we give, of the community we live in and we want to see the district grow. Place your business right we want to see the district grow. here with us and we'll all prosper.

HESE letters are signed personally with Unmack's I name and (a little human touch) always have a postscript!

When sets are sold, a little printed card goes in with the purchase, saying, "Thank you," and again emphasiz-(Please turn to page 72)

# Howross-Licensing Aided

Editor's Note: Charles C. Hanch addressed a meetina of the Radio Manufacturers' Association at Chicago

Hanch tells R. M. A. members of automobile patent plan and how it stimulated the progress and prosperity of that industry

October 12 on the subject of cross-licensing. Mr. Hanch was an more serious than the Selden patent. officer and director of the National Automobile Chamber of Commerce from its inception in 1913 to his retirement in 1925, and played a leading part in the creation and carrying out of the patent cross-licensing plan which has worked out so successfully in the automobile industry.

In the experiences of that industry, the radio industry may find some very valuable suggestions. Mr. Hanch's talk, in condensed form, follows:

Y PURPOSE, instead of attempting to tell you what your problem is, or to tell you the solution of your problem, is to tell you the history of at least one other industry which has had great problems and how they were met. It was my experience to be directly in contact with the automobile industry which encountered such problems.

Now, first of all, I wish to say that in my opinion the solving of a competitive as well as a patent problem in any industry, must have as a condition-precedent two things: It must have an effective trade association; it must have co-operative action on patents rather than individual action.

To give you some idea as to the complications involved in the patent situation of the automobile industry. I should mention that at the present time there are about 175.000 live patents and 75,000 expired patents, yet the automotive industry has been able to work out an effective crosslicensing agreement.

Prior to 1911, the automobile industry was controlled by the Selden patents, but in that year, Henry Ford proved them invalid. That same year, there was organized the Automobile Board of Trade. It was the first effective trade association in the auto-

immediately, after being organized, ments in the automobile industry.

dustry, which in my opinion was mobile Board of Trade that in patent A man named Dyer had taken out a series of patents on every conceivable form of sliding gear transmission of the automobile and every manufacturer used the sliding gear transmission except Ford.

There was apparently no conceivable way to get around this series of patents, and the manufacturers apparently did not know any way to avoid the use of the sliding gear transmission to change the speed of the automobile, because they are all using it today. The policy was then established of negotiating for a collective settlement. First of all, I should say the Dyer patents were submitted to the patent department of the Automobile Board of Trade and to eminent counsel, and while there were certain defenses against them it was the consensus of opinion of all who studied them that the patents were dangerous, that they might be sustained, and that they were a potential menace. So the principle was then established of collective bargaining, as the term is sometimes called in labor circles. The men who had been sued by Dyer under his sliding gear patents joined with those who

VI against the Dyer patent was being built up just as effectively as it was possible to make it until it reached such a point that Mr. Dyer was ready to talk about a settlement upon an equitable basis and the settlement was made collectively for every member of the Association, and upon exactly the same terms for each member of the association and free from any minimum annual license fees.

were willing to negotiate for a col-

lective settlement and refused to

make individual settlements.

Now that policy of effecting collective settlements became the prece-The Automobile Board of Trade dent for all future patent settlefaced a menace in the automobile in- There has been none to my knowledge

contrary in principle to that original settlement.

By this time it was quite clear to the members of the Auto-

matters if they didn't hang together they would hang separately. It was quite apparent that there was no place in the industry for two associations. so the directors of the National Association of Automobile Manufacturers and the directors of the Automobile Board of Trade got together for the purpose of consolidating and having but one effective trade association in the automobile industry. And that accounts for the present name. The National Association of Automobile Manufacturers and the Automobile Board of Trade were incorporated into the National Automobile Chamber of Commerce, in 1913.

OME time thereafter the National SOME time thereafter the National Automobile Chamber of Commerce encountered its first real menace of internal dissension. Two members of the National Automobile Chamber of Commerce, in connection with an outside manufacturer who was not a member, created a separate corporation to which they transferred a group of patents covering the front and rear axle of an automobile.

Owing to the fact that these companies had set up a separate company to control these patents, the matter was technically as though it were coming from an outsider, which I am frank to say contributed a good deal to the settlement. The demands TEANWHILE the defense made for those patents in the start were arbitrary and high, but after the possible defense was indicated and they saw what a fight would be required to put over those patents on the industry they radically modified their ideas of royalty and ended by agreeing to accept ten cents per front axle and forty cents per rear axle upon a sliding scale downward as the life of the patent shortened.

> WHILE direct patent co-operation among all the members had been discussed tentatively and various plans had been considered, going back as far as 1908, it was not until the

# the Automobile Industry

menace of these axle patents was pre- partments, in the final development of sented to the industry and the sample the automobile. of internal dissension was brought to them face-to-face that there was serious consideration given to ending for all time all patent controversy among

That problem was put up to a committee of five men of which I was made the chairman. We didn't know what to call the plan we had in mind. Our counsel afterwards called it the cross-licensing agreement, but it took eighteen months to sell the crosslicensing agreement to the members of the National Automobile Chamber of Commerce, and you will understand why when I say some of the members had no patents and some had patents valued at millions of dollars. Some of them thought that their patent situation might enable them to control the industry.

The idea of compensation was the hardest one to get out of the minds of these men. Naturally the man who had no patent was not looking for much, but the man who had one or a dozen, or fifty or 100 patents was quite concerned, and after some months of floundering with that problem this thought finally occurred to the committee, and it was this thought which finally won the entire membership over to the plan, with one or two

T WAS that the aggregate patents and the aggregate inventive and mechanical developing ability of all members was superior in value to the patents or the mechanical developing ability of any one single member. It was upon that theory, gentlemen, that the cross-licensing agreement was built. After they once became reconciled to that thought there was no hard feeling or bitterness when some manufacturer who had not a patent was invited to come up to the trough and partake free of charge of all the patents owned or controlled by the membership of the National Automobile Chamber of Commerce.

There was nothing inequitable in that, because it has developed in the industry that some of the men who had no patents have contributed as much or more than some of those patent co-operation instead of indiwho had the extensive research de- vidual action.

This point marks the true beginning of collective mechanical development as distinguished from the usual individual mechanical development which ordinarily applies to industries in all countries of the world. Many of the manufacturers had been so busy making cars to supply the trade that they had innocently copied the improvements of other people, many of them covered by patents. There was no intention to infringe. But you can see that if the crosslicensing agreement had not been consummated all these manufacturers who had copied the improvements would have been subject to suits and counter-suits and litigation upon litigation. The cross-licensing agreement wiped the slate clean. It established a status quo. Every man could legally use what he had already taken and every man was permitted to continue to use everything which was an improvement in the automobile, upon payment, of course, of fair royalties.

T THE time of the consumma-mation of the cross-licensing agreement, notwithstanding active production had been going on for twelve years, there were only 2,000,000 automobiles registered in the United States. The crosslicensing agreement, in my opinion, accomplished many results. It stabilized design. It advanced mechanical perfection of the automobile at least ten vears. It enabled manufacturers to concentrate on improvements and distribution. It reduced costs. It increased sales so that registrations increased ten-fold in ten years. That is up to 20,000,000 automobiles in 1925 as against 2,000,000

The automobile industry produces and markets four million automobiles annually, three-fourths of which are sold on the installment plan with annual contracts of three billion dollars.

The radio problem, whatever it is, is not unsolvable. It requires as a preliminary step, an effective trade association. Secondly, in my opinion, it will be essential that you have



CHARLES C. HANCH Formerly director of the National Automobile Chamber of Commerce

# France

This article is the third of a series on retail methods in Europe that is being written by Clotilde Grunsky, "Radio Retailing's" Pacific Coast editor. The first article, "Retail Methods in England," appeared in the August issue; the second article, "Selling Radio in Italy," in the October issue and the last, on Germany, will follow in the December number.

these same regulations will prevent full development of the art.

Furthermore there is a government sales tax on sets and an annual operating charge as well, the proceeds going toward the supporting of broadcasting. It is felt, however, that these taxes hinder the sale of radio to some extent. There are several broadcasting stations in France, but most of those outside of Paris reproduce the program of this station by telephone connection, thus offering little variety to those who might normally be distance fans.

The purchasing power of the French family is low, and in addition the conservative buying attitude of the public was not helped by the recent period during which the franc fluctuated so wildly. The average Frenchman is not mechanical by nature either, so that he does not readily take to the building of sets.

As a result of these factors, the radio industry, though active, does not play an impor-

tant part in the cross section of French economic life. There are several good radio stores in Paris, including one or two which have combined radio and photography, or other lines, and one or two de-



position it holds in your country," acknowledges the French merchant, "but that is because fewer French peo-ple can afford radio sets." Nevertheless there are stores in Paris which do an excellent radio business and which in general appearance and in enterprise rank well with the better class store in America. Among these is the shop which is known as "Radiolys" on the Rue Haussman. This store is in the center of the main shopping district adjacent to the Opera and it is outstanding in its neighborhood for attractive windows and for attentive salesmen. It sells radio even to people with moderate incomes and, as its proprietor acknowledges, does an "adequate" business.

In order to appreciate its methods it is necessary to consider the radio situation in France. Broadcasting is only fair, although greatly improved in recent months. Recent government regulations are bring-

ing about higher class programs but they also limit the right of the station to use other than French equipment where the apparatus can be obtained locally, and it is feared, therefore, that



# Dealers Face a Money Problem

By C. GRUNSKY

partment stores which have started radio departments, but that is about all. Radio in the provinces is confined to the larger towns, which follow in the footsteps of Paris. This condition is not hard to understand when we realize that many of the rural districts of France have not yet come to electric light and, therefore, hardly dream of radio.

What can a shop like "Radiolys" do in the face of such conditions? Sell on The manager believes in allowing credit where experience shows that it is deserved, but a definite time payment is not yet a part of the French selling system and there are several reasons for it. In the first place the thrifty French custom of buying only what can be paid for does not readily accept the

Right: Cameras and radio make a balanced mer chandising combination that is popular in France



Another

A listening-in station with headphones is one the features of this store

opportunity for going into debt. In the second place. French laws do not make the scheme desirable for the merchant for the reason, it is stated, that the article becomes the property of the purchaser on delivery, and the merchant is not given adequate protection. On the other hand, the refusal of credit always creates an unpleasant impression-and "Radiolys" suggests openly the possibility of arranging terms, reserving the right to deal with each case as conditions may dictate. A frank extension

of credit up to several months is not infrequent.

Does the shop send men into the field? Yes, it believes in active field work as a method of doing business. But here again, French conditions somewhat complicate the problem, for the "concierge" system, by which anyone entering a residence building must first pass the porter, is almost universal. It is said that this system was initiated by Napoleon as part of his spy system, but at the pres-

leading Paris ent time it serves chiefly to annoy the householder who frequently finds himself locked out of his own dwellingand to prevent house-to-house canvassing. Salesmen in the field, therefore, spend their time in following up store leads and in checking up on sets already in operation in order to develop further business with definite requests for calls from friends of the owner.

Demonstrations are made both in the shop and in the home, as they prove desirable, and the store is thoroughly wired so that the former is quite as practicable as the

"Radiolys" believes in servicing and stands back of its equipment, furnishing free service as required up to a two-year period. This feature is not so common among French firms and it stands out by its very contrast. The friendly relations which have been built up with cus-

(Please turn to page 72)

# 2 things to Put Across

Let your customers know that radio is the best Christmas gift and that your store is the best place to buy it

HIS issue of Radio Retailing will reach the hands of its readers before November 15. From By JOHN W. GRIFFIN President, Haynes-Griffin, Inc.

that date until Christmas there will remain but thirty-three business days. At Haynes-Griffin during this same period in 1926 we did 21 per cent of our entire radio business for our fiscal year. In 1925 the figure was 23 per cent. I do not believe that these figures were in any way abnormal for the average radio store.

These thirty-three days are extremely important, therefore, in the conduct of a retail radio store, and deserve the most careful consideration in our plans. The average daily sales figures of every radio store are probably higher during these days than during any other period of the year. A sharp increase in sales at this time will mean a real increase in profits. For instance, if Haynes-Griffin can increase its sales during these thirty-three days by 10 per cent over last year, it will be equivalent in dollars and cents to doubling our entire sales for the month of July.

I think this is generally true for the majority of other stores also, and the greatly increased profits which thereby become possible would certainly seem to make these days the most important in our business year.

SALES during the six days lying between Christmas and New Year's are going to be mighty interesting to me also. I remember reading an analysis of department store sales and net profits a few months ago, in which it was developed by a well-known statistician that the net profit for the average department store for the entire year was almost exactly equivalent to the gross sales during the last six days of the calendar year.

Practically all the leading department stores in the country were included in this analysis and the conclusion of the statistician was that the best rule-of-thumb method for determining the net profit of any department store for the calendar year was merely to total its sales for the last six days of the calendar year. For instance, if a store did a total business of \$200,000 from January until December 24, and an additional business of \$12,000 from December 26 until December 31, inclusive, then the net operating profit of this store for the entire year would also be approximately \$12,000.

In checking this back against our own experience for the past three years I found the same rule applied almost exactly to our own business. I think it would be interesting for other radio dealers to see how closely their experience is similar to this.

In the October issue of *Radio Retailing* an article appeared by S. J. Ryan which dealt in a most enlightening and comprehensive manner with the problems of Christmas buying by retail radio merchants, and the

necessity for proper inventory control and liquidation by Christmas day. Mr. Ryan stated that radio retailers

could reasonably expect an increase in sales of about 10 per cent this year over a year ago. Our immediate problem now, therefore, is to assure ourselves of being numbered among those retailers who will secure the normal increase to which we are apparently entitled.

Obviously, the groundwork of all retailing is to secure the right merchandise to sell and to have it on hand in the proper quantities—neither too much nor too little But our profit does not accrue until the cash register jingles and the customer's signature is on the dotted line.

I am sure Mr. Ryan did not mean that the radio merchant could expect a normal 10 per cent increase this holiday season if he simply sat still and waited for it to come to him. Surely the implication was there that this increase was the reward that would come only to the merchant who equalled or even surpassed his selling energy and initiative of last year. In other words, this 10 per cent increase is ours provided we get busy and go out after it just as hard as we did a year ago. At Haynes-Griffin we are planning to do a little better than that. We are going to increase our own selling effort at least 10 per cent and if that doesn't bring us more than 10 per cent increase in sales I am going to be pretty much surprised and disappointed.

Thousands of families regard a radio set as the finest possible Christmas gift. What can we do to stimulate this desire to the point of an actual purchase? What can we do to make a radio set easy and convenient to buy, and most important of all, what can we do to convince the folks in our neighborhood that ours is the best possible radio store at which to buy it?

FRE are just a few pointers drawn from the experience of five previous years in Christmas radio selling. Speed and convenience for the purchaser are the underlying note in all of them. The gift of a radio set may be the most important and expensive to be made by any one person, but there are a dozen or more other small things to be purchased also. And only a certain amount of time can be devoted to radio by the prospective purchaser. Make it easy for the customer to understand just what he is buying, exactly how much it costs, and help him to decide quickly. The store that does this will certainly get more than its fair share of the Christmas radio business.

Advertising:—If you are an advertiser in the newspapers place the bulk of your copy from November 15 to December 15 and coast along from then until Christmas. Radio sets are purchased earlier than other gifts. The smaller things are allowed to go until last, and radio



advertisements will be lost among the pages of the overcrowded newspapers in the last few hectic days before Christmas.

Sales Talk:—At Christmas time above all others avoid technical sales discussions. Talk to the customer in terms of what the radio will bring to him in the way of home entertainment. Tell him that radio is not a gift for a day but for years to come. Vision to him the joys of waking the family on Christmas morning with Christmas carols broadcast by the choirs of the leading churches. Tell him how radio alone will reflect the music and the happiness of the whole Yuletide season.

Merchandising:—Most people, in considering their friends for Christmas gifts, undoubtedly think of them in terms of \$5, \$50, \$100, etc. Other people will decide to allot a certain amount for a radio, generally a round sum, such as \$100 or \$300. You can take advantage of these tendencies by arranging your merchandise and set combinations accordingly. Select not more than six models as Christmas leaders and have these six models cover the complete price range from less than \$100 to \$400 or more.

At Christmas time you can find out more readily than at any other time just how much your customer wishes to spend. Concentrate on the model nearest to that price; don't bother to tell him how it can be made cheaper or better. Later we may be able to sell this customer a more expensive set. But make him stick to one model at Christmas time. If you make him believe the selection of a radio set requires a lot of discrimination and

judgment he is liable to delay the purchase until time is not so pressing, and a bird in the hand is worth more than two listening to the neighbors brag about their sets.

Guarantee:—Emphasize in your advertising and selling that anything selected as a gift may be exchanged immediately after Christmas by the recipient if he so desires. Much radio buying will be done this Christmas by inexperienced people, and they will not be sure that their gifts will please. Most generally they want something better and that all helps toward a sales increase.

Accessories:—Thousands of loving aunts and uncles will say this year, "Let's give Johnny something for his radio." Prepare a list of suitable accessories at various prices and realize that you will have to suggest to your customers what they should give. Don't look confused when a timid old lady tells you that she wants to spend ten or twenty dollars on something for her nephew's radio, and make sure to say that it can be exchanged for something else if he doesn't like it.

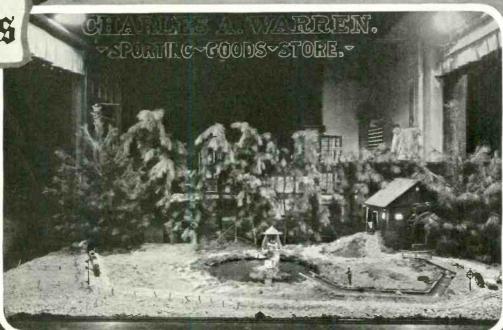
Windows:—Your windows will be a tremendous help in Christmas selling. Be sure to show every price plainly marked, and make your windows reflect the complete price range of your sets. Suggest that a radio set is a splendid gift in co-operation with other members of the family. Suggest also that the numerous Christmas bonuses that are distributed each year can be used to no better advantage than in the purchase of a radio.

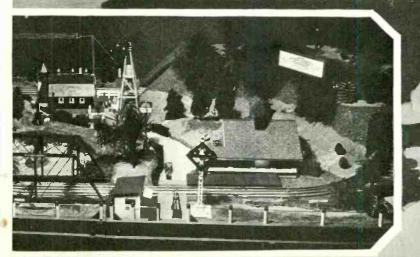
Speed and convenience for your customers is the essence of successful Christmas selling. Make it easy for them to buy.





Holiday interest in mechanical toys is agam capitalized in this display by the Charles A. Warren store at Kingston, N. Y. A miniature set on the table in front of the tent is the center of attraction. Branches of bine trees form the background.





Left: Tying in the Christmas interest in mechanical toys with radin on the farm, the George C. Wille Co., Canton, Ohio, constructed this miniature farm scene, with the radio idea provided by the aerial over the house.



# Measuring

By FRED E. KUNKEL

Each Dealer
Average
Sales
\$56,606

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we may soon expect a nationwide census of sales in a variety of commodities ranging from "arms and ammunition" to women's underwear, and running the gamut of 70 different manufactured commodities which enter the trade winds of the normal American city. Such a census will furnish a valuable barrage of business data which will level many of the obstacles now standing in the path of successful retailing. It will present the

present the first mathematical pic-

THE recently completed Baltimore census of retail distribution and the cost of doing business, presents the first vivid picture of the commercial mechanism of one of the great cities of the country and of the business life of that community.

46.841 Inha

These figures pave the way for the ultimate solution of many retailing problems and stir in the minds of those who deal with economic, business or social problems a vivid

appreciation of what it would mean if corresponding figures were now available for all parts of the country, figures which could be taken together and analyzed in the crucible of business chemistry to place retailing on a higher plane and drag it out of the mediocrity of failure, through the application of more scientific principles of doing business.

Very little has heretofore been known about stocks in the hands of distributors, or the area of distribution of any commodity, but now with this data in hand it seems quite within the realm of probability that we shall soon automatically eliminate a great amount of waste in the whole distribution machinery.

Baltimore was wisely selected for the first census taking, because it was a city large enough to offer a fair test of the plan. This census, which included in the survey all organizations which handle a product after it leaves the hands of the manufacturer or producer, has now been completed. Atlanta, Chicago, Denver, Fargo, Kansas City, Providence, San Francisco, Seattle, Springfield, Ill., and Syracuse have also been canvassed although definite figures will not be available for some months to come.

But taking the Baltimore census as the starting point

AVERAGE INVENTORY Per DEALER

\$5,553

ture of the distributing equipment of every city in the

nation, and will be of interest alike to merchants and economists, manufacturers and advertising men, whole-salers and retailers, and all those interested in commercial and industrial development.

WHILE the facts and figures obtained in Baltimore may be said to be crude when compared with what may be accomplished in the next decade, the data secured is nevertheless of the greatest value. For instance, as now classified the census shows that there

# the Winds of Sales Volume

Results of radio trade survey made by U.S. Census Bureau in Baltimore

are four radio wholesalers in Baltimore dealing in radio exclusively, with 42 salesmen, two firm members or proprietors, paying annually in salaries and wages \$106,300, with an actual inventory on December 31, 1926, of \$73,700 and net sales aggregating \$1,-143,300. This figure on the basis of total number of employees, including firm members, gives us \$25,984 as

the average yearly

102 Stores.
Sell Radio
Exclusively

\$111,800, with an actual inventory on December 31, 1926, of \$94,400, and with total sales aggregating \$962,300.

This interpreted in the light of the total population of the City of Baltimore means that the individual exclusively radio dealer sold \$56,606, or 1.21

per cent in sales per capita. The average salary per employee is \$1,315.29, while the number of inhabitants for each radio dealer is 46,841. In volume of sales these 17 radio stores stand 34th out of a total classification of 47 other trades.

Heretofore, the important mechanism by which merchandise was sold and consumed had no place in official figures. The retail world was at sea as to just how many people it catered to or could reach in any given area, whether its annual sales were up to the standard or running below the

average, whether it was carrying an excess inventory when compared with the average of all other retailers, whether it approximated or exceeded the average rate of turnover of other stores, whether it paid more wages than its competitors, or other lines of business, whether its payroll and expenses were higher, and similar information which will be brought to light by future surveys.

The Baltimore census also brings to light the illuminating fact that a total of 36,825 employees were engaged in 1926 in the operation of 11,455 retail establishments of all kinds, selling a grand total of \$362,168,000 of all types of merchandise, with 10,948 firm members actively engaged in retailing, making a grand total of 47,773 persons who derived the major portion of their income in 1926 from the sale of merchandise. We also learn that total salaries and wages represented 12 per cent of sales, and that the annual average amount of sales performed amounted to \$7,581 per employee.

TOTAL SALES \$962300

> sales per wholesale employee. On the basis of

salaries and wages paid, the average salary per salesman is \$2,530.95. The average inventory per establishment is \$18,425, while in volume of business conducted it ranks 31 out of a total classification of 38.

ON THE retail side we find there are 102 stores in all trades selling radio in Baltimore. Of these, 17 sell radio exclusively. These 17 exclusive radio stores form the basis of this survey. They employ 85 salesmen, with 15 firm members paying annually in salaries and wages



# Adapting Battery Receivers for the New A.C. Tubes

EALERS throughout the country are aware of the rapidly increasing demand for batteryless radio sets. Many customers, however, already have a receiver in which more or less money has been invested, and such customers hesitate to make another large outlay in a new receiver.

Here is a wonderful opportunity for the dealer to sell a large number of customers a less expensive proposition than a new set-and a chance to advertise the capabilities of his service

'27 type may be installed in practically any five- or six-tube receiver by following the general instructions given in this article. These tubes operate from a step-down transformer instead of a storage battery.

It will be noted that the '71 type tube is used in the last audio stage. In accordance with the manufac-

Conducted by H. W. BAUKAT Technical Editor

turer's recommendations an output transformer or the equivalent should be used between the power amplifier and the speaker, particularly where best tone quality is desired.

All tubes are operated at plate and grid voltages recommended by the manufacturers for best operation.

It should be needless to state that The new a.c. tubes of the '26 and all connections should be carefully soldered or bolted. Probably it will be necessary to readjust neutralizing condensers in sets of the neutralized

> The procedure for changing the circuit is as follows:

Remove the entire positive filament bus or main lead, also branch leads, from set. Disconnect the negative

filament leads from all sockets, cutting away an inch or so, or the entire branch lead. Disconnect each rheostat or filament resistor in the negative filament to A-battery lead and solder the two leads together, thus removing the rheostat from the circuit. The entire negative filament bus should be grounded, and all grid return leads from radio as well as audio frequency transformers are to be connected thereto.

In most receivers the above changes automatically ground all radio frequency grid returns if not the AF grid returns as well. The latter are easily grounded, however, by connecting all negative C terminals to the ground bus (formerly F-). Contrary to appearances, this does not remove the correct grid bias from each tube.

Replace the detector socket by the 5-prong socket. Connect the grid and plate leads to their respective terminals. The detector grid return lead should be removed from whichever filament bus it was connected to and should be connected to the cathode or to a lead later to be connected thereto. If the RF by-pass condenser in the detector plate circuit is connected directly across the transformer primary, no change need be made. If, however, connection was from plate to one of the filament leads, connection should be removed from the filament lead and placed on the cathode or to the lead later to be connected to the cathode.

#### KEEP A.C. LEADS AWAY FROM D.C. CURRENT

Mount the power transformer at a distance from AF transformers. All A.C. leads should be of twisted pair and should be kept away from D.C. portions of the circuit where possible. The 5-volt winding should be connected to the filament erminals of the 2nd AF stage (last audio). At any convenient point in this circuit a 10 to 100 ohm potentiometer should be connected across the twisted pair, its mid point (movable arm) being left unconnected for the present.

HE 2.5 volt winding should be connected to the heater terminals of the detector socket with another 10 to 100 ohm potentiometer placed across this twisted pair. The mid point of this potentiometer should be connected to the ground bus. Likewise the 1.5 volt winding (whose voltage may be as high as 1.6 volts under load) should be connected by another twisted pair (No. 16 B & S gage or larger) to all RF and 1st AF sockets. Connect the two low-voltage one microfarad condensers in series across the twisted pair coming from the 1.5 volt winding, and ground their common connection. A 5 to 10-ohm potentiometer should be connected across the twisted pair before it divides to the different amplifier sockets. Division should occur at one point. and not more than two tubes should by connected to the +45 volt and connected to the back of the B+ be fed from each branch. Differences in filament voltage, which with lowvoltage tubes are of greater consequence than usual, are thus minimized.

The 6-tap resistor may be mounted at any convenient point. Its different taps should be connected as follows:

Resistance	e Values	Tap No.
5-Tube Set	6-Tube Set	1
1700 ohms	1700 ohms	2
220 ohms	220 ohms	3
2200 ohms	3100 ohms	4
3900 ohms	5300 ohms	5
440 ohms	440 ohms	6

### Parts Needed for Change to A. C. Operation

3 or 4 1 1 1	lowing separ	sformer having the folate windings:  Volt Winding  """  """  """
10 ft. 1* 2 1	Twisted pair 5 - 10 Ohm 10 - 100 Oh	r No. 16 or larger Potentiometer m Potentiometers n Variable Resistor socket
1†	Six-tap resi Tap Number  1 - 2 2 - 3 3 - 4 4 - 5 5 - 6	stor     (50 milliampere)       Ohms Resistance for       5-Tube Set     6-Tube Set       1,700     1,700       220     220       2,200     3,100       3,900     5,300       440     440
1 1 1 1 2	Capacity 4 mfd. 2 " 2 " 1 " 1 "	Voltage  300 volts or more 200 " " 30 " " 100 " " 30 " " it to furnish 57 milli- 62 volts:‡

\*The rheostat in the receiver can be converted to a potentiometer by bolting a connection to the open end of the resistance winding. The resistance wire usually cannot be soldered.

†The resistor should have a low thermal cofficcient of resistance. The vitreous enamel type is recommended.

‡If the voltage of the power unit exceeds 162 volts at a drain of 57 milliamperes, a resistance may be connected in series to decrease the voltage applied. The value of this resistance in ohms would be 175 imes E, where E equals the number of volts in excess of 162.

the battery connecting terminal board +180, etc.) on the terminal board. in the receiver. If there is  $+67\frac{1}{2}$ of all '26 tubes will, however, be 135 resistance unit are as follows:

Terminals 4 and 5 may conveniently volts. Likewise terminal 6 should be  $\pm 90$  volt terminals respectively on power connection ( $\pm 135$ ,  $\pm 150$ ,

Condensers may be located at any volt connection for radio frequency convenient point in the set and all tubes it should be bridged over to the leads thereto may be bunched to-90 volt terminal. The plate voltage gether. Those connected across the

Terminals	Condenser
1—6	4 microfarad
23	2 microfarad
3—4	1 microfarad
3—5	2 microfarad

The 100,000 ohm variable resistor should be connected across the antenna Please turn to page 72

THER things being equal, the store which reflects most intensively the spirit of Christmas in its windows, and in its interior and exterior decorative treatment, will attract the most trade. Make your place of business a veritable bower of cheerfulness. Experience has shown that it will be money well spent.

Trim the store front with Christmas decorations and hang a holly wreath or two at the top of the windows. If your store front is of the type that will permit, use a Christmas tree in the entrance and decorate it with bright miniature electric light bulbs.

### Broadcast Chimes and Carols

Dealers who like to broadcast music from the store front may easily conceal a speaker in the top of the Christmas tree and use it intelligently by broadcasting Christmas carols and chimes. In many cities regular schedules are maintained by broadcasting stations for this Christmas music, broadcasting it once or twice daily.

### Lighting and Decorations

Lighting and decoration play just as an important part in the merchandising of radio sets as does the music and since all the music necessary can be obtained from the sets, play up Have Been

the lighting and decorations. The Denver Dry Goods Company, Denver, Col., uses flood lights equipped with color shields in the display windows and the interior of the store, playing them upon the best-looking consoles displayed.

Warm colors are essential in the winter merchandising of radio sets and these can be obtained in the dis-

play windows by equipping the flood lights with red, orange or amber color shields. In the interior floor and table lamps with colored shades can be used in the arrangement of the display.

Again in the interior of the store use more laurel trimmings, holly wreaths, and another Christmas tree brightly and artistically decorated.

### Don't Crowd the Sales Floor

All this extra trimming with a Christmas tree or even two or three need not and should not be done at the expense of crowding the sales floor. The sales floor should be stripped for action at Christmas time to accommodate the greatest number of customers and increased sales. The sales floor is not a place to keep stock, but is for the purpose of displaying one or, at the most, two models of your major pieces of merchandise.

### Have a Tree for the Children

If you can accommodate more than one Christmas tree on your sales floor have one for the children. The Caladyne Radio Company of San Francisco installed a Christmas tree last year on its main floor and invited the children to come in and enjoy it. Three 200-watt flood lights as well as miniature colored lamps furnished the



Last year an enterprising dealer in Wisconsin hit upon the idea of wrapping some of his floor display sets, consoles included, in Christmas tissue and ribbons, to represent Christmas gifts.



illumination and helped make the tree an object of beauty. The total cost was sixty dollars and everything except the tree was left over to use again.

### Santa Gets Names and Address

Hire a genial Santa Claus to give out printed cards to the children on which they can insert the radio presents they want Santa Claus to bring them on Christmas. The name and address should also be filled in and the list thus obtained offers excellent prospects for the sale of the specific products mentioned by the children.

### Price Groups

It has been found an excellent plan to arrange merchandise in price groups so that the Christmas shopper will not be confused with a multitude of prices when he has definitely fixed in his mind the amount which he wishes to spend on a present for a certain friend or relative. Make up a printed list of Christmas suggestions arranged in this same form of price grouping. This list will more than pay for itself in facilitating sales and it will also very effectively hold the customer if he has to wait for a salesman.

### Radio Sets are Xmas Gifts

The Steves Electric Company, Oshkosh, Wis., enlivened the entire appearance of its store and windows by having a number of its radio sets, consoles as well as table models, wrapped in white tissue paper and tied with big bows of red ribbon. Neatly printed cards announced that it was prepared to deliver its radio goods similarly attired, if requested to do so. Large white cards, hand let-

tered, were also available on demand and without charge. These cards were worded "For' a Good Boy," "For Mother," and similar Christmas greetings.

Place accessories and other merchandise of comparatively low price in the display windows and well up front in the store. The various types of radio accessories are finding increasing popularity as Christmas presents. It might be well to further that idea as much as possible.



Last but not least join the "Spug" Society—the Society for the Prevention of Useless Gifts—and carry out the slogan of "Make it a Radio Christmas." Make your suggestions definite and for specific radio articles such as a set of tubes, batteries, speakers, power units and other products.



November, 1927 Vol. 6 No. 5

### Sell What You Have to Sell

REPORTS reaching Radio Retailing would seem to imply that manufacturers are having difficulty in keeping their deliveries up with orders for the new A.C. tube sets.

That is unfortunate, but not necessarily serious. Perfection cannot be achieved in one leap. "Kinks" are bound to develop and it may take a little time to straighten them out.

This situation has lead some retailers to stop and ponder whether it is best to proceed with the merchandising of this latest type of receiver, or whether to wait until production is faster, in the meanwhile proceeding with the merchandising of whatever electrically-operated sets they have on hand.

The answer is simple, and is most easily expressed by the old proverb about a bird in the hand being worth two in a bush. Naturally, proceed with your merchandising plans as laid down early in the season. Sell what you have to sell, whether it be A.C. tube sets or other types of sets. If trouble develops with the A.C. tubes, or deliveries are slow, it will soon be remedied. Meanwhile, our immediate job is to *sell* what we have on hand *now*.

### Cross-Licensing the Salvation?

CROSS-LICENSING of automotive patents proved the salvation of the automobile industry, according to authorities in that field.

The best thinking of the radio industry today is centered upon the formulation of some corresponding plan for cross-licensing radio patents.

The whole structure of radio at the present moment is being undermined by constant internal strife over patents. Suits and counter-suits, strife and turmoil, jealousy and suspicion are dominant, all contributing to an appalling waste of finances that could and should be devoted to scientific research and market development.

It does not take any very great visionary powers to foresee the chaos that will eventuate if the present situation continues much longer, nor does it take any very great stretch of the imagination to realize that crosslicensing is probably the best solution.

licensing is probably the best solution.

The Radio Manufacturers' Association is making a serious attempt to get at the answer. Their committee is studying the problem and will report its findings. The RMA should have the commendation and support of the entire industry on this cross-licensing plan.

### New Competition

TRANSMISSION of entertainment by public utilities over the electric light or telephone wires is imminent. It will undoubtedly offer new competition to

# Are You Waiting

radio. But it will be, at best, only a supplementary service to that which radio broadcasting now offers the American public.

"Wired radio," as it is called, will shortly be here and without doubt it will be here to stay. The radio industry should welcome it and use it as a stepping stone to further progress and development, for radio is firmly entrenched in public popularity and it will continue to expand unhindered by new competition. The greatest usefulness of "wired radio" will come as a supplement to space radio.

### Will Somebody Tell Us Why?

A FLAGRANT example of how not to merchandise radio can be found in the too-common practice of many radio manufacturers to start their advertising, both trade and consumer, before the products advertised are ready for the market.

This gross mismanagement is not confined to one manufacturer by any means. Many can plead guilty to that charge, unfortunately, some even going so far as to advertise their product while it is still in a state of design and long before actual production has begun.

Retailers may be unusually stupid, but they cannot see one good reason why the public should be led into radio stores to ask for a product that could not possibly be on the dealers' shelves until weeks and sometimes months later. If someone will have the kindness to point out to them why the public should be thus misled, and the retail trade thus embarrassed, their viewpoint will be gladly changed.

Would it not be the logical course to follow the practice of manufacturers in other industries who announce that their new product will be procurable on and after such-and-such a date? The date to be far enough ahead, of course, for dealers to have the products on hand when the public asks for them.

### Electric or Not Electric?

RADIO merchants all over the country today are asking themselves the question as to whether or not it is misleading advertising to term every A.C. operated receiver an "all electric" set. A veritable tempest in a teapot is apparently waging between those who contend that only sets operated by the new A.C. tubes can be legitimately termed "all electric," and those who believe that any set, no matter what the means of electrification, that derives its entire current supply from the house lighting mains, can justly be called "all electric."

Trade reports indicate that the public, exclusive of radio "fans," makes little differentiation between sets using the new A.C. tubes, and sets deriving their current supply from the lighting circuit through power units or other means. What the public wants is an electric set. How the electrification is obtained is not of primary impor-

# Selling?

A. C. Tubes, Premature Advertising, Cross-Licensing, Independence, Visions,

> and other things discussed by the editors

tance, apparently. It is therefore logical to assume that any set which is operated entirely from the house current can honestly be called "all electric," without inflicting an imposition on the public.

Where an imposition does occur, however, is in advertising as "the latest development" receivers using D.C. tubes with power units supplying the current. Obviously, the A.C. tube method of electrification is the latest development and to advertise any other means as the "latest" is deliberately misleading.

Independence

TITH annual gross retail sales in excess of half a billion dollars, ranking among the first 12 American industries, with an annual trade show that can draw a trade attendance of more than 12,000 radio men, with two public expositions yearly that can draw an attendance of 500,000 consumers, as well as hundreds of smaller shows throughout the nation, with a capital investment estimated as close to \$750,000,000, employing 300,000 men, it is hard to comprehend just why radio needs or should seek the support of other industries.

Radio Retailing has maintained ever since it was first published three years ago that the radio industry is a major industry, big enough to stand on its own feet and fight its own battles without being dependent upon the electrical industry, the music industry or any other industry.

The remarkable development of radio in the past few years has borne out that contention. The onward sweep of radio has been the seventh wonder of the industrial world. Nothing can stand in its way. Nothing can stop its advance. It remains free and clear of any industry that would seek to adopt it. Let's carry on that way.

A New Vision

NEW vision of the vast potentialities of radio was A opened to the writer recently by Cy Colby, president of the RMA. That vision is the adaptation of radio to the business and commerce of the world.

When it is realized that radio can be made to do many things that are now done electrically by means of wires, the significance of its future possibilities as a commercial factor comes to mind.

We already have radio telephones. Some day we shall see radio fire alarms, radio burglar alarms and other practical applications of radio without the great expense of installation and maintenance of intricate wiring systems. Its future presents equally as vast a picture as the automobile or the electrical industries at their greatest.

One of the drawbacks at the present time, however, as the Radio Commission so sagely points out, is the lack of wavelengths with which to carry on these experiments. But who can predict what future developments may bring to light? Undoubtedly future inventions will narrow the

kilocycle separation so that an infinitely larger number of channels will be available in the present wavebands. And undoubtedly experimentation will prove the practicability of using frequencies in spectrums that are now considered undesirable.

Radio men have in the hollow of their hands the greatest natural force that mankind has yet discovered. It is theirs to use or misuse, to develop or retard.

Portables Not Necessarily Seasonal

PORTABLE receivers have many advantages which would qualify them as an all-year-round sales oppor-Perhaps the reason why they have never tunity. achieved the place they deserve in public estimation, is because the trade has accentuated their seasonal aspect.

Portables may be used to good advantage every month in the year, from the standpoint of the public. Small, compact, inexpensive, economical, they fill the bill when a set owner wants a second set to supplement the "big one." From the standpoint of the trade, they make excellent "leaders" to entice the purchaser to buy a larger, more expensive set later on.

### SELL 'EM ANOTHER ONE



NEA Service, Inc

# The new Radiolas

Sockes Power Operated



RCA RADIOLA 37—Special de luxe, eusemu-buile model «f famous RCA super-Heterodyne-with the incomparable Loudspeaker 104. Operares on electric light circuit—A.C. of D.C. (2019)-lete with Radiotrons (2019)-





RCA LOUDSPEAKER 104—Universally recognized as the finest achievement in radio acoustics.

For A.C. operation \$10.00

For D.C. operation 430012

A.C. Package for adapting R.CA Loudfor A.C. operation with R.CA Loudfor A.C. operation with R.CA Loudfor A.C. of the recognition of Radiola 28 at right of page.)

embody the latest refinements of radio design developed in these famous research laboratories.

IN the complete line of Radiolas are embodied the latest achievements of the great corps of engineers at work in the Research Laboratories of General Electric, Westinghouse and RCA.

The outstanding features of these Radiolas are their simplicity of operation and their marvelous fidelity of tone.

Designed by the same engineers who planned the leading high-power broadcasting stations, chosen by Victor and Brunswick for exclusive use in their finest instruments, Radiolas are everywhere recognized as the standard of the radio art.

Don't handicap a good radio receiver with an inferior antiquated loudspeaker. Ask any RCA Authorized antiquated iouospeaker. Ask any RCA Authorized Dealer to demonstrate the new RCA Loudspeaker 100-A. Compare its wonderful mellow tones with other speakers. Note what a difference is made by true reproduction of voice and music.





RCA LOUDSPEAKER 100-A—Still better than the nationally popular model to 100. Refinements of design and construction give greater sensitivity and struction give greater sensitivity and shility to handle greater volume. Rich, shility to handle greater volume. Rich mellow tone, and amazing realism of reproduction



RCA RADIOLA 20—A battery-operated receiver, many times as selective as the average antenna set. Known as write biggest value in radio." Can readily be socket power devices.

Less accessories \$78.00
With Radiotrons



RCARDIOLA16—New storage-battery receiver of great compactness and simulation of peration. Widest control range-ever achieved with one-distoration by Can be adapted for AC operation by Can footket power devices.

With Radiotrons 569.50



RCA RADIOLA 28—The tried, tested and perfected RCA Super-Heterodyne. Unrivalled selectivity, sensitivity and Unrivalled selectivity, sensitivity and perfection of tone. Battery operated or perfection may be used for socket power operation combination with RCA Loudspeaker 104. (Shown at left.) \$260.00 With Radiotrons.



RCA RADIOLA 17—This year's outstanding development in adio simplification. Operates directly from electric light circuit with the new alternating current tubes. One-dial control.

Less accessories

Buy with confidence AMERICA



where you see this sign. YORK NEW

CHICAGO

SAN FRANCISCO

CORPORATION EADIO

One of a series of color advertisements appearing in National Magazines.

MAKERS OF RADIOTRON

# The public accepts RCA Radiolas as the standard of the radio art

The RCA mark on a radio receiver or loudspeaker is a guarantee that back of it are the resources of the Radio Corporation of America, and the world's greatest electrical manufacturers —Westinghouse and General Electric.

That is why the public compares all radio instruments with the RCA standard.

RADIO CORPORATION OF AMERICA NEW YORK CHICAGO SAN FRANCISCO

# RCA Radiola

### In France, Dealers Face a Money Problem

Continued from page 57

tomers through this practice eloquently testify to its value, in the opinion of the manager.

The sets sold are largely French products because of the heavy tax on imports and the lower range of French prices, but there is a possible opening for the self-contained set of American make. At the present time the 4-tube set selling around \$65 is most popular, although the tendency is toward higher-priced sets. There is a fair demand for parts, although the sale of sets greatly

One of the interesting things done by this shop which has proved a business-getter is the selling of sets at a price which includes government tax, installation and antenna. The manager believes that the fear of future unknown expense is a greater deterrent to sales than the immediate price which the customer is considering. The guaranty of free service and the price quoted complete are two safeguards which the customer greatly appreciates.

In a home demonstration the set is allowed to remain on trial overnight if circumstances seem to warrant, but it is always called for promptly on the second day if the sale is not completed.

The value of advertising is well recognized by Radiolys and the store advertises in radio magazines, as well as by direct mail. Windows are kept attractive and changed frequently. The interior of the shop itself is very attractively arranged, with no "jumble of parts and sets" to belittle the value of the merchandise sold.

There is, perhaps, nothing which the French radio merchant has to contribute by the way of sales methods to his American colleague, but his testimony that an active sales policy combined with a service guaranty against future expense will sell radio, even under adverse conditions, is possibly of value.

### Small Town Methods in the Big City

Continued from page 53

ing the fact that the aim is to make the business and store as attractive as any downtown establishment and asking for suggestions. The card reads:

#### THANK YOU!

Your purchase is appreciated and so we "thank you."

We hope you will patronize us again.
We aim to make our store and our business as attractive as any downtown establishment. If you can suggest any improvements, please let us know.

It is signed, of course, with the name and address of the Westwood Company. Manufacturers' literature, incidentally, is also very highly prized and kept in neat pigeon holes in a rack especially made for that purpose in the store room.

Unmack feels that what he is selling is a service rather than any one article—that is, most of all, he is a counselor in the service of the customer and it is himself in that rôle that he is endeavoring to get over to his district.

"In practice this actually works out," Unmack says. "Except in a very few instances, the customer is no specialist in radio and his judgment is usually superficial.

The radio dealer, when you come down to it, sells, as a rule, just what he tried to sell."

This is particularly true when it comes to terms. One of the features offered by the store is twelve-month terms in payment if desired. It also offers a threemonth payment, however, and because this is the arrangement which Unmack himself believes in, it is a fact that very few sets are sold on the twelve-month basis. The three month system is more satisfactory than a pure cash sale, in Unmack's opinion, because as a rule it establishes a friendly contact which is likely to continue on into other relationships, whereas the cash customer is apt never to be heard from again. The man who is able to pay one-fourth of the price of the set down, with the rest in three equal monthly payments, is a good credit risk and experience has shown that no trouble in collections is to be anticipated. Conversation at this point runs about as follows:

"What terms can you give me?"

"Just as you prefer. We allow twelve months if you feel you want to take that long, but to tell the truth, most people prefer our three-month cash payment. allows you to divide the payment into four equal parts—" and so on.

The whole policy of Unmack in operating his store is to build himself a personal place in his community—to have his neighbors respect him and come to him as a friend for consultation in regard to their needs in the field in which he is an expert.

### Adapting Battery Receivers for the New A. C. Tubes

Continued from page 65

and ground terminals of the set. It may be conveniently located on the panel in place of the rheostat, since it will serve as the volume control. This type of volume control is recommended because it does not affect tone quality and because it minimizes the possibility of overloading the tubes with ensuing distortion, also for its simplicity

The above changes have doubtless left the —B and +B terminals on the battery terminal board without connection. It is suggested that these two be reserved for the B-supply connection. Resistance unit terminals 2 and 6 should be connected to the negative B and positive B terminals of the battery terminal board respectively. The primary of the power transformer might be connected to two unused terminals on the terminal board to facilitate connection to the electric light line. It is suggested that other unusual terminals be removed to avoid confusion.

Various companies are now in production on the type of filament supply transformer as specified in this article, among which is the Samson Electric Co., Dongan Electric Co., Acme Apparatus Co., Silver-Marshall, Jefferson Electric, Thordarson Electric, American Transformer Co., Harold Powers, Inc., General Radio Co., Leslie F. Muter and the National Co.

Dealers who wish to change battery sets over to a.c. operation, using the new types of tubes, but who may not have the facilities to do the re-wiring job suggested in this article, will be interested in the methods being developed by the Connewey Electric Laboratories of Hoboken, N. J., and the Radio Receptor Co. of New York City. and described elsewhere in this issue.





### Football Fans

Next best to seeing the game is hearing it

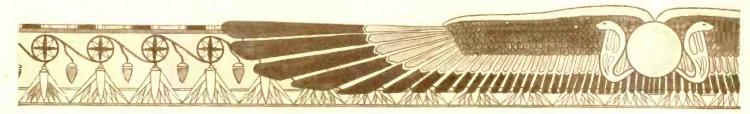
If you can't be with your college team at those distant games buy a radio and listen to



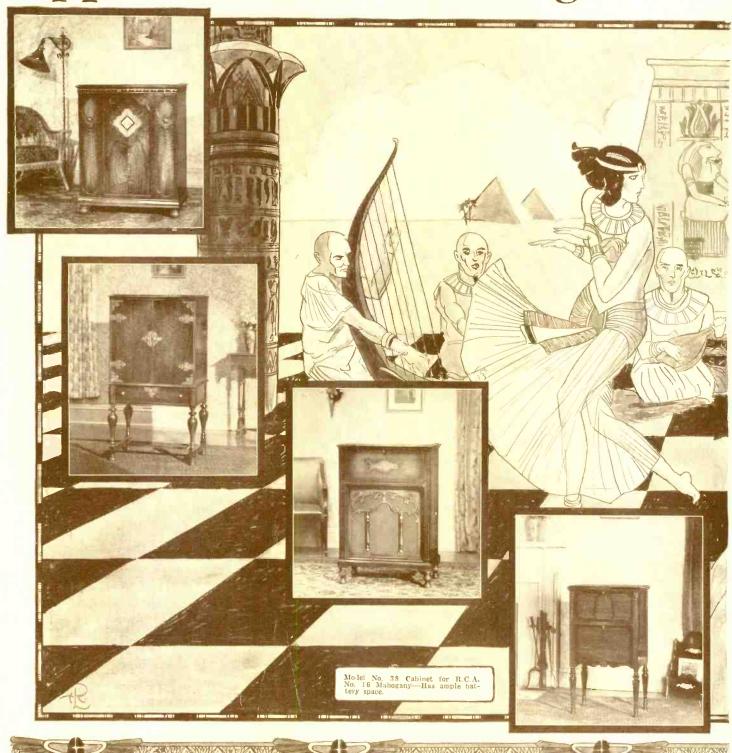
SELL , T

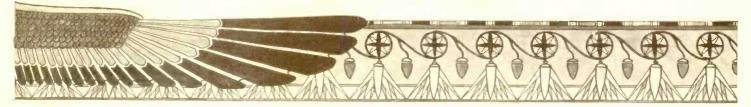
EM.

IN EVERY town there are many university graduates. Radio merchants everywhere have found it profitable to appeal to them in the football season to listen to their Alma Mater's games by radio. The big games occur this month and right now is the opportune time to feature them.



### Appeal to Woman's Age-Old





### Love of Music and Beauty



N THE misty morning of time, man's first thought was of food—but woman's was of beauty. gether they began to think of musical sounds.

Down through the ages, music and beauty have gone hand in hand. The Egyptians developed a stern beauty of temple and palace—laid the foundation for modern music at the same time and place.

In the most splendid court the world has ever seen, Cleopatra typified the culmination of Egyptian

Here, exotic, compelling beauty enthroned soft

In these modern times, you can enthrone the beautiful music of radio in the stately Radio Master

Men see the utility of radio, but women demand the beauty these cabinets offer. The glory of fine woods-shapely form-chaste design, charms

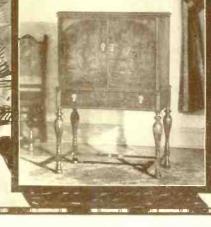
And now we have developed model 38-87-88 exclusively for the new R. C. A. 16 and 17, that these sets may be as beautiful as they are good. See them at your R. C. A. jobbers. The beauty of the cabinets and the superior craftsmanship

If you are not selling them, you're missing an

#### THE RADIO MASTER CORPORATION

One of the Ward Industries BAY CITY, MICH.







Winners of

National Radio

Window

CONTEST

FIRST PRIZE, \$50

The Hunleth Music Company, St. Louis, Mo., won the first prize of \$50 in "Radio Retailing's" National Radio Day Window Display Contest with the unusually attractive window at the right. It is an effective combination of beauty, concentration, simplicity and sales appeal.

#### SECOND PRIZE, \$25

The second prize of \$25 was awarded to the Exide Music Store. Greeley. Cal., for the display pictured below. Here also, altractiveness, concentration and simplicity are advoitly combined.





ADDITIONAL PRIZE WINNERS

Prizes of \$5 each have also been awarded the entries of the B. J. Sheppard Co., Savannah, Ga.; W. B. West, Lebanon, Mo.; and Knuepfer and Dimmock, Lawrence, Mass.

# ROGRESS and the

## Independents

T would be well for the radio industry right now to bear in mind L that the force of commercial competition has always been the deciding factor in business.

Natural economics alone have been responsible for the decision as to who shall remain in business, and who shall not.

Never in the history of any industry, to my knowledge, has any one company or corporation attempted to set itself up as the dictator of an entire industry through the use, or mis-use, of patents pertaining only to one part of that industry.

Frankly, that, however, is the situation in the radio industry today, as we all know. But the independent radio manufacturer, whether large or small, is not going to be forced out of business so easily. It has been the experience of many industries that the progress and prosperity of the industry as a whole are directly contingent upon the progress and prosperity of its so-called independent manufacturers.

In my opinion, to insure the broadest possible future development of radio, both as a science and as an industry, the continued existence of a large number of small manufacturers is essential. That has been the case in other industries, notably the automotive, electrical, hardware, airplane and similar modern industries. It is not logical to assume that radio will be an exception to this rule.

I do not believe it is any exaggeration to say that many of the small, independent manufacturers have been the largest contributors to the commercial and scientific advancement of radio in the past. Certainly, without them, radio could not have progressed to its present high stage of com $B_{V}$  Arthur D. Lord Receiver-in-equity. De Forest Radio Company

tific achievements as well, the socalled independent manufacturers rank high. Such patents as the neutrodyne, cone speaker, fixed condenser, gaseous tube, one-dial control. grid leak, the regenerative circuit and many others of major importance are

THE De Forest Radio Company strongly champions the cause of the independent manufacturers in this article by Arthur D. Lord, receiver of the company.

The De Forest Company, Mr. Lord declares, will welcome and cooperate with any constructive cross-licensing agreement which will help to clarify the radio patent situation.

fact, the whole art of radio is dependent upon the three-element tube, the invention of Dr. Lee De Forest in

It is this tube that makes radio reception possible, yet today we have the incongruous situation in which one company is attempting, by use of a circuit patent, to throttle the manufacture of the audion tube, without which the circuit in question cannot function.

There would seem to be no question as to the fact that we see today a single company making a serious attempt to bottle up the entire radio industry by means of the several patents which it holds. Such an attempt I believe to be unsound, unjust, uneconomic and un-American. It should be fought to the last ditch. Should mercial development. And in scien- this attempt at monopoly succeed, progress in the radio art.

radio will witness a protracted period of stagnation, if not actual retrogression, that will retard its development at least ten years, if not longer, in my opinion. It has been so in every previous monopoly and it will be so again in this attempted radio monopoly unless immediate steps are taken to frustrate it.

Speaking for the De Forest Radio Company, I can say that we will exert every effort to keep the radio industry free and clear to develop along natural economic lines without the crushing weight of a monopoly to hold it down. I can also state at this time that the De Forest Company will welcome and support any fair, workable plan for cross licensing of radio patents. And that state-

ment coming from the De Forest Company naturally should carry weight because of the number, importance and fundamental position of our patent holdings, dating back ten to fifteen years.

It may not be generally known but in the amazing development of radio reception the independents have made the greatest contribution to its scientific and commercial development.

The De Forest Company owns or controls some ninety radio patents, many of which are fundaheld by independent companies. In mental radio patents on both circuits and tube construction.

The De Forest Company today stands ready and willing to subjugate its own private interests to the best interests of the industry as a whole, and would welcome a constructive plan to pool its patents with an independent group.

#### Cross-Licensing Necessary

From the above record of De Forest patents, the significance of that statement can readily be seen. But the De Forest Company believes that a cross-licensing agreement of some sort is necessary if the industry's natural resources are not to be frittered away in constant patent litigation. The public interest in radio broadcasting certainly demands the freest possible development and

# Some of the New Electric



Day-Fan Electric Co., Dayton, Ohio \$350 complete, with special motor generator supply



Cleartone Radio Co., Cincinnati, Ohio \$325 complete



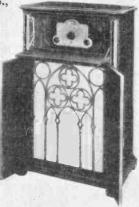
United Engine Co., Lansing, Mich. \$275 complete. Power unit



Electrical Research Labs.,
Chicago, Ill.
\$212 complete,
Power unit



Marti Electric Radio Co., West Orange, N. J. \$290 complete, A.C. tubes



Freed-Eisemann Radio Corp., Brooklyn, N. Y. \$295, Power unit



Federal Radio Corp., Buffalo, N. Y. \$460, without tubes, Power unit



Radio Products Corp., Birmingham, Ala. \$214.50, Power unit



Consolidated Radio Corp.,

Ann Arbor, Mich., Arorphone Division, \$600, electric

All-American Radio Corp., Chicago, Ill. \$225, A.C. tubes



Bremer-Tully Mfg. Co., Chicago, Ill. \$335, A.C. tubes

### Sets on the Market this Season



Mohawk Corp. of Illinois, Chicago, Ill. \$305 complete, A.C. tubes



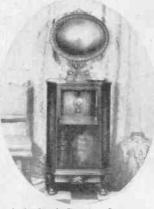
Mu-Rad Laboratories, Inc., Asbury Park, N. J. \$158.50, A.C. tubes



Buckingham Radio Corp., Chicago, Ill. \$175 complete, A.C. tubes



Langbein-Kau/man Radio Co., New Haven, Conn. \$195, A.C. tubes



Splitdorf Radio Corp., Newark, N. J. \$275, A.C. tubes



Amrad Corp., Medford Hillside, Mass. \$395, A.C. tubes



Radio Corp. of America, New York City \$895, complete



Sonora Phonograph Co., Saginaw, Mich. \$250, A.C. tubes



Simplex Radio Co., Sandusky, Ohio \$250 complete, A.C. tubes



Freshman Co., Inc., Charles, New York City \$195 complete, A.C. tubes



A. C. Dayton Co., Dayton, O. \$375, Power unit



Operadio Mfg. Co., Chicago, Ill. \$190.75, Power unit

### Some of the New Electric Sets



Zenith Radio Corp., Chicago, Ill. \$450, A.C. tubes



Shamrock Mfg. Co., Newark, N. J. 185 complete, A.C. tubes



Federal-Brandes, Inc., Newark, N. J. \$250, A.C. tubes



Bosworth Electric Mfg. Co., Cincinnati, Ohio \$312 complete, A.C. tubes



American Bosch Magneto Corp., Springfield, Mass., \$295, A.C. tubes



Kellogg Switchboard & Supply Co., Chicago, Ill. \$495, A.C. tubes



U. S. Electric Corp., Slagle Division, Ft. Wayne, Ind., \$385. without tubes: .A.C. tubes



Walbert Mfg. Co., Chicago, Ill. \$215, less tubes, A.C. tubes



Sparks-Withington Co., Jackson, Mich. \$175, A.C. tubes

### What the Trade is Talking About

### RMA Appoints Committee to Study Patent Cross-Licensing Plan

REALIZING that the patent situation is one of the most acute problems facting the radio industry today, the Radio Manufacturers' Association, at its meetings held in Chicago last month, appointed a special committee to study the advisability of mertiling out a plan for cross-licensing agreement which will be acceptable to everyone concerned.

The committee appointed to go ahead with a program whose objective will be to work out a fair and equitable patent cross-licensing agreement which will be acceptable to everyone concerned. of working out a plan for cross-licensing radio patents, similar to the cross-licensing agreement now in effect between auto-

mobile manufacturers.

According to C. C. Colby, president of the RMA, the members of the association are heartily in sympathy with the plan to perfect a cross-licensing program among radio manufacturers and the association stands ready to give its full support to

such a move.

At the Chicago meeting, the members heard an address by C. C. Hanch, formerly director of the Automobile Chamber of Commerce, who outlined the experience of the automotive cross-licensing plan, in which Mr. Hanch played a leading part. The text of Mr. Hanch's talk is reproduced more fully elsewhere in this issue.

Mr. Hanch expressed the belief that any

difficulties standing in the way of crossdifficulties standing in the way of cross-licensing in the radio industry could be overcome when it is pointed out that every interest and group of interests both large and small, would benefit by such a plan. At the conclusion of Mr. Hanch's talk,

with the problem follows:

A. J. Carter, president, Carter Radio Co.,

Chicago, III.
C. C. Colby, president, Samson Electric
Co., Boston, Mass.

H. C. Forster, president, Utah Radio Prod. Co., Chicago, Ill.

Prod. Co., Chicago, III.

A. T. Haugh, president, United Radio Co., Rochester, N. Y.

W. L. Jacoby, president, Kellogg Switchboard & Supply, Chicago, III.

E. Kauer, president, C. E. Manufacturing Co., Providence, R. I.

L. K. Marshall, president, Raytheon Manufacturing Co., Cambridge, Mass.

H. T. Melhuish, sales adm. mgr., Radio Corp., of America, New York, N. Y.

L. E. Noble, president, Federal Radio Co., Buffalo, N. Y.

W. A. Ready, president, National Co.

W. A. Ready, president, National Co., Cambridge, Mass.

Wm. Sparks, president, Sparks Withington Co., Jackson, Mich.
John W. Van Allen, RMA counsel, Buffalo, N. Y.

### Radio Protective Association Elects Directors

Sixty-six representatives of radio manufacturers, in Chicago for the Radio Show, were present at a meeting, called by the Radio Protective Association, at the Palmer House October 13. Discussion centered mainly in the formulation of plans whereby the rights of the individual members of this association to manufacture radio apparatus could be successfully maintained.

As a result of the growth in membership, and in order to give adequate representation to its Eastern affiliations, it was voted to increase the directorate from

was voted to increase the directorate from five to eleven. The following were elected and comprise the board:

Harry G. Sparks, Sparks-Withington Company, Jackson, Mich.; Fred S. Armstrong, Vesta Battery Corporation, Chicago; R. W. Augustine, Joy-Kelsey Corporation, Chicago; H. R. Rose, Shamrock Manufacturing Co., Newark, N. J.; H. Chirelstein, Sonatron Tube Co., New York, N. Y.; Duane Wanamaker, Grigsby-Grunow-Hinds Co., Chicago; L. Mandel, Metro Electric Company, Chicago; J. Wicchers, Western Coil & Electrical Co., Racine, Wis.; Arthur D. Lord, DeForest Radio Company, Jersey City, N. J.; Alexander Weiss, Marti Electric Co., West Orange, N. J.; Ernest Kauer, C. E. Manufacturing Co., Providence, R. I.

An executive committee, to be composed

An executive committee, to be composed of members of this board of directors, will shortly be elected and will function as a policies committee and in the capacity of

### St. Louis Association Holds Annual Show

The annual radio exposition of the St. Louis Radio Trades Association was held September 19 to 24 at the new Coliseum, St. Louis. The crowds attending evidenced the continuing public interest in radio products as is shown by the photo below. In ucts, as is shown by the photo below. In the insert, from left to right, are: Harold

W. Bennett, president of the St. Louis Radio Trades Association.



Radio Retailing, November, 1927

president of this organization, no president

as yet having been elected.

Plans were made to go before the Federal Trade Commission, in the near future, and present to that body such evidence as has been collected by the R.P.A. relative to the radio patent situation.

Measures were also formulated to put the entire association behind any member, jobber or dealer who might be sued for

patent infringements.

#### DeForest Wins Suit Over Regenerative Patents

Dr. Lee DeForest and the DeForest Radio Company of Jersey City, N. J., have been awarded the verdict in the famous regenerative patent suit by the United States Circuit Court of Appeals at Philadelphia.

The General Electric Company, Westinghouse Company and the American Telephone and Telegraph Company contended that Major Edwin H. Armstrong first discovered the regenerative principle. Irving Langmuir and Alexander Meissner also made the same claim, but the Court of Appeals decided Dr. DeForest had prior rights to the patent.

The DeForest Company states it thus has a right to claim all royalties paid to other companies for the regenerative patent since it was issued September 2, 1924.

#### Operadio Will Protect Patent Rights

The Operadio Manufacturing Company, of Chicago, Ill., has indicated it will prosecute by suit any company that infringes patent No. 1,563,529, covering flexible core for molding, used in air column speakers, which patent is owned by the Operadio Company. The announcement was made Company. The announcement was made by J. McWilliams Stone, president of the

company.

The Operadio Company has just completed an addition to its factory at 700 East Fortieth Street, Chicago, which will give it 6,000 additional square feet of factory

THE RADIO CORPORATION OF AMERICA has promoted E. E. Bucher to the position of assistant vice-president and has added Joseph L. Ray to the staff as general sales manager to fill the vacancy made by Mr. Bucher's promotion. Mr. Bucher, who has been with R. C. A. since its inception in 1919, will contact with the various licensees under R. C. A. patents. Mr. Ray licensees under R. C. A. patents. Mr. Ray was formerly connected with the Graybar Co. as general supply sales manager.

Rola Company, Oakland, Cal., maker of Rola loud speakers, has appointed Leon Golder as district sales manager in the middlewest. Mr. Golder will maintain offices at 612 N. Michigan Ave., Chicago, and will have a sales staff traveling that territory. He was formerly district sales manager of the Magnavox Company and prior to that connection was with the Sonora Phonograph Company for 13

SAX SCHUMANN, Sheboygan, Wis., has recently opened a radio sales and service shop at 1108 N. Eighth Street, under the name of Fada Sales & Service Company. Mr. Schumann was formerly with L. A. Heck, Kohler, Wis., distributor of Fada products, who has truned over his franchise to the new business and will remain in contact with it until it is well under way.

#### What a Business!



#### Changes in Personnel of Radio Commission

Several changes have been recently made in the personnel of the Federal Radio Commission. The death of Col. John F. Dillon, the commissioner from the Pacific Coast, has left a vacancy which is, as yet, unfilled.

Henry A. Bellows, the Commissioner from the Middle West, has resigned to take up again his old position as director of station WCCO, Minneapolis-St. Paul. His position has been filled by Sam Pickard, ormerly head of the radio division of the

Department of Agriculture, and more recently secretary of the Radio Commission.

Mr. Pickard's successor as secretary of the Commission is Carl H. Butman, who has long been identified with newspaper work at Washington.

THE ATWATER KENT MFG. COMPANY, Philadelphia, Pa., at the opening of the 1928 radio sales season, announced a twenty per cent reduction on the retail price of all its radio products, effective immediately.

THE CREMONIAM & RIGG partnership was dissolved recently and J. V. Cremonim will continue the business under the firm name of J. V. Cremonim at 236 W. 55th Street, New York City. The new owner will continue to represent the Greene-Brown Mfg. Co., and the Watsontown Table and Fur niture Co.

Mr. Cremonim has been appointed ex-ort agent for the Teletone Corp. of port agent for the Teletone Corp. of America and in addition to representing that concern he will act as export agent for the Robertson-Davis Co., Yahr-Lange, Inc., and the Reliable Parts Mfg. Co.

YALE ELECTRIC CORP., Brooklyn, N. is building a huge plant in Jersey City, N. J., where it will co-ordinate under one roof all the manufacturing activities now being carried on in Brooklyn and Indianapolis, Ind.

STEINITE RADIO COMPANY, ATCHISON, Kan., has erected a factory of 13,000 sq.ft. of floor space. This plant will triple the production of the original factory.

#### Window Contest for Federal Dealers

During the period between November 7 and December 10, the Federal Radio Corporation, Buffalo, N. Y., will hold a window display contest for designated Federal retailers. The prizes are as follows:

First		,	,					٠.						\$1	00	
Second	l													•	75	
Third																
Fourth															20	
Fifth						,									20	
Sixth															20	
D1 4																

The rules governing the contest, as announced by the Federal Company, are: Retailer to submit to the Federal company an 8 x 10 gloss print of his

display. Window is to be photographed some time between midnight November 7th

and midnight December 10th. 3. The window should contain at least one each of the D, E and F Models, any type, and such accessories as will make these models workable.

4. The Federal Company cannot qualify a retailers's window photograph if it shows competitive sets.

5. Each retailer may send only one photograph of one window.
6. The name of the retailer with his address shall be typed on a piece of paper and glued to the back of the photograph. photograph.

7. In case of a tie, the full prize will be awarded to each tying contestant.

A group of trade magazine editors will act as judges.

THE EDISON SHOP, Dallas, Texas, recently opened a new studio called the Stewart-Warner studio which will be used to demonstrate the new models. S. A. Lynch will be in charge.

THE TAUBMAN AUTOMOTIVE COMPANY, operating a chain of thirty-four retail stores in nineteen cities, has opened a New York office in the General Motors Bldg., at Broadway and 57th St. Samuel Taubman, vice-president of the corporation, will he in charge. The executive and purchasing offices still remain in the Taubman Bldg., 305 W. Baltimore St., Baltimore, Md.

THE G. C. BABER COMPANY, E. Market St., Wabash, Ind., recently installed a radio department. The company is handling Crosley and Sparton products and a complete line of tubes, eliminators and bat-

The Circle Sales Company, Indianapolis, Ind., has filed articles of incorporation to buy, sell and deal in radios, musical instruments and radio accessories. The incorporators are Herbert E. Jankins, Carl H. Strickland, Chester F. Bailey and Charles H. Bailey.

R. G. ZIMMERMAN has opened the Electric Service Bureau in the Second National Bank Bldg., Cincinnati, Ohio, and intends to incorporate radio lines as well as electrical accessories in his business.

The Sprague Electrical Supply Company, of Waterbury, Conn., has opened a branch office at 176 Federal St., Boston. Mass., where they will display a complete line of Howard receivers and Newcombe-Hawley speakers. G. F. Holland is manager, assisted by George Hutchings and W. H. Page.

INTERSTATE SALES COMPANY, Milwaukee, Wis., is now handling the Bosch line in Wisconsin.

### N.B.M.A. Holds Convention at Niagara Falls

The National Battery Manufacturers Association recently held its convention at the Hotel Niagara, Niagara Falls, N. Y. Among the speakers were George C. Wilson of Remington-Rand, Inc., and W. R. Ingalls of the American Bureau of Metal Statistics.

The following officers were elected for the coming year: D. H. Kelly, who was re-elected president; C. H. Smith, Westinghouse Union Battery Co., first vice-president; Ward S. Perry, Vesta Battery Corp., second vice-president; J. B. Perlman, Hartford Battery Mfg. Co., secretary; Paul M. Marko, Marko Storage Battery Co., treasurer, Leon A. Doughty, Carlile & Doughty, Inc., director and J. D. Wanvig, Globe Electric Co., director.

CROSLEY RADIO CORP., Cincinnati, Ohio, has added T. N. Thompson and Roy Cummings to its sales force. Mr. Thompson will cover the Northwest territory and Mr. Cummings will work out of the New York office.

THE KELLOGG SWITCHBOARD & SUPPLY COMPANY, Chicago, Ill., has appointed Joseph H. Utz as sales manager of its radio division. Mr. Utz was formerly associated with Harvey-Hubbell, Inc., Bridgeport, Conn., as central states representative.

Splitdorf Radio Corp., Newark, N. J., has appointed Hal P. Shearer as sales manager, according to Robert W. Porter, vice-president. Prior to joining Splitdorf, Mr. Shearer held an important position with the Zenith Radio Corporation. For a number of years he owned and operated the Shearer Piano Co., New York City.

H. G. Tudor, Marion, Ind., has recently established a store at 120 West Fifth Street with Robert Shaw as associate in the business. The company will handle both accessories and receiving sets.

The National Broadcasting Company, New York City, will broadcast the following football games over the Red and Blue networks during November: Saturday, Nov. 12, Michigan vs. Navy over the Red network and Yale vs. Princeton over the Blue network; Saturday, Nov. 19, Harvard vs. Yale over the Red and Blue networks; Thursday, Nov. 24, Penn. vs. Cornell, over the Red and Blue networks; and Saturday, Nov. 26, Arnıy vs. Navy over the Red and Blue networks.

Major Edwin H. Cooper has recently been appointed Boston representative of the Bremer-Tully Manufacturing Company of Chicago, to whom he brings long experience in radio and a very extensive acquaintance throughout New England.

THE INTERNATIONAL RESISTANCE COMPANY, manufacturer of Durham Metallized Resistors, has moved from the Perry Building to 2½ South 20th Street, Philadelphia, Pa. The company recently appointed B. J. Fitzner, 159 E. Elizabeth Street, Detroit, Mich., as its sales representative.

Great Lakes Radio Corporation, Milwaukee, Wis., has recently appointed Sidney Neu, formerly manager of the radio department at Julius Andrae & Sons Company, to the position of vice-president and general manager. Walter Kluge, formerly assistant to Mr. Neu is now taking charge of sales for the Andrae company.

### First Survey of Radio Stocks Completed

According to a survey of radio dealers' stocks just completed by the Electrical Equipment Division of the Department of Commerce, the first of its kind ever officially undertaken, returns from 7.842 dealers out of a total of 31,485 indicate that there was an average of 9 receiving sets and loud speakers per reporting dealer on October 1, 1927. "B" and "C" battery's stocks showed an average of 31 per reporting dealer, in units of 45 volts, and 7 storage batteries for "A" power, whereas eliminators averaged 5 per dealer. Receiving set tubes, not A.C., averaged 63 per dealer, whereas A.C. ones averaged 4. The survey showed that other types of tubes for rectifying purposes averaged 5 per dealer.

rectifying purposes averaged 5 per dealer. A total of 936 jobbers was circularized of which 236 replied. The number of receiving sets per reporting jobber was 373, loud speakers 385, "B" and "C" batteries 1220—45 volt units, storage batteries 105, eliminators 254, tubes other than A.C. ones 3,140, A.C. tubes 97, and rectifying tubes 171 all per jobber.

171, all per jobber:
Herewith is a table showing combined dealers' and jobbers' stocks, actually reported:

No. on Hand

15,560 storage battery (b) A socket-power units not using storage battery. 7,503 (c) B socket-power units with or without "C 51,979 (d) A and B socket-power combined units with or without C 26,237 (5) Vacuum Tubes (Receiving). (a) Tubes designed for oper ation from 6 volts D.C.. 1,008,278 (b) Tubes designed for operation from 4 volts D.C. (c) A.C. tubes (either heater 230,053 or filament type) 52,147 (6) Rectifying Tubes or Units. (a) High voltage tubes or other rectifying units for B power supply 58,070 (b) Low voltage tubes or other rectifying units for "A" power supply ..... 18,546

(b) Radio receiving sets wired for A.C. operation not including power supply...

(b) Loud speakers with associated power amplifier...

(a) Dry B and C batteries in

(b) Storage batteries not asso-

(a) A socket-power units using

terms of 45-volt units...

ciated with trickle charg-

(2) Loud Speakers.

(3) Batteries.

(a) Loud speakers only

(4) Socket Power Units.

9,498

153,001

534,721

77,143

5,018

#### General Motors Signs For Largest Hook-up

General Motors Corporation will broadcast every Monday evening from 9:30 to 10:30 over WEAF and a chain of twentyeight stations—the largest single hook-up used in any regular series of radio concerts on the air today. The opening program will be presented Nov. 7, and a concert will follow each Monday thereafter.

The hook-up extends from New York in the East to Omaha in the West, and from Portland, Maine, in the North to Jacksonville, Florida in the South, and will later be extended to the Pacific Coast.

will later be extended to the Pacific Coast.
The stations through which the concerts
will be heard are as follows: WEAF, New
York; WEEI, Boston; WTIC, Hartford;
WLIT, Philadelphia; WRC, Washington;
WGR, Buffalo; WCAE, Pittsburgh;
WTAM, Cleveland; WWJ, Detroit;
WSAI, Cincinnati; KSD, St. Louis;
WCCO, Minneapolis-St. Paul; WTMJ,
Milwaukee; WOC, Davenport; WHO, Des

Moines; WOW, Omaha; WDAF, Kansas. City; KVOO, Oklahoma City; Tulsa; WBAP, Fort Worth; WHAS, Louisville; WSM, Nashville; WMC, Memphis; WSB, Atlanta; WBT, Charlotte; WJAX, Jacksonville; WJAR, Providence; WTAG, Worcester; WCSH, Portland, Me.

No Chicago station appears on the list for the reason that all Chicago stations are closed down Monday nights.

C. E. Mfg. Co., Inc., Providence, R. I., maker of CeCo Tubes, has just appointed Charles O. Cressy sales engineer according to H. H. Steinle, general sales manager of the company.

The Julian M. White Mfc. Co., Sloux City, Iowa, manufacturer of White Socket Power Units, has recently added Nick Patti and Lee Conover to its organization. Mr. Patti, who for years was associated with Freed-Eismann is director of sales and Mr. Conover, who formerly was director of sales for the Garod Radio Co., is now eastern representative.

### Kellogg Holds Chicago Dealers Meeting



The Kellogg Switchboard & Supply Company, Chicago, Ill., recently held a well-attended dealer meeting in its home city. The above photograph indicates the interest displayed in the banquet part of the program at the La Salle Hotel.

#### Packard Sedan Offered as Window Display Prize

Yahr-Lange, Inc., Milwaukee, Wis., is giving away a 1928 model Packard sedan as a grand prize for the best super-ball antenna window display put in by a retail dealer between now and January 1, 1928! The winner will be selected by five nation-

ally known judges.

The window will be chosen from the neatness and manner in which the display has been arranged, and not from the size of the display, therefore giving the small dealer just as good a chance in winning the prize as the larger dealer with a bigger

display window.

The rules of the contest are as follows: 1. To be eligible to enter contest, it is necessary that you place an order for six (6) Super-Ball Antennas with your jobber.

2. Super-Ball window display material, hithographed, cut out, and display bases,

furnished free by your jobber or Yahr-Lange, Inc., Milwaukee, Wis.

3. Window display can contain, in addition to Super-Ball Antenna, any other radio merchandise you desire, with the ex-

eption of competitive aerials.

4. Display window must be photographed, preferably 8x10 size, but this is not absolutely essential. Any good photographs submitted will be satisfactory.

5. Display to remain in window as shown in photograph, for at least ten days.
6. You may submit photographs of as many different window displays as you wish, but each must be entered as a separate individual entry, and each will be judged as such.

7. All photographs submitted in this contest become the property of the Sponsors

for advertising purposes.

8. Decision of the judges shall be final. Artistic arrangement, general effect of display, originality of conception and prominence of Super-Ball Antenna, are factors that will be considered. Window should contain six (6) Super-Ball Antennas.

9. Contest closes at midnight, December 31st, 1927. Any entries postmarked after that time, will not be eligible for the prize. 10. The 1928, five-passenger Packard Sedan will be delivered to the winner any place in the United States.

11. Photographs should be mailed to Yahr-Lange, Inc., Milwaukee, Wisconsin, and be sure to write or write our register and appears and states.

and be sure to write or print your name and address on the reverse side of the photograph.

The judges in this contest are all wellknown to the radio trade. The winner will be published in the Radio Publications after the judges have made their decision.

DAVEN RADIO CORPORATION, Newark, DAVEN RADIO CORPORATION, Newark, N. J., recently made the following additions to their selling staff; Mr. G. O. Jones, 164 Federal Street, Boston, Mass., covering the states of Maine, New Hampshire, Vermont, Rhode Island, Massachusetts and Connecticut; Mr. D. H. Shalleross, Bourse Bldg., Philadelphia, Pa., covering the states of Pennsylvania Delaware, Maryland Virgorian Pelaware, Pelaware, Pelaware, Pelaware, Pelaware, Pelaware, Pelaware, Pelaware of Pennsylvania, Delaware, Maryland, Virginia and the District of Columbia; Mr. C. A. Stone, 305 Allied Crafts Bldg., 507 Pico Street, Los Angeles, California, covering the state of California only; Mr. S. Gillan Hyman, 90 Maitland St., Toronto, Gillan Hyman, 90 Maitland St., Toronto, Canada, covering the entire Dominion of Canada; and Mr. V. W. Clemishire, 127 Clinton Avenue, Albany, N. Y., covering the entire state of New York with the exception of New York City. C. B. L. Townley, Sales Manager of the Daven Radio Corporation, made the announcement ment.

#### Radio Shows

November 7-12: Worcester Radio Show, State Armory, Worcester, Mass.

November 8-13: Third Annual Radio Show, Municipal Auditorium, Cleveland, Ohio.

November 28 - December 2: Radio Division, N.E.M.A., Edgewater Beach Hotel, Chicago, Ill.

FRED MACGOWEN has been appointed Pacific Coast division sales manager of the Crosley Radio Corporation with headquarters at San Francisco. His territory will include the entire western district, west of and including the Rocky Mountains. Mr. MacGowen was formerly district sales manager with headquarters at Cleveland. H. R. Simmons and H. C. Kercheval will assist him. Mr. Simmons will work out of Seattle and Mr. Kercheval out of Butte,

THE SPARKS-WITHINGTON COMPANY, Jackson, Mich., recently celebrated the opening of its new radio plant by entertaining 468 guests from six states. Captain William Sparks gave a merchandising talk on the future of Sparton Radio at a business meeting held after the tour of inspection.

#### "Them Eyes"



Bond P. Geddes is the owner of the eyes in the above photo. "Ged" has just been appointed executive vice-president of the Radio Manufacturers' Association to succeed L. S. Baker, who has resigned to devote his entire time to the National Association of Broadcasters. "Ged" comes to the radio industry from the newspaper business, having been manager of the Washington, D. C., bureaus of both the United Press and the Associated Press. As a newspaperman, he has covered the activities of every President since Taft and brings to radio a wealth of experience and common sense.

### DeForest Engineer Perfects New Receiving System

The DeForest Radio Company, Jersey City, N. J., has developed and perfected a fundamentally new system of radio reception according to Arthur D. Lord, receiverin-equity of the company. This new system is the invention of Dr. George A. Somersalo, Finnish physicist and former research engineer of the DeForest Company.

The system provides a fundamentally new method of obtaining radio-frequency amplification without infringing any existing

### Radio Corporation Issues Quarterly Statement

Gross income from sales, communications and other in-come for the quarter ended Sept. 30, 1927
General operating and admin-.\$16,773,091,27 istrative expenses, depreciation, cost of sales, patent amortization estimated federal income tax and accrued reserve for year end

Surplus profits for quarter... \$3,588,989.13

Surplus profits for nine months ended September 30, 1927

\$4,141,355.32

Blumenthal's Phono & Radio Shop, 42 Lee Avenue, Brooklyn, N. Y., has opened a new radio salon for the display of beautiful radio cabinets and new model

RADIO SPECIALTY COMPANY, distributors of A-K Radio, Milwaukee, Wis., held a get-together for all the state dealers. The convention was featured by sales talks and a special program.

THE YAHR & LANGE, INC., Milwaukee, Wis., formerly distributors of Sonora Radio have discontinued all connections in radio jobbing and will manufacture the Super-Ball Antenna and the new Yar speaker.

HARRY WEBBER, Stewart Warner products distributor, Milwaukee, Wis., has mangurated a novel plan to insure lowservice cost in new model sets by installing a complete service school plan for dealers' employees. All the dealers will be asked to send the foreman of their service crew to the school in Milwaukee, and at the conclusion of a week of school, the foremen will be expected to pass an examination covering the work they had in overhauling, checking, repairing and testing sets, in order to retain their posi-

H. R. FLETCHER, director of sales of the Algonquin Electric Company, 245 Fifth Avenue, New York, has recently been made a vice-president and director of that organization. Mr. Fletcher is well known to the radio trades and is on several committees of the Radio Manufacturers' Asso-

Amrad, Inc., Medford Hillside, Mass., has appointed Frank A. Hinners assistant general manager. Mr. Hinners was formerly president and chief engineer of the King-Hinners Company.

# Pictorial NEWS Radio Radio Aids Balloon Racers (right) The U. S. Army entries in the recent International balloon races at Detroit were equipped with radio to aid in guiding them on their flight. Note the microphone by the flier's head and the speaker in the rigging above.

PROSPECTING BY RADIO (above)
Finding mineral deposits beneath the earth's surface is one of the latest usages of radio.
Prospectors in Southern California are shown listening for the change in frequency tone which ore deposits make in the receiver.

#### DISTINGUISHED VISITOR

Guglielmo Marconi, "Father of Wireless" (left), is visiting this country for the first time in many years to attend the International Radio Conference at Washington. He is here shown in the experimental laboratory of his famous yacht, "Electra."

#### RADIC BY AIR EXPRESS (left)

Radio apperances was among the first load of material carried from the East to the West Coast by the American Radway To's new Airplane Express.

#### RADIO HEAT (right)

Here's a new radio furnace which accomplishes, by means of radio frequency current, fusing of metals and other chamical reactions possible hitherto only in a vacuum. Its developer, Dr. Harvey C. Rentschler is shown explaining & to S. P. Grace, president of the New York Electrical Society.



### What's New in Radio and

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

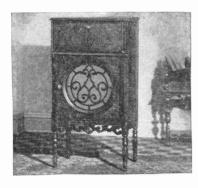
### Console Cabinet for Radiolas 16 and 17

The new cabinet as shown in the illustration which is of the Jewel Casket type, was fashioned especially for Stanley and Patterson and the Times Appliance Co. of New York, by the Adler Mfg. Co., Louisville, Ky. They will have the exclusive distribution of the new model in the metropolitan district. The new cabinet is 39½ inches high and 30½ inches wide and has ample room to accommodate either the 16 or 17 Radiola and for all the regular battery equipment when used for the Model 16. When used for the Radiola 17, the electric set, the battery compartment can be entirely removed. The front door pane opens down to form an attractive desk and a lift top makes the chassis conveniently accessible. The new model is executed in matched burl walnut.—Radio Retailing, November, 1927.



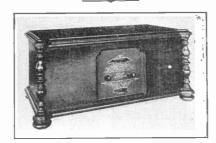
### Six-Tube Console

This small console is a recent addition to the Arborphone line made by the Consolidated Radio Corp., Ann Arbor, Mich., Arborphone Division. It is made of American walnut, selected striped veneer being used on the top and ends, and highly figured matched veneers on the drop front, with ornamental overlays on the door. A cone speaker is installed and there is ample space provided for batteries and eliminators. The five tube Model 27 Arborphone receiver and the six tube Model 25 (Loftin-White circuit) are interchangeable in this cabinet. With the former (5 tube Loftin-White) it is Model 252 listing at \$185.—Radio Retailing, November, 1927.



### Radio Furniture

The Sonora Phonograph Company, Inc., Saginaw, Mich., is offering Console or Highboy designs with inbuilt speakers, or for external speakers. The model E-860 which lists at \$165 has a Grille, but no inbuilt speaker. The Model E-865 and E-870 are equipped with Sonora Inbuilt cone speakers and list at \$195 and \$250, respectively. The model E chassis is equipped with all radio frequency sockets cushioned. The detector socket is also cushioned, and special cabinet design in model E-865 and E-870 ma'res howl trouble caused by microphonic tubes a rather remote possibility,—Radio Retailing, November, 1927.



### Seven-Tube Receiver

A. H. Grebe & Co., Richmond Hill, New York, is placing on the market a new receiver known as the "Synchrophase Seven." A striking feature of this receiver is the French Marquetry panel through which the dial and vernier project. The panel is genuine butt walnut with a design wrought in bronze. The cabinet is two-tone walnut and mahogany, the walnut face being of select figure butt walnut blending with the panel. The circuit includes fieldless, Litz, space-wound, Binocular Coils, and it is claimed that he receiver will operate on a very short indoor aerial. Five individual variable condensers are mounted horizontally, and are driven in unison by a three-point tuning device, connected to the tuning dial and tangent wheel vernier.—

Radio Retailing, November, 1927.

### Radio Cabinets

Three new radio cabinets have just been announced by the H. T. Roberts Co., Chicago, Ill. All of these are equipped with the RCA 100-A speaker. The cabinets are built in the factories of Berkey and Gay, Grand Rapids, Mich., and bear this company's trade

mark and guarantee. The "Trafalgar" model which is illustrated is finished in wax, open grain, hand rubbed and hand shaded. All doors, drawers and falls thave been carefully fitted by hand so that they fit snugly and operate easily. The sliding drawers are on steel rollers. The cabinets are of five-ply veneered construction and beautiful color combinations have been developed through the proper use of the following selected woods: walnut, English oak, Swirls, English elm burl, crotch walnut, English Pollard oak, and satinwood. The other two models are the "Carlton" and the "Charing."—Radio Retailing, November, 1927.



### Automatic A-B Power Unit

The new Vesta Automatic A-B power unit contains an A battery enclosed in a clear glass case, and a built-in hydrometer; a B unit; a dry rectifier; and automatic relay. The hydrometer is in plain view, visible through a cutaway in the case, as is also the level of the battery solution. The unit is equipped with two variable controls which give regulation over entire B voltage in both amplifier and detector circuits. This variable control gives the maximum results from any radio receiver. The B section of the unit is furnished in two sizes of B current supply—40 and 60 mils at 180 volts. The 40 mils at 180 volts, with 6 volt, 50 amp. hour battery within the unit sells at \$72. The 60 mils of the same sells at \$77. The dry rectifier contained in this unit is of the Vertrex type. The B power unit, which is incorporated in the complete unit, may also be had in a separate unit, including automatic relay. The 40 mils at 180 volts sells at \$39.50 and the 60 mils at 180 volts sells at \$39.50 and the 60 mils at 180 volts sells at \$44.50. Made by Vesta Battery Corp. 2100 Indiana Ave., Chicago, Ill.—Radio Retailing. November, 1927.



### Where to Buy It

News of the latest products gathered by the editors

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



### Tudor Radio Cabinet

This new Adler-Royal product is made by the Adler Mfg. Co., Louisville, Ky. It has a spacious compartment, large enough to take any combination of battery or power units. Access to the battery compartment is from the front, the front panel being attached as in piano construction. In addition the drawer construction for the radio panel chassis is easily accessible without removing the cabinet from the wall, and the cabinet may be used with or without a horn speaker. The dimensions of the Tudor are—height 50\frac{3}{2} in., width 29\frac{1}{2} in., depth 20\frac{1}{2} in. - Radio Retailing, November, 1927.



### New Capacitors

The Wireless Specialty Apparatus Company (Faradon) Boston, Mass., is manufacturing 10-filter units in vacuum-impregnated, moistureproof, pressboard containers, with black leatherette finish. They are of 1/10, 1, 2, and 4 mfd. capacity and are made for maximum operating voltages of 1,000, 300, 450, and 600 direct current respectively, and 500, 150, 225, and 300 direct current. Intended retail prices range from \$1.25 to \$5.75.

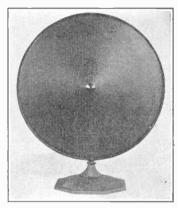
tended retail prices range 1.0... \$5.75.

The by-pass units made by this company come in lithographed metal containers and are of \$\frac{1}{2}\$, 1 and 2 mfd. capacity. The maximum operating voltages are 75 alternating, and 150 direct current. Intended retail prices are 90c., \$1.20 and \$1.90.—Radio Retailing, November, 1927.



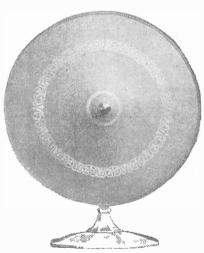
### A and B-Power Units

The Prest-O-Lite Storage Battery Sales Corporation, Indianapolis, Ind., is now calling attention to a new radio power combination, the A and B power units. The new B-power unit is called the "Speedway B."—Radio Retailing, November, 1927.



### Cone Reproducer

The illustrated cone reproducer is being made by the Monmouth Products Company, 882 East 72nd St., Cleveland, Ohio. This speaker, known as the "Hylocone," is made in two sizes. The first has a 30 inch diameter, and the second a 22 inch diameter. According to the manufacturer a special wood fiber is used for the cone construction, which is full floating, the front and back being cemented into one unit. The driving unit is adjustable. The base is finished in crystalline brown baked enamel. Either wall hangers or bases are supplied. The intended retail price of the larger size is \$32.50 and of the smaller \$29.50.—Radio Retailing, November, 1927.

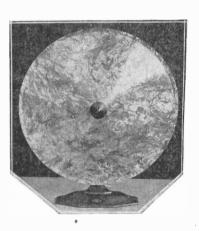


### Cone Reproducer

A cone type speaker is now on the market that has several distinctive features. It is known as the "Vemarc l'ower Speaker," and is adaptable for use with all tubes, including the '12 and '71 power tubes without the use of a coupling device. An impedance switch permits the matching of the speaker to the individual set, which allows the emphasizing of either the high or the low notes. A "Masonite" backboard is used which adds ruggedness and protects the free edge of the cone. The cone is 20 inches high. Lists at \$10 complete and is manufactured and guaranteed by the Associated Radio Corporation, Ann Arbor, Michigan.—Radio Retailing, November, 1927.

### Cone Reproducer

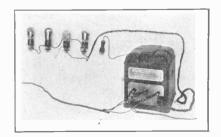
The illustrated cone reproducer, known as "Pearl-O-Cone" is the latest product of the Acme Electric & Mfg. Company, 1444 Hamilton Ave., Cleveland, Ohio. This speaker stands 19 in. high and has a cone of 17 in. in diameter. Pyralin is used for the structure of the cone and according to the manufacturers gives excellent reproduction throughout the entire audible frequency range. The speaker comes in a variety of color shades which will harmonize with practically every decoration to be found in the home. Intended retail price is \$17.50.—Radio Retailing, November, 1927.



### Power Amplifier and A.C. Tube Supply

Radio Receptor Co. Inc., 106 Seventh Ave., New York, is placing on the market two models of power amplifiers combined with A, B and C-supply for the new a. c. tubes. Each model comes complete with a special harness and tube adapter as shown in the accompanying illustration. A volume control is also furnished as well as a type '10 and '80 tube. A dummy plug which is wired to the "Powerizer" is inserted in the first audio frequency socket thereby putting into operation the power amplifier equipment and displacing everything beyond the defector tube in the set.

Radiola 20 model has an intended retail price of \$73 complete and designed for use with the Radiola 20. AK model which is designed for Atwater Kent models 20, 30, 32, 33 and 35 has an intended retail price of \$74. These units will operate most five, six and seven tube sets although not considered universal. — Radio Retailing, November, 1927.



### Latest Products Gathered by the Editors

### Illuminated Cone Speaker

Illustrated is an illuminated cone speaker known as "Glo-Cone" being made by the Aladdin Mfg. Company, Muncie, Ind. The lamp which illuminates the cone, is controlled by a pull chain extending through the back of the speaker. The new inside frosted 25-watt Mazda round globe is to be used. The front of the speaker is removable in order to place the lamp in the socket. Also the unit of the speaker is adjustable. Intended retail price is \$12.50.—Radio Retailing. November, 1927.



### B-Power Unit

The Serpa Manufacturing Company, Inc., 35 E. Wacker Drive, Chicago, Ill., is making the B-power supply illustrated. This unit delivers 135 volts at 50 milliamperes and has taps arranged for 22, 45, 67, 90 and 135 volts. The case has a green, crystallized finish and measures 3½ in. x 6½ in. x 8½ in. According to the manufacturer, this type of power supply operates on either alternating or direct current. The intended retail price is \$12.85.—Radio Retailing, November, 1927.



### Lead-in Lightning

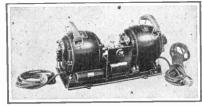
A combination lead-in and lightning arrester is being made by Swan-Haverstick, Inc., Trenton, N. J. There are only two contacts to be made as the lightning arrester is an integral part of the lead-in. The intended retail price is 60 cents.—Radio Retailing, November, 1927.





### A.C. Tube Transformers

The General Radio Company, Cambridge, Mass., has placed on the market its type 440A low voltage transformer for use with the new A.C. tubes. This transformer will carry a total load of 70 watts, which may be drawn from any one of the windings or divided. Filament supply is provided for filament, separate heater, power and rectifier tubes. It is designed for use on 110 volts, 60 cycles, and has an intended retail price of \$10.—Radio Retailing, November, 1927.



### Motor Generator Set

The Bodine Electric Company, 224 West Ohio St., Chicago, Ill., has placed on the market a motor generator set which operates on 110-volt D.C. current, and supplies 110-volt, 60-cycle current for radio use. The output is 250 watts. The machine is finished with black, baked enamel, and equipped with carrying handles and rubber padded feet. A small rheostat is provided to take care of variations in D.C. line voltage, and insure exactly the right A.C. voltage at the set. The intended retail price of the machine illustrated, known as No. 1031-R, is \$170. If it is desired to operate this machine from 220-volts D.C., an additional charge of \$6 is made.—Radio Retailing, November, 1927.



### Light for Speaker

The Edison Lamp Works, Harrison, N. J., has recently developed a new small 10-watt, 115-volt lamp which is particularly applicable to the lighting of radio speakers. The specifications of the lamp are 10 watt, 110 volt, 115 volt and 120 volt, S-11 bulb with intermediate screw base. The lamp is available in clear, white, red, green. blue, vellow, amber-orange and flame tint coated colors. The intended retail price is 25 cents. Sockets and receptacles for the new intermediate screw base lamp have been developed by the merchandising department of the General Electric Company of Bridgeport, Conn.—Radio Retailing, November, 1927.

### A C Tube Filament Supply Transformer

The Thordarson Electric Mfg. Co., 500 West Huron St., Chicago, Ill., has placed on the market its model T 2446 filament lighting transformer. This transformer has been especially designed for the new AC tubes and provides three voltage windings which are: 1.5 volts. sufficient for six of the '26 type tubes; 2.5 volts, which will supply two of the '27 type tubes, this winding being center tapped; and 5 volts, which will supply two 5-volt power tubes, the winding on this supply also being center tapped. A receptacle is provided in the unit for the B-supply plug. The case has a crackle finish and measures 2\frac{3}{2} in. by 5\frac{3}{2} by 4\frac{3}{2} in. It is intended for use on 115 volt 60 cycle current and is furnished with a 6 ft. cord and separable plug. Intended retail price is \frac{\$10}{2} - Radio Retailing. November, 1927.



### Speaker Comparator

A speaker comparator is being made by Temple, Inc., 213 South Peoria St., Chicago, Ill. It consists of a bakelite turret molded in the form of a hollow truncated cone. Around the base of this cone, five pin-jacks are mounted, all of which are electrically connected together on the inside of the cone form making a common lead to five speaker circuits. Directly above each of these pin-jacks five more jacks are mounted in such a way so as to allow the switch arm to make individual contact with the terminal of each one of them. Thus any one of a five speakers may be instantly compared for tone quality. The intended retail price is \$8.50.—Radio Retailing, November, 1927.



### Electric Phonograph Reproducer

The Brooklyn Metal Stamping Corporation, 718 Atlantic Ave., Brooklyn, N. Y., announces the "Via-Rad." an electric phonograph reproducer that can be quickly attached, without tools, to any phonograph to change it to a radio-operated instrument. It consists of three units. The electric reproducer replaces the sound box of the phonograph, the "Via-Tector" fits into the detector socket of the radio set, and the "Via-Trol" regulates the reproduction from a whisper to the loudest volume. It makes use of the detector tube of the radio set, thereby assuring full power for great volume. By the use of a power tube, such as the '12 or '71 types in the last stage of the radio set, the "Via-Rad" will deliver great volume which can be still further increased by a power amplifier. The intended retail price, complete, is \$10.—Radio Retailing, November, 1927.

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

### Dry-Contact Metallic Rectifiers

Rectifiers

The Benwood-Linze Co., 19th & Washington Ave., St. Louis, Mo., has placed on the market a line of dry-contact metallic rectifiers. Rectifier type A-20 is designed for replacing rectifying units of all trickle chargers and A-power devices of the electrolytic type, which have a low secondary voltage of from 10 to 12 volts, under load. This type is a full-wave rectifier. The intended retail price is \$5.

Replacement rectifier, type A-40 is for the same use in units having a secondary transformer voltage of from 15 to 16 volts, under load. This type is a half-wave rectifier and has an intended retail price of \$5.

Rectifying element type C, is fitted with a standard screw base suitable for use in place of all 2-ampere bull type charging devices, using a transformer with a secondary voltage of from 15 to 18 volts, under load. This element furnishes half-wave rectification at a 2-ampere charging rate. The intended retail price of this element is \$4.50—Radio Retailing, November, 1927.

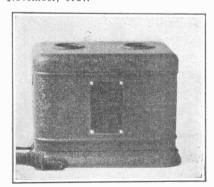


### B-Power Unit with A.C. Filament Taps

A.C. Filament Taps

Harold J. Power. Incorporated, Medford, Mass., is placing on the market an entirely new type of A, B and C power unit. This unit supplies 50 milliamperes at 180 volts for the B-power and has taps at 45, 90 and 180 volts. There is also a flexible lead plugging into tip jacks which provides adjustment for high, low and intermediate line voltages. Either a '13 or '80 type rectifier may be used in this unit.

The unit also supplies raw AC for lighting the filaments of the new AC tubes. The current available is as follows: 1½ volts AC, for a maximum of 7 of the '26 type AC tubes: 2½ volts AC, for a maximum of 7 of the '26 type AC tubes: 2½ volts AC, for a maximum of 2 voltages may be obtained by the proper use of the AC tubes in the receiver set design and therefore, according to the manufacturer, no separate C-voltage terminals are incorporated in the unit itself. Overall dimensions of the unit are 6¾ in. long. The case is of die-made metal with all corners rounded and finished in Crystalline brown lacquer. This unit is known as model 475 and has an intended retail price of \$47.50, complete with tube.—Radio Retailing, November, 1927.



Radio Retailing, November, 1927



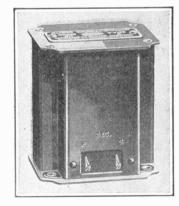
### Power Unit Condensers

Two balanced condenser banks are now being manufactured by the Dubilier Condenser Corporation of New York City.

Condenser Corporation of New York City.

Condenser bank type PL-574 has been designed primarily for the Thordarson R-171 Power Compact, although it is equally suitable for use with the new Raytheon BH rectifier or the full-wave filament rectifiers. This condenser bank is constructed with ample dielectric strength. The condenser sections are sealed in a metal container with handy soldering terminals on the top and sides. There are five condensers in the bank, with a total capacity of 14 microfarads. The sections are of different voltage ratings in accordance with the different voltages encountered in the various parts of the filter circuit.

Condenser bank PL-575 has been designed primarily for the Thordarson R-210 Power Compact, but it is equally applicable to any other type of high-voltage, half-wave rectifier layout for operating a '10 type of power tube, together with supplying the plate requirements of the usual receiver. This bank, also contained in a metal case with soldering terminals on top, contains six condensers totalling 12 microfarads, and of different voltages according to the part of the filter circuit in which they are to be used.—Radio Retailing, November, 1927.



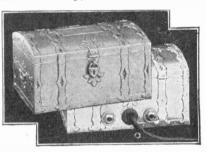
### A. F. Transformer

The new type A audio-frequency transformer manufactured by the Sangamo Electric Company, 50 Church St., New York City, is especially designed to minimize distortion. The core is of special alloy and the axis of the transformer winding is in a horizontal plane enabling the transformer to be oriented to eliminate hum. It is shielded in an iron case to avoid interference from stray fields. The approximate primary resistance is 1,960 ohms; the secondary resistance about 7,100 ohms. The maximum plate current permissible is 6 milliamperes. The turn ratio is three to one. The transformer is three inches high. List price, \$10.—Radio Retailing, November, 1927.

### Output Transformer

Out put Iransformer

The Scanlan Electric Mfg. Co., 1113
No. Franklin Street, Chicago, Ill., is
just placing on the market a new idea
in output transformers under the name
of "Speaker Chest." This accessory is
of netal, with the transformer sealed
inside of it, and it has all the appearances of a cigarette container in the
shape and design of a treasure box.
It is finished in antique bronze, antique
silver, antique brass, or a walnut shade
thus providing some finish which will
harmonize with practically any furniture set, speaker, or other accessories
in the room. The intended retail price
of this output transformer is \$10.—
Radio Retailing, November, 1927.



### Socket Mounting

The H. H. Eby Manufacturing Company, Inc., 4710 Stenton Ave., Philadelphia, Pa., has simplified the assembly of their new Universal socket for mounting on top of a wood or metal panel. Inclosed with each socket, now comes a thin insulator shaped the same as the base of the socket. In order to mount the new socket on top of a wood or metal panel, it is necessary only to drill two clearance holes for the mounting screws. The four soldering terminals are bent back in the slots provided, and the Bakelite insulating plate furnished is placed against the lugs and the socket is ready for mounting.—Radio Retailing, November, 1927.

### A C Tube Kit

The Conneway Electric Laboratories, Hoboken, N. J., has placed on the market the illustrated a.c. tube kit. This kit contains five "magnatrons" of the following types: Three a.c. 226 magnatrons fitted with adapter bases, one a.c. 227 magnatron also fitted with a adapter base, and either a d.c. 112 or d.c. 171 power tube for the last audio stage which is also equipped with an adapter base. To change over an existing battery operated set, all that is necessary is to substitute these a.c. tubes in their proper places and connect up the filament circuit properly which in the case of these tubes is brought out to two binding posts on the adapter base and furnish a suitable a.c. source. The intended retail price of the kit of five tubes is \$21.—Radio Retailing, November, 1927.

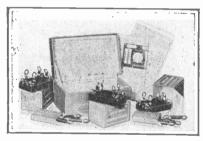


### What's New in Radio and Where to Buy It



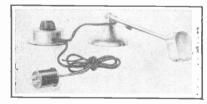
### Radio Battery in Clear Glass Case

The latest in radio A batteries is announced by Vesta Battery Corporation, Chicago, Ill., in a clear glass case, through which the water level in the battery is clearly visible at all times. In addition to the clear glass case there is a "3 ball" type hydrometer built into the case. This shows the state of charge at all times—plainly and faithfully. No hand hydrometer is needed. This battery is made in both 50 and 100 ampere hour sizes. The positive plates are 25 per cent oversize. The separators are also oversize.—Radio Retailing, November, 1927.



### Amplifier Kit

This new kit made by the Daven Radio Corporation, 158 Summit St., Newark, N. J., contains three No. 43 resisto-couplers complete with the necessary resistances to make a resistance-coupled amplifier for use with Mu-30 tubes and with B eliminators. An amplifier constructed from this kit will not "motor-boat," no matter what B eliminator is used. List price, \$8.—Radio Retailing, November, 1927.

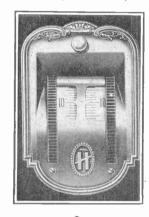


### Electrical Pick-Up

The new Daven Pick-Up for phonographs made by the Daven Radio Corp., Newark, N. J., eliminates all needle scratching and reproduces the music from phonograph records faultlessly. It is made of brass. The plug fits into the detector socket of any radio set. List price, \$17.50.—Radio Retailing, November, 1927.

### Illuminated Drum Dial

An illuminated drum dial has been placed on the market by the Hammarlund Manufacturing Company, 424 West 33rd Street, New York. It has two drums of Bakelite, knurled on the edges for easy operation and a die-cast supporting frame. The wave-length scales are of translucent celluloid with a small electric light back of them, which illuminates the numbers and degrees clearly. This light connects with the regular A battery circuit. A convenient switch turns the light on or off. The main drive shaft is fitted with an unique flexible coupling on each end for the attachment of condensers in tandem. The dial has a bronze escutcheon plate embossed and oxidized. List price: \$6.—Radio Retailing, November, 1927.



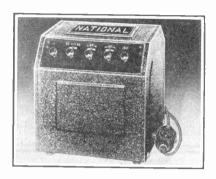
### Power Clarostat

A new clarostat with a current carrying capacity of 40 watts has now been placed on the market by the American Mechanical Laboratories, 285 North Sixth Street, Brooklyn, N. Y. It can be mounted by means of one hole. According to the manufacturer each one of these units is hand calibrated. They can be obtained in various resistance ranges for different purposes. The intended retail price is \$3.50.—Radio Retailing, November, 1927.



### Amperite Adapter For Old Sets

The amperite adapter control idea consists of two amperites arranged in parallel and connected in the minus A-lead of the usual radio receiver, for the purpose of controlling all filaments of the receiver for proper operating temperature. This adapter is being made by the Radiall Company, 50 Franklin St., New York. The method may be applied to any existing set simply by inserting the adapter with two amperites in the minus A-lead, mounting the unit either inside or at the rear of the cabinet, and with the existing hand rheostats short-circuited or kept full on. — Radio Retailing. November, 1927.

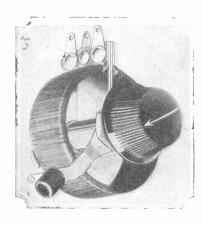


### B-Power Unit

The National Company, Inc., Malden. Mass., is placing on the market a new power supply unit known as "National B Type 7180." This unit will supply 70 milliamperes at 180 volts, which is sufficient for operating the largest radio set, including a '71 power tube. In addition to the fixed power tube plate voltage of 180, three variable voltages are available as follows: Detector voltages, 22 to 45; radio frequency voltages, 90 to 75, and audio frequency voltages, 90 to 75. This unit is designed for 110-vont, 60-cycle operation, and uses an '80 typerectifier tube. Over all dimensions are 7½ in. high by 7½ in. long, and 7½ in. wide. The 5-ft. cord carries in addition to its plug, a switch for turning the unit on and off.—Radio Retailing, November, 1927.

### Fourth Terminal Potentiometer

A new potentiometer being made by the Central Radio Laboratories, 16 Keefe Avenue, Milwaukee, Wis., has an additional semivariable arm which can be adjusted behind the panel to any desired resistance value. It is made in 4 sizes. The 175-ohm unit is used to provide the two variable voltages in A-B-C power circuits, while the 250-ohm unit will provide, two variable taps 67 volts and an intermediate voltage—in the B-output of the new Raytheon A-B-C power circuit. The 2,000 ohm unit is used to provide two variable C biases in B power circuits, such as the Amertran Power Pack. Two 6,000 ohm units connected in series across the output of a B filter will provide four variable output voltage taps with the best possible load regulation. The intended retail price of the first two units is \$2 each and of the second two \$2.25.—Radio Retailing, November, 1927.



### Latest Products Gathered by the Editors

### Speaker In Picture

Baritone Manufacturing Co., 844 West Jackson Blvd., Chicago, Ill., has placed on the market the Illustrated picture-cone-speaker. The cone is located in the rear of the frame in such a way that it does not show when the picture is properly hung. The painting is done on black velvet. The sound from the speaker is not reflected from the wall but comes through the front of the picture. These picture cones come complete with the cone, a 10 ft. cord, and mounted in a handsome frame, ready for hanging. Either a floral and bird design may be had, or a picture of "Old Ironsides," the intended retail price being the same in both cases, \$25. Overall dimensions are 70½ x 31½ in.—Radio Retailing, November, 1927.



### Automatic Charger

Automatic Charger

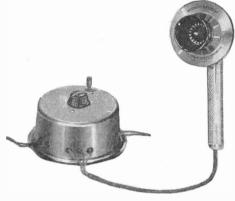
Both A and B current supply are controlled automatically from the switch on the radio set, through the automatic relay switch constructed within the new charger being made by the Valley Electric Co., 4515 Shaw Ave, St. Louis, Mo. This unit is equipped with a B-power supply receptacle mounted on the back of the case. The B-power unit attachment plug is plugged into the receptacle. This arrangement makes the radio receiver automatic in its operation.

By action of the relay the Charger is disconnected from charging the battery and the "B" Power is connected to the set. When the switch on the receiver is turned to the "Off" position, the reverse operation takes place, and the Charger automatically continues to charge the battery. If "B" Batteries are used instead of a "B" Power Unit, the Charger can also be controlled from the Radio Set switch. It delivers either 1½ or 2½ amperes, controlled by a high and low plug under the lid. The Raytheon element, is employed. Comes complete with cord, plug, leads and clips. Black enameled case. Price \$16.50.

—Radio Retailing, November, 1927.



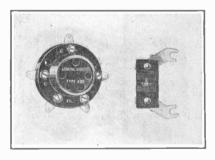
Radio Retailing, November, 1927



### Radio Announcer Outfit

Radio Announcer Outfit

The purpose of this set is to enable the Radio and Phonograph Dealers to readily make announcements through the amplifier and speaker of radio or phonograph. It consists of a Wonderphone High Power differential type microphone and a control box having a cord with an adapter for slipping over the prongs of the detector tube, for attaching to the radio set. Three pin jacks are provided in the side of the control box to receive the microphone cord. Two additional pin jacks are also provided to receive the terminals of a magnetic pick-up for playing phonograph records, where desired. The control box is also provided with a volume control, and a 3 position key type switch for turning off the radio program while using either the microphone or phonograph pick-up with the radio set. As this set can be quickly attached to the radio and the radio or either type of transmitter can be instantly switched on or off at will, it makes an ideal arrangement for the Dealer who wishes to take advantage of the direct advertising possibilities of such a combination. Made by the Universal High Power Telephone Co. Seattle, Wash. — Radio Retailing, November, 1927.



### Center Tap Resistance, Socket and Rheostat

The General Radio Company, Cambridge, Mass., is now marketing its type 439 center tap resistance. This is for use with the new A.C. tubes. This resistance is designed in such a manner that it will fit directly across the tube socket and is held in place by the binding posts of socket. No other mounting is necessary. The intended retail price is 60c.

is 60c.

Type 438 Socket is also a new item which is designed for the new five-prong tubes. The intended retail price of this is 50c. Rheostats which will carry the load necessary for the operation of the new A.C. tubes may also be had at an intended retail price of \$1.25 each.—Radio Retailing, November, 1927.

### New Radiotron For Experimenters

Amateurs and experimenters will be interested in the recent announcement of the Radio Corporation of America concerning a new Radiotron of the screen grid type. It is intended primarily for radio-frequency amplification (without neutralization or stabilizing resistance) in circuits esp.cially designed for it. The tube has a voltage amplification factor of over 250.

The new Radiotron will be known as UX-222. It has a filament, a plate and two grids, in place of the usual three elements employed in other receiving Radiotrons. This second grid is responsible for its high voltage amplification in the circuit in which it is used. Radiotron UX-222 may also be used as a "space charge grid" tube in audio frequency circuits. It cannot be utilized in the present-day receiver. Special circuits and specially shielded apparatus are necessary to realize its maximum capabilities.

The new Radiotron has a standard four prong UX base and differs in external appearance from the ordinary tube by the addition of a small metal cap at the top of the glass envelope for a fifth connection to the control grid. The filament terminal voltage for this tube is 3.3 volts and the filament current consumption is .132 amperes. The recommended plate voltage is 135 volts.

—Radio Retailing. November, 1927.

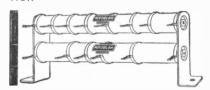


### New Transformer for A C Tubes

Another power supply transformer has been added to the long list announced during the past year by the Dongan Electric Manufacturing Company of Detroit. This newest transformer, No. 4586 low voltage A C power supply transformer, is designed for use with the new A C power tubes, '26 amplifier tubes and '27 detector tube. 4586 transformer will function also with '71 power amplifier tube; when a set uses '10 tube for power amplification Dongan transformer No. 4587 is required.—Radio Retailing, November, 1927.

### Tapped Resistors

Illustrated is the Kroblak tapped resistor No. 245, manufactured by C. E. Mountford, 30 Sullivan St., New York. This unit embodies the necessary resistors for the new QRS and Raytheon A, B and C power units. The unit consists of two 75 watt tapped resistors mounted within brackets. The retail price, \$6.—Radio Retailing, November, 1927.



### News of Jobbers and Distributors

### Illinois Crosley Jobber Has Record Meeting

The Williams Hardware Company, Streator, Ill., recently held its annual radio fest at which 230 dealers were present—the largest number ever attending a Crosley meeting in Illinois. The affair opened with a display of radio merchandise, followed by a speech by Powell Crosley, Jr., president of the Crosley Radio Corp., who was introduced by M. B. Williams. Other speakers during the afternoon were R. V. Sutliffe, western editor of Radio Retailing and L. A. Kellogg, sales promotion manager of the Crosley Co. In the evening a banquet was served in the Williams plant where the guests were entertained by artists from Station WTAX. The principal addresses at this dinner were made by Charles H. Williams, president, Williams Hardware Co., and C. A. Lindevall, Burgess Battery Co.

GRIER-SUTHERLAND COMPANY recently held a Federal Orthosonic Radio Exhibit at the Park Lane Hotel, Toledo, for the benefit of northern Ohio retailers.

MILLHENDER ELECTRIC SUPPLY COMPANY, Boston, Mass., has recently been appointed as a distributor for the Sleeper Radio and Manufacturing Corporation's products.

Tay Sales Company, Chicago, Ill., has taken over the Sonora line for Wisconsin with offices in Milwaukee at Broadway and Mason Streets.

METROPOLITAN ELECTRICAL SUPPLY COMPANY, 180 West Lake Street, Chicago, Ill., has been appointed as distributor of Bremer-Tully products.

REX ELECTRIC, INC., 326 Camp St., New Orleans, La., has been appointed as distributor of the Mohawk line. Morris Gay Elgutter, president and general manager, issued the announcement.

Precision Products Company, Ann Arbor, Mich., has appointed the following concerns as distributors of the Arborphone line: Stratton & Terstegge, Inc., Louisville, Ky., A. J. Tobey Company, Los Angeles, Calif., and John E. Graybill & Co., York, Pa.

United Music Company, 19 Main St., Brockton, Mass., has recently added a wholesale department to its activities, operating under the name of the Felkin Supply Co.

THE NORTH AMERICAN AUTO SUPPLY COMPANY, Cleveland, Ohio, has been appointed Freed-Eisemann distributor for Cleveland and surrounding territory.

The L. A. Chambers Company, distributor for several lines in the Chicago district has been appointed to cover the same territory for the Tobe Deutschmann Company.

THE JENNINGS-McCollom Company, manufacturers' and distributors' agent, 221 S. W. Temple Street, Salt Lake City, Utah, is available for several other lines in that territory.

The Mohawk Auto Equipment Company, 1222-26 So. Wabash Avenue, Chicago, has formed a Radio, Electrical, Sporting Goods and Lighting Fixture division in charge of Mr. I. C. Friedman, and will be pleased to receive catalogs and data from manufacturers for this new division.

The Crosley Radio Corporation, Cincinnati, Ohio, has appointed the following concerns as distributors for its line: The Southland Electric Supply Co., Louisville, Kentucky, which will handle Crosley merchandise exclusively in the southwest territory and the Kentucky Ignition Company, Lexington, Kentucky, which will cover in and around Lexington.

THE DREHER PIANO COMPANY, Cleveland, Ohio, recently celebrated the seventieth anniversary of its founding. A short while ago this company added the Atwater Kent line of radio sets and speakers.

REVALL MANUFACTURING COMPANY, Euclid Bldg., Cleveland, Ohio, is the name and address of a new concern which will act as Ohio representative for radio and electrical manufacturers. Bertrand M. Lewis, formerly sales manager of the Specialty Appliance Co. is the organizer of the new company.

The Roller-Smith Company, 233 Broadway, New York City, has appointed the D. H. Braymer Equipment Company, W. O. W. Building, Omaha, Neb., as its representative for Nebraska and Western Iowa. D. H. Braymer is at the head of this organization.

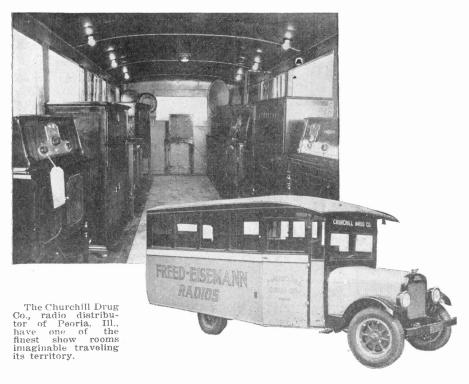
EMMONS-HAWKINS HARDWARE COM-PANY, Huntington, W. Va., has been appointed distributor of Crosley sets and accessories with West Virginia and part of Kentucky as its territory.

SIMPLEX RADIO SUPPLY COMPANY, INC., 3321 Washington Blvd., St. Louis, Mo., recently moved into its new building at the above address. W. F. Kuhn and F. F. Alberter, the organizers, established the business in 1921 and its steady growth since that time has necessitated the erection of new quarters.

Several Crosley distributors have recently established branches in their territories. C. D. Franke & Co., Charleston, S. C., now has a branch at Columbia, S. C.; Harper Meggee, Inc., Seattle, Wash., has opened a store at Spokane and Noyes Brothers and Cutter, St. Paul, Minn., have started branches in Fargo, N. D., and Billings, Mont., the Billings store operating under the name of Chapples, Inc.

The Kellogg Switchboard & Supply Company, Chicago, Ill., has a sales team, composed of two of its staff, which stages so-called "radio circuses" before meetings of dealers called together by Kellogg distributors. An outline of good talking points for the retailer is given, the points being brought out graphically by a series of illustrated charts. During the past several weeks the Kellogg Radio Circus has been enthusiastically received by Lucker Sales Co., Minneapolis; Grinnell Brothers, Detroit; Standard Radio Co., Milwaukee; and a large dealer meeting at the Hotel LaSalle, Chicago.

### Traveling Show Rooms Gaining in Popularity



### New Dealer Help Material

Aids to greater profits provided by radio manufacturers for their dealers

#### Three Punch Plan Helps Offered G. E. Dealers

The Merchandise Department of the General Electric Company is offering to its dealers a Three Punch Plan for the sale of G-E Battery Chargers, consisting of newspaper advertising, store and window display, and demonstration.

The campaign package contains three display cards, a counter display, a bulb display stand, a window strip, folders and other sales promotional pieces, a Three Punch Plan Manual, proofs of dealer newspaner advertisements, sample sales letters, and other material.

POLYMET MANUFACTURING TION, 599 Broadway, New York City, has prepared a new catalog describing its products. An interesting feature of the booklet is the illustration of several well-known eliminator and amplifying circuits listing the parts necessary for their construction. The catalog is free to anyone writing for it.



### Raytheon Issues New Display Card

The Raytheon Mfg. Co., Cambridge, Mass., is offering an attractive display card in colors which connects to an outlet receptacle from the back.

An eliminator can, in turn, be plugged into the receptacle on the face of the card thus providing an interesting tie-up between the tube and the eliminator.

MASTER-CRAFT PRODUCTS COMPANY, 3803 North Clark St., Chicago, Ill., has available a window streamer illustrating their new low price tube rejuvenator. They also pack this instrument in a display carton for counter advertising.

THE POOLEY COMPANY, 16th and Indiana Ave., Philadelphia, Pa., has issued Bulletin No. 1002, describing the large amount of dealer help material which they have available for their dealers. The material includes prepared newspaper advertisements, mailing folders and signs, as well as many other interesting display articles.



### Hyatt Window Display

Hyatt Electric Corporation, 836 N. Wells Street, Chicago, Ill., is supplying its dealers with the above illustrated window display. The window display is lithographed in three colors and has the imprint "Licensed Dealer" at the top.

Briggs and Stratton Corporation, Milwaukee, Wis., are distributing to their dealers and jobbers two attractive booklets, done in black and orange, and written in the lighter vein. These booklets give complete instructions for assemblying and connecting Basco Combination Power Units and for servicing the same. They are illustrated by clever line drawings which show the happy dealer engaged in the various steps of assembling, connecting or servicing Basco products.

RADIO CORPORATION OF AMERICA, 237 Broadway, New York City, has available for the exclusive use of its authorized dealers an electrotype specimen book illustrating the cuts of R.C.A. products available for local advertising.

YAHR-LANGE, INC., Milwaukee, Wis., has recently issued a large descriptive folder and a mailing folder describing their super-ball antenna, as well as a mailing folder describing their radio speaker.

OPERADIO MANUFACTURING CORPORATION. 700 East Fortieth Street, Chicago, Ill., has recently issued a mailing folder describing their radio speakers. A space is left open on the back for the dealer's name and

KELLOGG SWITCHBOARD & SUPPLY Co., 1066 West Adams Street, Chicago, Ill., has recently brought out a series of mailing folders describing their new A. C. tubes, their A. C. sets, as well as their B-power units and reproducers.

Niagara Metal Stamping Corp., Niagara Falls, N. Y., is furnishing dealers with an attractive display model and colored counter and window cards with all orders for one dozen or more of its PREMAX adjustable steel radio masts. The model mast is an exact 1½ foot replica of the Premax telescoping mast mounted on an attractive metal base. It shows the ornamental top, pulley, base, roof anchors, adjusting device and method of attaching the guy wires that are standard equipment with this antenna support.

Precision Products Company, Inc., Ann Arbor, Mich., is offering to dealers the interesting window display illustrated above. It is 60 in. wide and 34 in. high and is lithographed in 8 colors. is scored along the sides of the book, so that the wings can be folded in to fit a window smaller than 60 in. The strip at the top is separate and is intended for use as a window streamer.

### Yahr-Lange Offers Window Contest Display Material



Part of the window display material being supplied by Yahr-Lange, Inc. to dealers who wish to complete for the Packard Sedan offered as first prize to the winner. Details of this contest appear in the news section.

# Specifications of Receiving

Receiving Tubes

			ecewing 1 uves					
Name and Address of Manufacturer	Trade Name and Model Number	List Price	Recommended Use	Filament Terminal Voltage	Filament Current Amperes	Detector Plate Voltage	Maximum Amplifier Plate Voltage	Amplification Factor
Armstrong E. & M. Co., Inc. Newark, N. J.	Armor—501 512 571 171-A 510	\$2.50 4.50 4.50 4.50 9.00	Det, R.F., A.F. Det., R.F., A.F. Power Amp. Power Amp. Power Amp.	5 5 5 7.5	. 25 . 50 . 50 . 25 I . 25	45 45	135 157 180 180 450	8 8 3 3 8
Cable Supply Co., Inc. 31 Union Square, New York	Speed—X-201-A X-199 V-199 X-120 X-140 11 12 X-112 X-171	1.75 1.75 1.75 1.75 2.00 2.50 2.50 3.50 3.50	Det. and Amp. Det. and Amp. Det. and Amp. Power Amp. Hy. Mu. Amp. Det. and Amp. Det. and Amp. Power Amp. Power Amp.	5 3 3 3 5 1.1 1.1 5	. 25 . 06 . 06 . 125 . 25 . 25 . 25 . 5	20-45 20-45 20-45 20-45 20-45	45-135 45-90 45-90 90-135 135-180 45-90 45-90 90-157 90-180	8. 2 6. 6 6. 6 3. 4 30 6. 31 6. 31 8. 6
Cleartron Vacuum Tube Co. 28 W. 44th St. New York	Cleartron—CT-201-A CTX-199 CTX-201-R.F. Ili-Constron—CTX-101-A Cleartron—CTX-200-A CTX-171	1.75 2.25 2.50 3.00 4.00 4.50	R.F., Det., A.F. R.F., Det., A.F. R.F., Amp. Res. Coupled Amp. Det. Power Amp.	5 3 5 5 5 5	. 25 . 80 . 25 . 25 . 25 . 25	45 45 67 45	135 90 90 135	8.5 7 10 20 20 3
Cunningham, Inc., E. T. 370 Seventh Ave. New York	Cunningham—I) X-301-A CX-340 C-299 CX-299 CX-220 C-11 CX-12 CX-300-A CX-112 CX-371 CX-310	1.75 2.25 2.25 2.25 2.50 2.50 2.50 4.00 4.50 4.50 9.00	Det. and Amp. Det. Det. Amp. Power Amp. Power Amp.	5 3.3 3.3 1.1 1.1 5 7.5	. 25 . 25 . 06 . 06 . 132 . 25 . 25 . 25 . 50 . 50	45 90-135 45 45 45 45 45 45 45	135 180 90 90 135 90 90 180 180 425	8 30 6.25 6.25 3.3 6.5 6.5 20 8
Diamond Vacuum Prod. Co. 4049 Diversey Ave. Chicago, Ill.	Diatron—201-A 199-V, 199-X, 199-LB 240 112 200-A 171 210	1.75 2.25 2.25 3.75 4.00 4.50 9.00	Det. and Amp. Det. and Amp.  Res. Coup. Power Amp. Det. Power Amp. Power Amp.	5 3 5 5 5 5 6, 7.5	. 25 . 06 . 25 . 50 . 25 . 50	45 45 45	135 90 180 157 180 157 425	8 6.5 30 7.25 20 3 7.5 7.7
C. E. Mfg. Co. Providence, R. I.	Ceco—A B & C E G H K F J-71 L-10	1.75 2.00 2.50 2.50 2.50 3.00 4.50 4.50 9.00	General Purpose General Purpose Power Amp. Res. Coup. Det. R.F. Amp. Power Amp. Power Amp. Power Amp.	5 3 3 5 5 5 5 5 7.5	. 25 .06 .12 .25 .25 .25 .25 .25 .25	45 45 67–90 67–90 45–90	135 180 135 180 135 180 180 425	8.5 6.4 3.3 20 14.4 12.5 8 3
Connewey Electric Labs. 406 Jefferson St. Hoboken, N. J.	Magnatron—DC-201-A DC-199 DC-240 DC-120 DC-200-A DC-112 DC-171 DC-210	1.75 2.25 2.25 2.50 4.00 4.50 4.50 9.00	Det. Amp. Det. Amp. Res. Coup. Power Amp. Det. Power Amp. Power Amp. Power Amp.	5 3 5 3 5 5 7.5, 6	. 25 .06 .25 .125 .25 .25 .25	45 45 90–180 45 20–45 45 45	90-135 90 90-180 135 180 180 450	8 6.25 30 3.3 8 3 7.5
Daven Radio Corp. 158 Summit St. Newark, N. J.	Daven—Mu-6 Mu-20 Mu-20	4.50 2.25 2.25	Power Amp. A.F. Amp. Det.	6 6 6	. 5 . 25 . 25	4590	180 180	6 20 20
DcForest Radio Co. 139 Franklin St. Jersey City, N. J	Audion-1)-401-A D-400-A D-412 D-471 D-410	1.75 4.00 4.00 4.50 9.00	Det. Amp. Det. Power Amp. Power Amp. Power Amp.	5 5 5 7 7	. 25 . 25 . 5 . 5	22–45 22–45	135 135 180 500	9 30 8 3 7
Diana Radio Tube Corp. 250 Park Ave New York	Diana—DX-201-A DX-240 DX-199 DX-199 D-199-L,B. DX-120 DX-200-A DX-112 DX-171 DX-210 Chesterfield—CFX-201-A CFX-240 CFX-199 CF-199 CF-199-L,B. CFX-120 CFX-121 CFX-121 CFX-112 CFX-111 CFX-111	1.75 2.25 2.25 2.25 2.50 4.00 4.50 9.00 1.75 2.25 2.25 2.25 2.25 2.25 2.25 2.25 2	Det. and Amp. Res. Coupled Amp. Det. & Amp. Det. & Amp. Det. & Amp. Det. & Amp. Power Amp. Power Amp. Power Amp. Power Amp. Pot. and Amp. Res. Coupled Amp. Det. and Amp. Power Amp.	5 3.3 3.3 3.3 3.3 5 5 7.5 5 3.3 3.3 3.3 3.3 3.3 5 5 5 5 5 7.5 5 5 7.5 5 7.5 5 7.5 5 7.5 5 7.5 5 7.5 5 7.5 5 7.5 5 7.5 7.	. 25 . 25 . 06 . 06 . 06 . 125 . 25 . 50 . 50 . 25 . 25 . 25 . 06 . 06 . 06 . 06 . 125 . 25 . 25 . 25 . 25 . 25 . 25 . 25	22-45 90-180 22-45 22-45 22-45 21-45 22-90 157.5 90-180 180-425 22-45 90-180 22-45 22-80 180-42 22-80 180-42 22-80 180-42 23-80 24-80 25-80 2	45-130 45-90 45-90 45-90 45-130 45-90 45-90 45-90	
Emerson Radval Corp. 25 W. 43rd St., New York	Emerson Multivalve 3-4 * Takes the place of 3 ordin		Any of its 3 units can be		detectors or	45 .\F.	135	6-8
Gold Seal Electrical Co., Inc. 250 Park Ave. New York	Gold Seal—GSX-201-A GSX-240 GSX-199 GS-199 GS-199-L.B.	1.75 2.25 2.25 2.25 2.25 2.25	Det. and Amp. Res. Coupled Amp. Det. and Amp. Det. and Amp. Det. and Amp.	5 5 3.3 3.3 3.3	. 25 . 25 . 06 . 06 . 06	22-45 90-180 22-45 22-45 22-45	45-130 45-90 45-90 45-90	

# and Rectifying Tubes

Receiving Tubes (continued)

<del></del>					7711	1 70		
Name and Address of Manufacturer	Trade Name and Model Number	List Price	Recommended Use	Filament Terminal Voltage	Filament Current Amperes	Detector Plate Voltage	Maximum Amplifier Plate Voltage	Amplification Factor
Gold Seal Electrical Co., Inc. 250 Park Ave. New York	GSX-120 GSX-200-A GSX-112 GSX-171 GSX-210	\$2.50 4.00 4.50 4.50 9.00	Power Amp. Detector Power Amp. Power Amp. Power Amp.	3.3 5 5 7.5	. 125 . 25 . 50 . 50 1 . 25	135 22-90 157.5 90-180 180-425		
Hytron Corp. 19 Oakland St. Salem, Mass.	Hytron—X-201-A X-199 V-199 Large X Base, X-199 X-120 Hi-Mu X-200-A X-112 X-171	1.75 2.25 2.25 2.25 2.50 3.00 4.00 4.50 4.50	Det. or Amp. Det. Power Amp. Power Amp. Power Amp.	5 3 3 3 5 5 5	. 25 . 06 . 06 . 125 . 25 . 25 . 5	45 45 45 45 45 45	135 90 90 90 135 135 136	8 6.25 6.25 6.25 3.3 20
Jaeger Research Labs. 280 Park Ave. Weehawken, N. J.	Jaeger—JX-201-A JX-199 JX-200-A JX-112 JX-171	1.75 2.25 4.00 4.50 4.50	Det. and Amp. Det. and Amp. Det. Power Amp. Power Amp.	5 3 5 5 5	. 25 . 06 . 25 . 5	45 45 45	135 90 135 180	8-8.5 6.3 25 8 3-3.5
Ken-Rad Corp. Owensboro, Kentucky	Archatron—UX-199 UX-100-A UV-199	2.25 2.25 2.25	Det. and Amp. Res. Coupled Amp. Det. and Amp.	3 5 3	. 06 . 25 . 06	22-45 45 22-45	90 180 90	6 35 6
	Adp199 UX-120 UX-201-A UX-200-A UX-112 UX-171 UX-210	2.25 2.50 1.75 4.00 4.50 4.50 9.00	Det. and Amp. Amp. Det. and Amp. Det.   Output Tube Output Tube Power Amp.	3 3 5 5 5 5 7.5	. 06 . 125 . 25 . 25 . 50 . 50	22–45 45 22–45	90 135 135 157 180 425	3.25 8 6 3 7.5
La Salle Radio Co. 149 W. Austin Ave. Chicago, Ill.	nformation not available at t	ime of goi	ng to press.					
Lektrodio Corp. 12 Maple St. Lynn, Mass.	Elektron—X-201-A X-200-B X-240 X-199 A-199 V-199 X-120 X-200-A X-112 X-171	1.75 2.25 2.25 2.25 2.25 2.25 2.25 4.00 4.50 4.50	Det. and Amp. Det. Res. Coupled Amp. Det. and Amp. Det. and Amp. Det. and Amp. Det. and Amp. Power Amp. Power Amp. Power Amp.	5 5 5 3 3 3 5 5 5 5	. 25 . 25 . 25 . 06 . 06 . 06 . 125 . 25 . 5	45 67.5 45 45 45 45	135 180 90 90 90 135 157.5	30 6.5 6.5 6.5 3
Magnavox Co. Oakland, Cal	Magnavox-201-A	1.75 4.50	Det. and Amp. Power Amp.	5 5	. 25	45	135 180	8 3.5
Musselman, A. J., Inc. Chicago, Ill.	5-VA 4-UA 3-UB 3-UBX 5-PD 5-UC With Adapter—5-UCA 6-P	1.60 1.75 1.75 2.25 2.25 4.00 4.50 5.00 9.00	Det. and Amp. Power Amp. Power Amp. Power Amp.	5 5 3 3 5 5 7.5	. 25 . 25 . 12 . 06 . 06 . 25 . 5 . 5	90-135 90-135 90 90 90 90 45	135 135 90 90 90 180 180 475	7 7.5 6.5 5.5 5.5 8 8
Northern Mfg. Co. 371 Ogden St. Newark, N. J.	Marathon—M X-201-A M X-240 M X-199 M V-199 M X-120 M X-200-A M X-111 M X-171	1.75 2.25 2.25 2.25 2.50 4.00 4.50 4.50	Det. and Amp. Det. and Amp. Det. and Amp. Power Amp. Det. Power Amp. Power Amp.	553335555	. 25 . 25 . 06 . 06 . 125 . 25 . 5	45–67 45–67 45–67 45	180 180 135 135 135 135	8-9 30 6-7 6-7 4 30 7-8
Perryman Electric Co. 33 W. 60th St. New York	Perryman—RH-201-A RH-199 PX-240 PA-120 PD-200-A PA-171 PA-112 PA-210	1.75 2.25 2.25 2.50 4.00 4.50 4.50 9.00	Det. and Amp. Joet. and Amp. Res. Coupled Amp. Power Amp. Det. Power Amp. Power Amp. Power Amp. Power Amp.	5 3 5 5 5 5 6–7.5	. 25 . 06 . 25 . 12 . 25 . 5 . 5	22-45 22-45 90-180 45	135 67.5 90–180 135 180 157.5 425	8. 6.5 30 3.3 2.65 8.0 7.5
Radio Corp. of America 233 Broadway New York	Radiotron—UX-201-A UV-199 UX-199 UX-240 WD-11 WX-12 UX-120 UX-200-A UX-112-A UX-171 UX-210	1.75 2.25 2.25 2.25 2.50 2.50 2.50 4.00 4.50 4.50 9.00	Det. and Amp. Det. and Amp. Det. and Amp. High Mu Det. & Amp. Det. and Amp. Det. and Amp. Power Amp. Det. Power Amp. Power Amp. Power Amp. Power Amp. Power Amp.	5 3.3 3.3 1.1 1.3 3.3 5 7.5	. 25 . 063 . 063 . 25 . 25 . 25 . 132 . 25 . 25 . 132 . 25 . 25	45 45 45 135–180 45 45 45	135 90 90 135–180 135 135 135 135 135	8 6.3 6.3 30 6 6 6 3.3 20 8 8 3 7.7
Schickerling Products Corp. 401 Mulberry St. Newark, N. J.	Schickerling—SX-201-A SX-500 SX-200 SX-199 SX-120 LC-201-A SX-112 SX-111 SX-700 SX-710	1.75 2.50 2.50 3.00 3.00 3.00 4.00 4.50 4.50 5.00 9.00	Det. and Amp. R.F. Amp. Det. Amp. and Det. A.F. Amp Det. and Amp. Det. Power Amp. Power Amp. Power Amp. Power Amp. Power Amp. Power Amp.	5 5 3.3 3.3 7 5 5 5 8	. 25 . 25 . 25 . 06 . 120 . 05 . 25 . 5 . 5 . 25	45 45 45 45 22–45	90-135 90-135 90 135 135 135 135 135 180 135 450	8. 5 9. 1. 0 6 4. 8. 5 20 8 3. 8 8

### Specifications of Receiving Tubes (concluded)

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Recommended Use	Filament Terminal Voltage	Fialment Current Amperes	Detector Plate Voltage	Maximum Amplifier Plate Voltage	Amplification Factor
Sonatron Tube Co. 108 W. Lake St. Chicago, Ill.	Sonatron—X-201-A X-200 X-200 X-199 V-199 A-199 X-240 II X-12 X-120 X-120 X-120 X-RF X-200-A X-30 X-20 X-6 X-29 X-17 X-112 X-171 X-112 X-171-A X-112-A	\$1.75 1.75 2.25 2.25 2.25 2.50 2.50 2.50 2.50 3.00 4.00 4.00 4.00 4.00 4.00 4.50 5.00 9.00	Det. and Amp. Det. Det. and Amp. Det. and Amp. Det. and Amp. Det. and Amp. Res. Amp. Det. and Amp. Power Amp. Power Amp. Power Amp. R.F. Amp. Det. Res. Amp. Power Amp.	553335.1133556663-4433-45557.5	. 25 1 . 06 . 06 . 06 . 25 . 25 . 125 . 125 . 125 . 25 . 25 . 25 . 25 . 25 . 25 . 25 .	45 16-22 45 45 45 45 135 22-45 22-45	90 90 90 180 90 135 135 135 135 135 135 180 180 180 180 185 135 135 135	8 6.25 6.25 6.25 30 6.5 6.5 3.3 3.3 3.3 12 30 20 8 20 20 3.3 3.3 8 8 7.7
Specialty Appliance Co. Cleveland, Ohio	Information not available at	time of go	ing to press.					
Stewart-Warner Speed Corp. 1826 Diversey Parkway Chicago, Ill.	701-AX 700-A 712-AX	1.75 4.00 4.50	Det. and Amp. Det. Power Amp.	5 . 5 5	. 25 . 25 . 5	45 [45–67	180	8
Sunlight Lamp Co. Newton Falls, Ohio	Crusader—201-A 171 112 240 200-A Duplex-171 Duplex-112 199 120		Amp. and Det. Power Amp. Power Amp. Res. Coupled Amp. Det. Power Amp. Power Amp. Det. and Amp. Power Amp.	5 5 5 5 5 5 5 5 5 3 3	. 25 . 5 . 5 . 25 . 25 . 5 . 5 . 06	45 45 45 45	135 180 157 180 180 151 90 135	8 3 8 30 3 8 6.25 3.3
Supertron Tube Co. Hoboken, N. J.	Information not available at t	inie of goi	ng to press.					
Sylvania Products Co. Emporium, Pa.	Sylvania—SX-201-A SX-240 SX-199 SX-120 SX-200-A SX-112 SX-171 SX-210	1.75 2.25 2.25 2.50 4.00 4.50 4.50 9.00	Det. and Amp. Det. and Amp. Amp. and Det. Amp. Det. Amp. 24mp. 34mp. 4mp.	5 3 3 5 5 5	. 25 . 25 . 06 . 125 . 25 . 5	20-45 135-180 20-45 20-45	135 250 135 135 135	8-9 30 6-7 3-4 20 8.0 3-4 8
Televocal Corp. 588 12th St. West New York, N. J.	Televocal—TC-201-A TC-199 TC-200-B TC-240 TC-120 TC-200-A TC-171-A TC-112-A	1.75 2.25 2.25 2.25 2.50 4.00 4.50 4.50	Det. and Amp. Det. and Amp. Det. and Amp. Power Amp. Det. Power Amp. Amp. Amp.	5 3.3 5 5 5 5 5	. 25 .06 .25 .25 .125 .25 .25 .25	45 45 22 22 22 22.5–45 22.5–45	135 90 67.5 90–135 135 135–180 90–135	8 6 25 30 3.3 25 3 7.9
Universal Elec. Lamp Co. Newark, N. J.	I nformation not available at t	ime of goi	ng to press.					
Van Horne Co., Inc. Franklin, Ohio	Van Horne 5-VAX 5-VAX 3-VAX 3-VBX 5-VD 5-VC 5-S 5-DG 5-VCX 6-P	1.75 2.25 2.25 2.25 4.00 4.50 4.50 4.50 5.00 9.00	Det. and Amp. Det. and Amp. Det. and Amp. Det. and Amp. Power Amp. Power Amp. Double Grid Power Amp. Power Amp.	5 5 3 3 5 5 5 5 5 7.5	. 25 . 25 . 12 . 06 . 25 . 5 . 25 . 25 . 50	45 45 45 45 45 45 2-20	180 180 135 135 180 180 180 180 425	8 4 8 9 1.5 5.5 20 8 3 5-40 8
Vesta Battery Corp. 2100 Indiana Ave. Chicago, Ill.	Vesta X-201-4 199 X-240 X-120 X-250-A X-200-A X-112 X-171 X-210	1.75 2.25 2.25 2.50 3.00 4.00 4.50 4.50 9.00	Det. and Anp. Det. and Amp. Res. Coupled Amp. Power Amp. Det. Det. Power Amp. Power Amp. Power Amp. Power Amp.	5 3 5 5 5 5 5 7.5	. 25 . 06 . 25 . 125 . 25 . 25 . 5 . 5	20 20-90 22 20-45 22-45	180 135 180 180 425	
Zetka Labs., Inc. 67 Winthrop St. Newark, N. J.	Zetka Process ZP-201-A Z-200-A Z-R-F ZP-112-A	2,50 4,00 4,50 4,50	Det. and Amp. Det. R. F. Amp. Power Amp.	5 5 5 5	. 25 . 25 . 25 . 28	22-45 22-45	135 90 157	7.5-8.5 15-20 10-11 7.5-8.5

### A. C. Receiving Tubes

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Heater or Non- Heater Type	Recommended Use	A.C. Filament or Heater Voltage	A.C. Filament or Heater Current in Amperes	Maximum D.C. Plate Voltage	Ampli- fication Factor	Heater Terminals Located at Top or is 5-Prong Base Used
Arcturus Radio Co. 255 Sherman Ave. Newark, N. J. * R. F. amplifier and A. F.	Arcturus—76 28 30 amplifier up to but not includ	\$5.00 5.00 5.00 ing last sta	. Heater Heater Heater ge.	Det. * Last Stage A.F.	15 15 15	. 35 . 35 . 35	45 135 180	12 10.5 4	4-prong 4-prong 4-prong
Armstrong, E. & M. Co., Inc., Newark, N. J.	Armor—A.C. 100	4.00	N-H	Gnl. purpose	1.0	2.4	135	8	4-prong

### Specifications of A. C. Receiving Tubes (concluded)

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Heater or Non- Heater Type	Recommended Use	A.C. Filament or Heater Voltage	A.C. Filament or Heater Current in Amperes	Maximum D. C. Plate Voltage	Ampli- fication Factor	Heater Termins Located at Top or is 5-Prong Base Used
Cable Supply Co., Inc. 31 Union Square, New York	Speed—226 227	\$3,00 6.00	N-H N-H	Amp. Det.	1.5	1.05	135 135		4-prong 5-prong
C. E. Mfg. Co., Inc. 702 Eddy St. Providence, R. I.	Ceco—M-26 N-27	3.00 6.00	N-H H	Amp. Det.	1.5	1.05	180 180	8.2 8.2	4-prong 5-prong
Connewey Electric Laboratories Magnatron Bidg. Hoboken, N. J.	Magnatron—AC-226 AC-226* AC-227* AC-227* AC-112* AC-171*	3.00 3.50 6.00 6.00 4.50 4.50	N-H N-H H H N-H N-H	Amp. Amp. Det. Det. Pwr. Amp. Pwr. Amp.	1.5 1.5 2.5 2.5 5.0 5.0	1.05 1.05 1.75 1.75 1.75 .25	180 180 180 180 180	8 8 8 8 8	4-prong 4-prong 5-prong 4-prong 4-prong 4-prong 4-prong
Cunningham, Inc., E. T. 370 Seventh Ave. New York	Cunningham—CX 326 C 327	3.00 6.00	N-H H	Amp. Det.	1.5	1.05	180 180	8. 2 8. 2	4-prong 5-prong
Daven Badio Corp. 158 Summit St. Newark, New Jersey	Daven—AC-1 AC-15 ACD-1 AC-10		N-H N-H N-H N-H	Amp. Amp. Det. Pwr. Amp.	1.5 1.5 1 7.5	1.05 1.05 1.1.25	180 180 45–90 500	8 15 7 7	4-prong 4-prong 4-prong 4-prong
Diana Radio Tube Corp. 250 Park Ave., N. Y.	DianaDX-226 DY-227	3,00 6.00	N-H H	Amp. Amp. Det.	1.5	1.05	90-180 Det. 45-90		
	Chesterfield—CFX-226 CFY-227	3.00 6.00	N:H H	Amp. Det. and Amp.	1.5	1.05	Amp. 90-180 90-180 Det. 45-90 Amp. 90-180		
Gold Seal Electrical Co., Inc. 250 Park Ave., New York	Gold Seal +GSX-226 GSY-227	3.00 6.00	N-H H	Amp. Det. an I Amp.	1,5	1.05	90-180 Det. 45-90 Amp. 90-180		
Hytron Corp. 19 Oakland St. Salem, Mass.	Hytron—226 227	3.00 6.00	N-H H	Amp. Det.	1.5	1.05	180 45–90		4-prong 5-prong
Jacger Research Labs. 270 Park Ave. Weehawken, N. J.	Jueger-JY-226 JY-227	3.00 6.00	N-H H	Amp. Det. and Amp.	1.5	1.05	90 180	8 8	4-prong 5-prong
Kellogg Switchboard & Supply Co. 1066 W. Adams St., Chicago	KelloggA.C401 A.C403	5.00 7.50	H H	Gnl. purpose Pwr. Amp.	3	1.5	150 180	10.0	Term. at top Term. at top
Northern Mfg. Co. 371 Ogden St. Newark, N. J.	Marathon—AC-607 AC-608 AC-605 AC-615	6.50 6.50 6.50 6.50	H H H	Audio frequency Gnl. purpose Pwr. Amp. R.F. Amp.	6.0 6.0 6.0 6.0	1.0 1.0 1.0	180 180 180 180	8.5 8.5 4.5 15.0	4-prong 4-prong 4-prong 4-prong
Perryman Electric ('o. 33 W. 60th St. New York	Perryman—P.A-226 P.AC-100 P.A-227	3,00 4,00 6,00	N-H N-H H	Det. and Amp. Det. and Amp. Det. and Amp.	1,5 1,0 2,5	1.05 2.00 1.75	180 180 180	8.2 8.2 8.2	5-prong
Radio Corp. of America 233 Broadway, New York	Radiotron—UX-226 UY-227	3.00 6.00	N-H H	Amp. Det.	1.5	1.05	180	8.2	4-prong 5-prong
Sonatron Tube Co. 108 W. Lake St. Chicago, Ill.	Sonatron—X-226 X-225 X-227	3.00 5.00 6.00	N-H H H	Amp. Det. Amp. Det. Amp.	1.5 3.0 2.5	1.05 1.05 1.75	180 180 180	8 8 8	Term. at top
Sovereign Elec. & Mfg. Co. Chicago, Ill.	Information not sent in	at time of	going to p	ress.					
Sylvania Products Co. Emporium, Pa.	Sylvania SX-226 SY-227	3.00 6.00	N-H H	Amp. DetAmp.	1.5	1.05	180 180	8.3 8.3	5-prong
Felevocal Corp. 588 12th St. West New York, N. J.	Televocal—AC-226 AC-227	3.00 6.00	N-II H	Amp. Det.	1.5	1.05	180 22-90	8 8	5-prong
Van Horne Co., Inc. Franklin Ohio	Van Horne—1.5 1 3 2.5	3.00 4.50 5.00 6.00	N-H N-H H H	RF & AF RF & AF General General	1.5 1 3.0 2.5	1.05 2 1.0 1.75	180 189 180 180	8.2 10 10,0 8.2	4-prong 4-prong Term. at top 5-prong

### Rectifying Tubes

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Full or Half Wave Rectifier	Filament or Gaseous Type	Filament Terminal Voltage	Filament Current Amperes	Maximum A.C. Input Voltage per Plate	Maximum D.C. Operating Voltage	Maximum D.C Output Current (M.A.) at Max Operating Voltage
Armstrong E. & M. Co., Inc. Newark, N. J.	Armor—516B	\$7.50	Half	Filament	7.5	1,25	500	450	80
Cable Supply Co., Inc. 31 Union Square New York	Speed—Hyvolt 280 281	4.50 5.00 7.50	Full Full Half	Gaseous Filament Filament	5 7.5	2 1.25	· · · · · · · · · · · · · · · · · · ·	200 225 500	85 125 115
C. E. Mfg. Co., Inc. 702 Eddy St. Providence, R. I.	Ceco—DG R-80 R-81	5.00 5.50 9.50	Full Full Half	Gaseous Filament Filament	5 7.5	2 1.25	300 300 750	200	85 125 110
Cleartron Vacuum Tube Co. 28 W. 44th St., New York	Cleartron Rectron—CT 400 Cleartron—CT X 213	2.50 4.50	Half Half	Filament Filament	5.5	1.25		135 180	25 35

### Specifications of Rectifying Tubes (concluded)

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Full or Half Wave Rectifier	Filament or Gaseous Type	Filament Terminal Voltage	Filament Current Amperes	Maximum A.C. Input Voltage per Plate	Maximum D.C. Operating Voltage	Maximum D.C Output Curren (M.A.) at Max Operating Voltage
Connewey Electric Labs. Magnatron Bldg. Hoboken, N. J.	Magnatron—Rex Super-Rex A.C280 A.C281	2.00 4.00 5.00 9.50	Half Half Full Half	Filament Filament Filament Filament	5 5 5 7.5	1 .5 2 1.25	330 330 330 750	290 290 290 290 710	36 50 125 125
Cunningham, Inc., E. T. 370 Seventh Ave., New York	Cunningham—CX380 CX381	5.00 7.50	Full Half	Filament Filament	5 7.5	2 1. 25	300 750	425 1050	125
Daven Radio Corp. 158 Summit St., Newark, N. J.	Daven—A.CR-I	10.00	Half	Filament	7.5	1.25	550	450	65
De Forest Radio Co. 139 Franklin St., Jersey City, N. J.	Audion-1)-416-B	7.50	Half	Filament	7.5	1.25	550	500	65
Diamond Vacuum Products Co. 4049 Diversey Ave., Chicago, Ill.	Diatron—213 280	5.00 5.50	Full Full	Filament Filament	5	2 2	220 300		65
Diana Radio Tube Corp.  250 Park Ave. New York	Diana—DX 213 DX 280 DX 281 DX 216B Chesterfield—CFX 213 280 281 216B	5.00 5.50 7.50 7.50 5.00 5.50 7.50 7.50	Full Full Half Half Full Full Half Half	Filament Filament Filament Filament Filament Filament Filament Filament	5 7.5 7.5 5 7.5 7.5	2 2 1.25 1.25 2 2 1.25	220 300 750 550 220 300 750 550		65 125 110 65 65 125 110 65
Edlo Labs., Inc. 113 Monroe St. Lynn, Mass.	Edlo—GB HB IB	4.50 4.50 7.00	Full Full Full	Gaseous Gaseous Gaseous				150 200 200	65 100 350
Gold Seal Electrical Co., Inc. 250 Park Avenue New York	Gold Seal—GSX 213 280 281 216B	5.00 5.50 7.50 7.50	Full Full Half Half	Filament Filament Filament Filament	5 7.5 7.5	2 2 1.25 1.25	220 300 750 550		65 125 110 65
Lektrodio Corp. 12 Maple St., Lynn, Mass.	Elektron—EH	4.50	Full	Gaseous			450	200	40
Musselman, A. J., Inc. Chicago, Ill.	5 IR 7 ½ TR	6.00 7.50	Full Half	Filament Filament	5 7.5	2			65 65
Northern Mfg. Co. 371 Ogden St., Newark, N. J.	Marathon—MX213 216B	5.00 7.50	Full Half	Filament Filament	5 7.5	2 1.25	220 550	200 450	65
Perryman Electric Co. 33 West 60th St. New York	Perryman—P.R.213 280 216A 216B 281	5.00 5.50 6.00 7.50 7.50	Full Full Half Half Half	Filament Filament Filament Filament Filament	5 5 7.5 7.5	2 2 1 1. 25 1. 25	300 300 350 550 750		65 125 45 65 110
Q.R.S. Music Co. 306 S. Wabash Ave. Chicago, Ill.	Q.R.S.—60MA 85MA 100MA 100MA 400MA	4.50 4.50 4.50 6.00 7.00	Full Full Full Full Full	Gaseous Gaseous Filament Gaseous Filament	4 4	4	275 350 350 600 375	175 200 250 550 300	60 85 100 100 400
Radio Corporation of America 233 Broadway New York	Rectron—UX-213 Radiotron—UX-280 216-B 281	5.00 5.00 7.50 7.50	Full Full Half Half	Filament Filament Filament Filament	5 5 7.5 7.5	2 2 1.25 1.25	220 300 550 750		65 125 65 110
Raytheon Mfg. Co. Kendall Square Building Cambridge, Mass.	Raytheon—BH BA	4.50 7.50	Full Full	Gaseous Gaseous					125 350
Schickerling Prod. Co. 401 Mulberry St., Newark, N. J.	Schickerling-Z80 Z500	6.00 7.50	Full Full	Gaseous Gaseous			325 375	200 300	100 500
Sonatron Tube Co. 108 W. Lake St. Chicago, Ill.	Sonatron—SH-85 213 280 216B 281	4.50 5.00 ~ 5.00 7.50 7.50	Full Full Full Half Half	Gaseous Filament Filament Filament Filament	5 5 7.5 7.5	2 2 1.25 1.25	350 220 300 550 750	200	85 65 125 65 110
Sylvania Products Co. Emporium, Pa.	Sylvania—SX-213 216-B	5.00 7.50	Full Half	Filament Filament	5 7.5	2 1.25	220 550		65
Televocal Corp. 588—12th St., West New York, N. J.	Televocal—TC280 281	5.50 9.50	Full Half	Filament Filament	5 7.5	2 1.25	300 750		125 110
Van Horne Co., Inc. Franklin, Ohio	Van Horne—5R 7½R	5.50 9.50	Full Half	Filament Filament	5 7.5	2 1.25	300 750	185 450	125
Vesta Battery Corp. 2100 Indiana Ave., Chicago, Ill.	Vesta—X213A X216B	5.00 7.50	Full Half	Filament Filament	5 7.5	2	220 550	,	65 65

### Precision Products Merges with Wells-Gardner

Wells-Gardner & Co., Chicago, and the Precision Products Company, Ann Arbor. Mich., have merged their radio manufacturing businesses and are now organized under the name of the Consolidated Radio Corp. The new company is licensed under R. C. A., Westinghouse, General Electric and A. T. & T. patents. C. A. Verschoor is president; A. S. Wells, vice-president; F. E. Royce, secretary and Frank Dill-bahner, treasurer.

#### Tube Prices Reduced

Announcements of reductions in the price of some types of vacuum tubes were received just at press time, too late for revision of the prices in the above lists. The editors regret the necessity of asking you to make note of price changes now being announced and correct the prices accordingly.

The Pfanstiell Company, Waukegan, Ill., has been licensed by the Radio Corporation of America. They have appointed E. R. Peel as radio sales engineer. Mr. Peel will look after their "Special Chassis" business throughout the United States.

George Lewis, formerly president and general manager of Kenrad, has been made vice-president of Arcturus Radio Co., Newark, N. J. Mr. Lewis is also identified with the trade as chairman of the Vacuum Tube Committee of the R. M. A. and chairman of the N.E.M.A., vacuum tube section.

### \$55.

### At this price the Crosley Bandbox is Radio's most astonishing success . . . not because the price is low . . . but because the set is magic!

When HISTORY is in the making-

"You're there with a Crosley

6 Tube Crostey BANDBOX \$55.

The ability of the new Bandbox is amazing. Its simple operation is easily understood and its wonderful performance is at the command of any hand that can turn the dial.

Millions are making up their minds today to buy a radio.

Millions will replace obsolete sets with new, up-to-date receivers this fall.

Experienced radio owners will look first for 3 fundamental points and to every set they consider will address these questions:

- Is it selective
- 2. Is it sensitive

Is it easy to operate Satisfied on these points they will

- Single dial control
- Illuminated dial
- Volume control
- Single cable leads

Console installation adapt-

ability
6. Reasonable price.
Millions will look at the
Crosley Bandbox.

Crosley dealers from Maine to California have this wonderful receiver hooked up for immediate demonstration and will explain its matchless performance

in a manner somewhat like this: The Crosley Bandbox is a

6-tube receiver The circuit of this set is of the excellence you would expect from a group of skilled engineers suddenly given the pick of the world's radio patents to work

Crosley has always given the radio world its biggest value for

its dollar. Contemplate the perfection possible when the doors of the research and development laboratories of The Radio Corporation of America, The General Electric Co., The Westinghouse Co., The American Telephone & on it la Telegraph Co., there.

nd the Hazeltine and Latour Acuminators been designed. Far Corporations were thrown open. Licensed under their patents!

The Crosley Bandbox is totally and completely shielded. Every element is absolutely separated from every other element by solid shielding. Coils are covered

with copper. This could have EUTRODÝNE been done cheaper, but efficiency would

have been sacrified. Condensers are housed in cadimum-plated steel. All wiring is separated and

stantial, the entire set is assembled on a heavy metal chassis.

The tuned radio frequency amplification stages have been absolutelv balanced through use of the Neutrodyne principle. The set is a genuine Neutrodyne!

To the initiated this means much.

To the layman it manifests itself only as a radio receiver that does not squeal or howl when you are

trying to get a station.

The shielding makes the Bandbox highly selective—the circuit, acutely sensitive and the design, extremely easy to oper-

The Bandbox is operated with single station selector (one dial)

In most localities and in most owners' hands the single station selector will find all the programs anyone could possibly wish. But there are some owners who demand greater ability like the possessors of 90 horsepower motor cars who may never step on it but like to be conscious it's For such have the

away stations of weak power but perhaps good music are captured by the use of these little auxiliary Their function is best tuners. likened to a pair of field glasses. As the lens bring the distant scene to nearby aspect, so do the acuminators bring the remote station signals up to room filling volume. Ordinary one dial radios can never perform like this. Hair line tracking of the condensers together is difficult—but the acuminators, little secondary adjustments exclusive to Crosley give shielded from all other parts of the Bandbox a substantial com-the receiver. Solid, sturdy, sub-mand of the air and all that is in it.

The dial of the Bandbox is illuminated. For shadowy corners and dim eyesight it recommends itself.

Volume Control is necessary on good radio

trol is necessary on good radio today. Nearby and high powered stations send terrific Impulses into the receiver. Detuning has been a favorite emethod of softening this loud reception, but with stations closer and closer

Crostcy
GOX \$55.

A single cable leads all outside and power connections from the Bandbox.

The adaptability of the Bandbox to installation in all types of cabinets is a feature. The metal case of the Bandbox to lifts off the chassis. This leaves the closely grouped dial, switch and volume control shafts to be stuck through holes in the panel of any sort of cabinet. The escutcheon is quickly screwed over them and the console installation is not only complete but has no earmarks of a makeshift.

Every radio year has been a year of

Every radio year has been a year of mass production experience to Crosley. This year saw an investment of over half a million dollars in equipment that a fine radio might be made at such speed and in such quantities that a price of nearly half a hundred dollars could be maintained. maintained.

Throughout the country millions amine the Bandbox today. They see examine the Bandbox today examine the Bandbox today. They see it the achievement of an organization who began its development when radio as we know it today began. Its success has been tremendous if clamorous demands from dealers are any indication. Skeptics, the unbiased and the radio wise have pronounced it GREAT. Even at any price it would be a sensation, for its performance ranks with the

most expensive and fanciest radio receivers on the

receivers on the market.

An AC model Bandbox takes its power from the electric light.

Former power supply with its constant annoyance and expense is entirely climic.

entirely elimi-

Power Converter

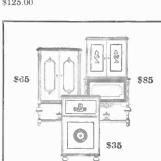
is entirely eliminated.

The new R.C.A. AC tubes provide clear, smooth and loud reception comparable in every way to the most efficient wet storage battery power.

Alternating current ripple is smoothed out in the compact little power converter which is sold with the AC Bandbox. This device needs no attention—is half the size of an ordinary storage "A" battery and matches the Bandbox in finish and color.

The AC Bandbox is \$65 The Power Converter is \$60

This gives you a complete, direct AC radio adaptable to any type of installation you may choose—bookcase, console, desk, cabinet, arm-chair or tuck it away on the corner of the table-\$125.00.



APPROVED CONSOLES

"I want the public to have as great a value in consoles this year as I have given them in the Bandbox," said Powel Crosley, Jr.

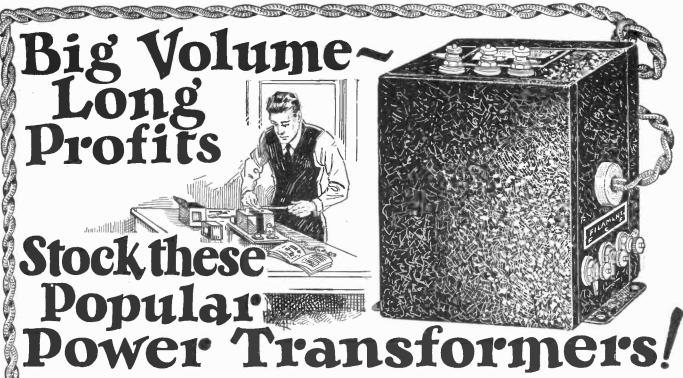
Prominent furniture manufacturers thru their long experience promised beautiful cabinets at moderate prices. Designs submitted were admired, praised, tested. approved! The Musicones were built in. Crosley dealers now sell them. Purchasers may know they are best suited for Crosley radio by looking for the "approved label" in each one. Crosley dealers get these cabinets only from The H. T. Roberts Co., located at 1340 S. Michigan Ave., Chicago, Sales representative for The Showers Brothers Co., Bloomington, Ind., and The Wolf Manufacturing Industries, Kokomo, Ind. Prominent furniture manufacturers

Write Dept. 130 for descriptive literature

THE CROSLEY RADIO CORP. Powel Crosley, Jr., Pres. Cincinnati, Ohio

Crosley is licensed only for Radio Amateur, Experimental and Broadcast Reception.

Montana, Wyoming, Colorado, New Mexico and West prices slightly higher



A big volume seller—at low cost—for the home set builder. A Power Amplifier and B-Supply built to recognized Thordarson Standards. Designed to meet popular demand for surpassing transformer efficiency at popular price. Demand is there, product is right, your margin is liberal.



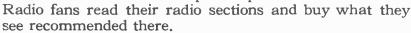
R-171 Power Compact . \$15

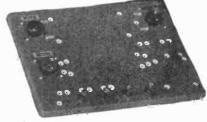
Sales volume + fast turnover + long margin=Bigger NET Profit for You

Radio experts in newspapers and magazines specify this unit. They recommend it for use with either home-made or factory built transformers. Newspapers in many to ture it in big space and display headlines.

That kind of endorsement cannot be bought.

R-211 Metal Baseboard, for use with R-210 compact, including sockets, binding posts, mounting screws, and hook-up wire \$5 formers. Newspapers in many big cities fea-It is reserved for tested and proven products.





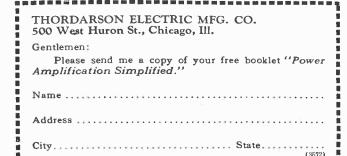


R-210 Power Compact. \$20

### his wide D

More than ever before, Young America is making its own sets. The amateur market is wide open and going strong. Amateurs talk, No. 2099 Double Choke compare notes, boost a good product, and tell where to get it. Unit . . . . . \$14 Thordarson Power apparatus is made to order for that market. You can cash in on that situation. Display Thordarson Transformers, tell your customers about them, let the public know you have this fast selling, guaranteed transformer. For complete instructions and data, fill out and mail the coupon.





Get this FREE Book!



No. 2098 Power Supply Transformer . \$20

THORDARSON ELECTRIC MANUFACTURING CO.

Transformer Specialists Since 1895

WORLD'S OLDEST AND LARGEST EXCLUSIVE TRANSFORMER MAKERS Huron and Kingsbury Streets - Chicago, Ill. U.S.A.

## MERCHANDISING RADIO PARTS

A Section of Radio Retailing

November, 1927

### Cut-Price or List-Price

These are the main methods of doing business in parts today. Which is the better way?

Which?

ONTRARY to the off-recurrent belief in the radio trade that the cutprice parts dealer would defeat himself at his own game plenty of them are still in business—and going strong. So, too, are the list-price parts dealers still in business and doing better than ever—in many cases in the same block with the cut-price dealers—notwithstanding that it was difficult to see how they could stay in business in the face of competition, such as the cut-price dealers offer.

These counteracting methods of doing business virtually next door to each other give rise to the question as to which is the best way to merchandise parts.

A canvass of various parts dealers covering several eastern cities yields some widely divergent opinions on the subject.

However, two or three interesting facts stand out as the result and they are: first, that the cut-price dealer is just as much in business as the list-price dealer, or vice versa, whichever you please; second, that there is an important third type of parts dealer who might be called the "in-between"; and last but not least that the parts business at the present time is on the up-grade and seems likely to continue to increase.

But, the question is, which of these methods is the right way to merchandise parts?
Let's take the case of the slashing cutprice dealer—any one of them will serve the purpose although in this case the oldest and most successful cut-price parts dealer in the "downtown" district of Philadelphia is the chosen representative.

This dealer claims that, in the first place, the buying public is made up of naturalborn bargain-hunters who are always looking for bargains and usually buy more than they need and even more than they want when they find them. He further claims that even though the cut-prices which provoke this bargain-buying habit would seem to limit profits, the habit promotes a cumulative buying on their part, which runs up the sales to the point where

the total profit surpasses that which would come from a much smaller number of sales

That, in a nutshell, is his reason for operating his business under the cut-price method although there are secondary or contributory reasons why he chose that method and is maintaining it. They are: first, that his location is in the district in which the general public naturally comes to look for cut-price merchandise; second that the competition of stores which create this kind of a shopping district prevent him from a doing a list-price business; and third, that as yet too few manufacturers of parts are trying to uphold the list-price of their goods.

This dealer also claims that, due to the fact that he is in a transient trade district, he cannot maintain a great deal of personal contact with his customers nor give them service, hence must offer a big inducement in order consistently to draw them to his

However, exactly opposite views were taken towards several of the cut-price dealers' opinions, particularly in the case of the oldest list-price parts dealer in Boston, Mass., and in Baltimore, Md.

Each of these dealers is located in the district with the slashing cut-price dealers. Each not only believes whole-heartedly in maintaining list prices but believes that he could not make money at cut prices no matter what quantity of merchandise he

Both of them maintain list prices by handling parts which have their prices upheld by the manufacturers.

Furthermore, each emphatically declared that he owed most of his success to personal contact with his customers and the little touches of service he was able to give them through that contact. Each claimed that he did not need any drawing card other than his contact and good merchandise to draw his customers to his store.

Which one is right?

### Which Is the Better Way?

THE CUT-PRICE DEALER

Pools with other stores Buys in large quantities Gets bigger discounts Buys bankrupt stocks Carries a big stock Has a big turnover Requires large capital investTHE LIST-PRICE DEALER

Has greater margin Buys in small quantities Buys new stock Carries a smaller stock Relies on personal contact Has many repeat customers Requires small capital invest-



Electrostatic condensers for all purposes

### Pre-viewing the New Circuits



Current fan magazines are telling how to build the sets described on this page. Do you have the parts?

### The Hammarlund-Roberts Hi-Q "Six" Circuit

N the October issue of Popular Radio. the salient features of the new Hi-Q "Six" were enumerated. The construc-"Six" were enumerated. The construc-tional details are appearing in the November number.

The set comprises three stages of tunedhigh-frequency amplification, with a tuned detector stage, and with a filter choke and condenser in the output of the detector circuit to exclude high-frequency currents The latfrom the low-frequency amplifier. ter is composed of two stages of transformer-coupled amplification, power tube in the last stage.

The outstanding features incorporated in this new receiver are

The entire receiver is mounted on a metal chassis with complete shielding.

2. The mechanical details of the new receiver have been so worked out that the only tuning control appearing on the front secondary adjustments appear on the front panel, the filament switch and the volume control.

3. Automatic variable coupling, which secures maximum and uniform amplification over the entire tuning range and exceptional selectivity and sensitivity with full volume on all frequencies, without the slightest possibility of oscillation.

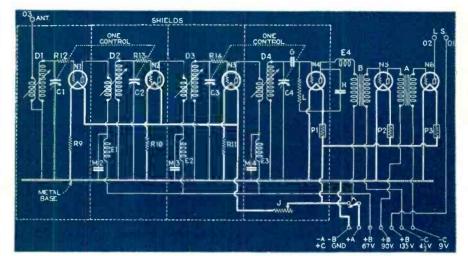
4. The complete isolation of each of the

four tuned circuits by means of chokes and

by-pass condensers.

The list of parts necessary for building this set is as follows:

and B-Audio-Frequency trans-A an



C1, C2, C3 and C4—.0005 mfd. variable condensers.
D1, D2, D3 and D4—Auto-couple

E1, E2, E3 and E4—Radio-frequency chokes.
G—.00025 mfd. mica fixed condenser.

H-.001 mfd. mica fixed condenser. J-6-ohm rheostat. Battery switch.

L—2-megohm resistor.
M2, M3 and M4—.5 mfd. by-pass condensers.

condensers.
N1, N2, N3, N4, N5 and N6—Vibrationless sockets.
O1, O2 and O3—Engraved binding posts, marked Speaker +, Speaker —,

P1 and P2—1 amp. automatic filament adjuster.
P3—1 amp. automatic filament adjuster.

juster.
R9, R10 and R11—Grid-blasing resistors.
R12 and R14—Grid suppressors.

1—Foundation unit containing: 1 drilled and engraved panel, 7x21x1 inch; 1 drilled metal chassis; and 2 two-stage aluminum box shields.

 Illuminated drum dial. Cable connector and cable.
 Brass extension shafts for vari-

able condensers. 2—Cam-operating assemblies, 1—Grid-leak mounting block, 2—Grid-leak clips.

### The "Peridyne" Five—A Super DX Set

I N the November issue of Radio News the theoretical side of the "Peridyne" was considered and the constructional de-

tails are appearing in the December issue.

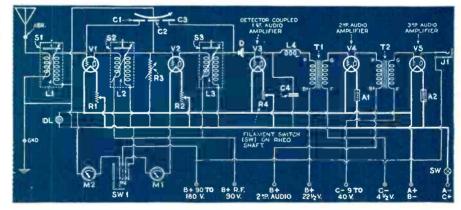
The "Peridyne" Five set is a highly developed 5-tube DX receiver, plus crystal detector, and it is the claim of the designer of the circuit, Hugo Gernsbach, editor of Radio News, that it will accomplish anything within the powers of an 8- or 10-tube set, no matter what circuit is used.

The circuit used contains nothing revolutionary; the only novelty lies in the "Peridyne" system of shield tuning.

A crystal detector replaces one tube, and the "Peridyne" Five, which uses five vacuum tubes, is therefore in reality a 6-tube set. The detector acts as a half-wave rectifier and passes practically no radio-frequency currents. Inserted in the grid lead quency currents. Inserted in the grid lead, it does away with the condenser and grid leak. The tube to which the crystal detector is connected is the first audio amplifier. There are, therefore, three stages of A. F. amplification in this set, which accepted the terms of the transmission of the stage counts for its tremendous volume.

Although a three-gang condenser is used, no compensating condensers are required.
All compensation is accomplished by means of the "Peridyne" shield.
The list of parts necessary for building this set are as follows:

S1. S2 and S3-Coil shields.



C1, C2 and C3-.0005 mfd. variable C1, C2 and C3—2000 had tare condensers.
L1, L2 and L3—Radio-frequency transformers.
T1 and T2—Audio-frequency transformers.
R1 and R2—Rheostats.
R3—0—100,000 ohm variable resistor

R4, SW—30-ohm combination switch-rheostat. A1—{ amp. automatic filament control.

A2—1 amp. automatic filament control.

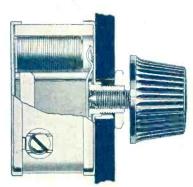
-Carborundum detector. 001 mfd. fixed condenser. - 85-millihenry radio-frequency

choke.
M1—0-8 volts voltmeter.
M2—0-150 volts voltmeter.
J1—Single-circuit jack.

SW1—Two-circuit jack. V1, V2, V3 and V4—'01-A-type tubes and sockets. V5—'12-type tube and socket.

5—'12-type tube and several services and several several services and several s

Bradleyohm-E is a variable resistor made in a great variety of sizes, providing widely varying resistance values.



Bradleyohm-E

The wide range of the Bradleyohm combined with the unusual stability it provides causes it to be extensively used in B-eliminators.

### Radio Parts That Sell Rapidly

THE most discriminating set and power unit builders are partial to Allen-Bradley resistance units because of the absolutely stable and unusually reliable resistance values they provide. THE scientifically treated discs in Allen-Bradley variable units do not vary with age or atmospheric conditions. The resistance value remains constant and adoes not change in operation.

Display Allen-Bradley Parts to Boost Your Sales and Make Your Store Headquarters for These Popular Items



Bradleyleak
Perfect Gridleak



Bradleyunit-A
Perfect Fixed Resistor

THE Bradleyunit-A does not vary with age or atmospheric changes. It is guaranteed to be accurately within 5% of its rating. Used on many B-eliminators and ideal for resistance coupled amplifiers. Made in a wide range of resistance values



Bradleystat
Perfect Filament Control

ALLEN-BRADLEY COMPANY
489 Clinton Street, Milwaukee, Wisconsin



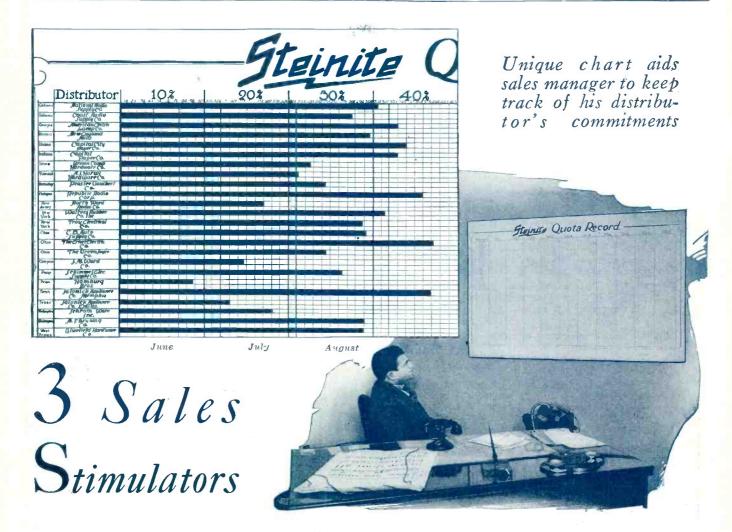
PERFECT RADIO RESISTORS

# MANUFACTURERS and MARKETS

Devoted to the Problems of the Manufacturer in the Design and Distribution of Radio Apparatus

A Section of Radio Retailing

November, 1927



VERLASTING watchfulness and constant contact with distributor and dealer; that is the underlying policy which has accounted for the rapid growth of the Steinite Laboratories Company, 506 South Wabash Avenue, Chicago, III., according to Oscar Getz, vice-president and general sales manager.

Two years ago this Fall, Steinite's mer-

chandising set-up was admittedly quite incomplete. The company was just getting started. Today its distributors are located all over the United States and its orders for immediate delivery are fifteen times greater than for the corresponding month of 1926, according to Mr. Getz.

From a sales managerial viewpoint this record is attributed by Mr. Getz largely to

these three interlocking factors

1—Territorial Coverage Tack Map. 2—Jobber Sales Quota Board. 3—District Managers' Bulletin, Jobbers'

Bulletin, Jobbers, Salesmen's Bulletin and Dealers' Bulletin.

Steinite has an exclusive jobber and dealer territorial policy. It requires its distributors to report to the home office each dealer franchise applicant. It has a record, therefore, of every dealer account. As soon as a retail franchise is granted a blue tack is placed in that dealer's town on a special wall map of the United States provided for this purpose. Mr. Getz re-views this map once a month and notes the progress which each distributor is making securing effective territorial coverage. It is unnecessary to state that those jobbers whose progress is apparently slow are questioned, in kindly manner, by the home office. Frequently a district manager is assigned to work closely with the delinquent account until a satisfactory rate of progress has been achieved.

Physical coverage and other releases

Physical coverage and sales volume go

hand in hand. In order to check quickly and accurately at all times the sales column, a jobber sales quota record board, illustrated above, was devised. It is divided vertically into ten equal spaces. Each vertically into ten equal spaces. Each space represents ten per cent of the to-be-expected annual sales volume. This board is further divided, by vertical red lines, into 12 unequal spaces which represent the monthly quota of orders to be expected from the jobber. These run from June to June. This monthly ratio is based on the average business of ten typical radio jobbing accounts received during 1926; adbing accounts received during 1926; advanced one month to allow for this year's earlier buying activities. Thus, for example, it will be seen that while each account is expected to buy but ten per cent of its yearly quota from June to the first half of August, commitments during October should aggregate 11 per cent of the year's total, and for November 13 per



### The B-T "A" Transformer

Just pin this slip to your

520 So. Canal-BRENTER-TULLY-Chicago, III.

cent. While these subdivisions, which are red lines, cannot, of course, apply to every jobber on Steinite's books, it is sufficiently accurate to serve its purpose; namely that of a comparative reminder as to how each jobbing account is meeting its quota obligations.

#### GRAPH OF JOBBERS' ORDERS

Once a month each jobber's orders are totalled and the proportionate percentage of each respective quota graphically extended, in the form of a red horizontal line, on this quota board. Naturally the accounts whose purchases are falling behind the general average receive special attention from this manufacturer. This is done in a friendly spirit—in an endeavor to find out the real reasons for this apparent lack of activity rather than in the spirit of criticism.

#### DIRECT CONTACT DOWN THE LINE

The Steinite bulletin system for the immediate and complete dissemination of policy-ideas is the next logical informative This system is noteworthy because of its comprehensiveness.

This manufacturer maintains a list of its distributors' salesmen as well as of their Thus it is able to contact directly each of the four vital human elements in its sales chain. These are reached through four differently colored, letter-sized, mimeographed bulletin sheets. This system is flexible and easy to operate. An idea conceived in the morning is mimeographed and in the mail by four that same afternoon.

The district manager receives copies of the jobbers, the jobbers' salesmen, and the dealer bulletins. The jobber is mailed the jobbers' salesmen and the dealer bulletins. All jobbers' salesmen receive copies of the dealer sheets. This policy keeps everybody fully informed concerning the matters they are entitled to know about and main-tains the manufacturer's name and activities constantly before the field organization.

## Colored Sockets Available for the Manufacturer

In order to eliminate mistakes and confusion the Benjamin Electric Manufacturing Company, Chicago, Ill., has introduced a line of colored sockets in accordance with the new N.E.M.A. standards, for manufacturers' use only. These are arranged as follows: A rich maroon for general purpose use such as radio frequency amplifiers and first stage audio frequency amplifiers. A dark green for the detector tube. For AC operation using the UY-227 type tube, a five-prong socket is also furnished in dark green. For the power tube a bright orange socket is used. These sockets are elecsocket is used. These sockets are electrically and mechanically the same as have always been made by this company.

Although this is a commendable step

forward there exists some doubt in our minds as to how those sets where the socket holes are drilled in the subpanel will adopt this measure. Obviously, in this case, colored bakelite cannot be used as all the sockets are formed from the one piece of black bakelite used in the subpanel construction. May we suggest that a solution to this may be in either stamping or otherwise coloring a small circle within to the wire coloring a small circle within the area of the tube prong holes according to the specified colors. This will enable rapid identification of sockets where all the wiring and most of the apparatus is placed beneath the sub-panel or otherwise concealed.

## What The World Wants

Listed below are some specific inquiries for American goods received in the Department of Commerce, Bureau of Foreign and Domestic Commerce, at Washington, D. C. To obtain confidential information, it is necessary only for American export-ers to apply to the nearest office of the Bureau or at Washington, giving the number or numbers of the inquiry or inquiries in which they are interested. An asterisk \*) indicates that the inquirer would act as both purchaser and agent.

India-27410.—Batteries, storage, nickel

Turkey-\*27421.-Radio sets and parts. Mexico—27375.—Radio specialties. Uruguay—\*27640.—Radio sets and parts. Switzerland — 27376. — Radio battery

\*27512.-Radio parts and ac-Germanycessories. 27511.—Radio sets and parts.
Brazil—27765.—Radio sets and parts. England—27766.—Radio sets and parts. India—27762.—Radio sets, 1 to 8 tubes. Italy—\*27839.—Batteries, storage. France—27763.—Radio sets and parts. Germany—27764.—Radio parts and accessories.

Australia-27776.-Radio sets and parts

### New Radio Patents

Designs 73,474. John M. Beach and George Fletcher, Grand Rapids, Mich. Combined Radio and Phonograph Cabinet or Similar Article. Assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. 73,495. Bernard D. Colen, New York, N. Y. Assignor Musical Products Distributing Co., Inc. New York, N. Y. Radio cabinet or Article of Similar Nature. 73,501. Edward L. Hedemark, Chicago, Ill. Assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Radio Cabinet. 73,504. Victor Lougheed, Oakland, Calif. Assignor to Magnovox Company, Oakland, Calif. Radio dial. Patents 1,643,015. Ernest W. House, Birmingham, Ala. Radio Receiving Circuits. 1,643,029. Charles W. Paterson, Detroit, Mich. Speaker. 1,643,075. Marius Latour, Paris, France. Assignor to Latour Corporation, Jersey City, N. J. Radio Signaling Apparatus. 1,643,290. George R. Anderson, Rockford, Ill. Radio Device. 1,643,319. Meyer Seligman, New York, N. Y. Device for Supporting Radio Parts. 1,643,323. John Stone Stone, San Diego, Calif. Assignor to American Telephone

1,643,323. John Stone Stone, San Diego, Calif. Assignor to American Telephone and Telegraph Company. Directive An-

and Telegraph Company. Directive Antenna Array.

1,643,382. John Robert Kelley, Covington, Ky. Radiographic Apparatus.
1,643,660. Charles Francis Jenkins, Washington, D. C. Billboard Radio Picture Receiver.

1,643,689. William Hartman Woodin Jr., Plainfield, N. J. Radio Aerial Pole or the Like.

Plainfield, N. J. Radio Aerial Pole or the Like.

1,643,781. Donald G. Little, Wilkinsburg, Pa. Assignor to Westinghouse Electric & Manufacturing Company. Radio Sending System.

1,643,791. Joseph Slepian, Swissvale, Pa. Assignor Westinghouse Electric & Manufacturing Company, Speaker.

1,644,266. Freeman Orne, Dubuque, Iowa. Antenna Construction.

1,644,332. Thomas J. Fay, Brooklyn, N. Y. Frequency Transformer.

1,644,601. Albert Paul Hans Gerd Nickel Charlottenburg, and Johannes Joachim Spinner, Berlin, Germany, Vacuum Discharge Tube.

1,644,605. Jerry Pavek, Polar, Wis. Sound Amplifier for Radio and Telephone Reception.

1,644,605. Jerry Pavek, Polar, Wis. Sound Amplifier for Radio and Telephone Reception.
1,644,795. Leslle Stevens, Glen Ridge, N. J. Sound Amplifier
1,644,796. Henry Page Stuart, Seattle, Wash. Amplifying and Detecting Tube. 1,645,051. Perry Y. Hodge, Nigara Falls, N. Y. Sound-Reproducing Device.
1,645,057. Lawrence H. Junken, Schenectady, N. Y. Assignor to General Electric Company. Thermionic Current Transformer.

1,645,231. Frederick Dietrich, New York, N. Y. and William H. Gerns, East Orange, N. J. Assignors to Brandes Laboratories, Inc., Newark, N. J. Electromagnetic Sound Reproducer.
1,645,295. Harrison W. Rogers, New York, N. Y. Method and Apparatus for Plural Recording and Reproducing of Sounds.
1,645,301. Joseph Slepian, Wilkinsburg, Pa. Assignor to Westinghouse Electric & Manufacturing Company. Magnetic Amplifier and Self-Modulator.
1,645,302. Joseph Slepian, Wilkinsburg, Pa. Assignor to Westinghouse Electric & Manufacturing Company. Magnetic Amplifier and Self-Modulator.
1,645,305. Joseph Slepian, Swissvale, Pa., and Clinton R. Hanna, Wilkinsburg, Pa. Assignors to Westinghouse Electric & Manufacturing Company. Sound-Translating Device.

Manufacturing Company, Sound-Translating Device.

1,645,306. Joseph Slepian, Swissvale, Pa. Assignor to Westinghouse Electric & Manufacturing Company. Microphone Circuit.

1,645,329. Helen Kanders, New York, N. Y. Sound Amplifier.

# Radio Division N.E.M.A. Studying Radio Industry

Designation, identification and location on the receiving set of radio broadcast station channels by the sample method of giving them numbers, as well as call let-ters, is being studied by a special commit-tee of the National Electrical Manufac-turers' Association, and will form one of the major subjects for discussion and consideration at the meeting of the radio division of the association, to be held at Edgewater Beach Hotel, Chicago, November 28-December 2.

Through a number of technical papers by authoritative experts the program will focus on phases of the radio industry which merit immediate attention from the manufacturer. The subjects include: Growth and development of the industry, mer-chandising, relation of radio to the elec-trical industry, analysis of the broadcast situation with respect to inter-channel and same-channel cross talk and heterodyne interference, and factors bearing on the design of radio products, such as developments and characteristics of A.C. tubes, methods for obtaining economical power supply from house lighting circuits, and future trends in cabinet design.

future trends in cabinet design.

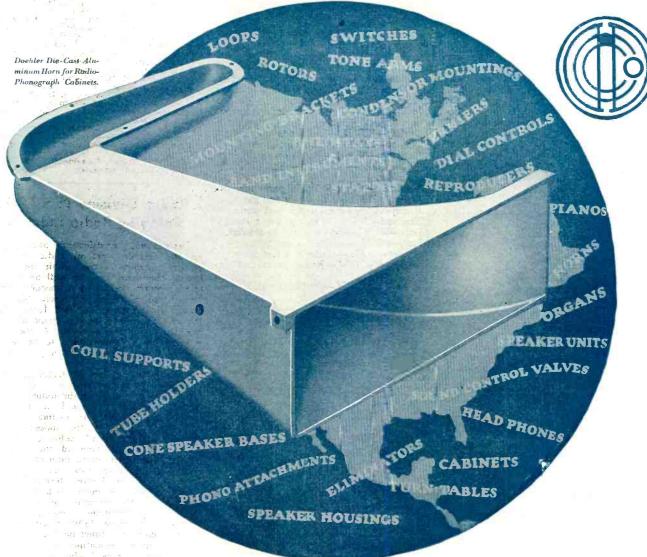
A committee consisting of R. H. Langley, of the Croslev Radio Corporation as chairman; Ray H. Manson, Stromberg-Carlson Telephone Mfg. Co.; L. W. Chubb, Westinghouse Electric & Mfg. Co.; George Lewis, Arcturus Radio Company; M. C. Rypinski, Federal-Brandes, Inc.; James M. Skinner, Philadelphia Storage Battery Co., and Alfred E. Waller, managing director of the National Electrical Manufacturers' Association, has been appointed by Mr. Raycroft, vice-president in charge of the radio division, to form recommendations for the radio division of N.E.M.A. to the Federal Radio Commission. mission.

## Denmark Has 150,000 Radio Sets

Denmark has now 150,000 licensed radio receiving sets, with approximately half of them in Copenhagen, according to the Danish telegraph bureau, says a report from Vice Consul Ellis A. Johnson, Copen-hagen, made public by the Department of

The license charge is ten kroner (par \$0.268) annually for each set, making a total income of 1,500,000 kroner, which is used for the broadcasting of prepared and selected programs adapted to the various seasons of the year.

# THE WORLD'S LARGEST PRODUCERS OF DIE-CASTINGS



ASK! ASK the big users of Die Castings! ASK the manufacturer of precision products! ASK the manufacturer who demands prompt delivery. ASK us to show YOU how the facilities of the Doehler organization with its four great plants . . . with its 20 years experience and its resourceful engineering and metallurgical departments can serve your Die Casting needs . . . C. Consult with us on your new project . . . Our Catalog should be in your files. A copy will gladly be mailed on request.

# DOELLER DE-CASHINGS

Also uesigners & manufacturers of DOEHLER Vending Machines for selling, sampling and advertising purposes.

DOEHLER DIE-CASTING CO. Brooklyn, N. Y. ~ Toledo, O. Batavia, N.Y. Pottstown, Pa.

# Market BAROMETER

Conditions spotty, trade reports indicate

# Chicago

"Brisk"

Crisp October weather stimulated fall demand. Dealers having difficulty supplying consumer market for A.C. tube sets. Retailers complaining of harm done by premature and persistent advertising of A.C. tube sets when same not obtainable. These tactics irritate prospects and retard sale of other models. Chicago show attendance twelve per cent better than last year. Lively consumer and dealer buying reported. "Give us the goods and we will do twenty per cent more business than last year," is consensus of dealer opinion.

# Denver

"Healthy"

Radio industry in Rocky Mountain territory is in most healthy condition of its history. Better reception has added greatly to the confidence and satisfaction of public and stimulated sales in proportion. A survey of entire territory indicates an increase in retail sales northern districts of fifty per cent and increase of thirty per cent in wholesale and retail sales in entire district. Increase in volume is large due to increased popularity of power equipment. General business conditions very good especially in stock-raising and agricultural sections. With livestock prices at high peak and prospects of the sugar beet crop paying forty million dollars to the producers, prospects for radio sales in next sixty days is excellent.

# San Francisco

"Reports Vary"

Business conditions Northern California reported by manufacturers as twenty to twenty-five per cent under last year; by wholesalers as fifteen to twenty per cent better and by retailers as thirty to forty per cent better with excellent prospects for Christmas season. General business conditions on slightly lower level than 1926 and numerous retail outlets have dropped out. National broadcasting much appreciated but local broadcasting suffers from ruling of San Francisco unions which prevents hotel orchestras from going on air. It is also suggested that better co-operation between broadcasting stations in interest of more diversified programs would help. Reception much improved over last year but conflicts still complained of. Increased interest in power-operated sets reported following fall show, but dealers complaining of slow deliveries.

# Philadelphia

"Calm"

Radio activity somewhat calm for this part of season. Opened with a bang but sudden decline now being experienced.

This condition attributed to heavy September business. Dealers predict early return to normal. Electrically operated sets leading market. Cone speakers lead sales in accessories. Reception conditions very good. Dealers and jobbers carrying exceptionally large stocks. However, total sales September outnumbered those for October. Trade is experiencing slight lull but oncoming months expected to witness usual rush.

# San Antonio

"Outlook Better"

Outlook for radio this territory better than ever before. Dealers report excellent sales and predict continued good business for rest of season. Wholesalers report good business throughout territory and predict banner year. Co-operative advertising campaign inaugurated by local radio trades association yielded wonderful results. Each member contributed five hundred dollars and newspapers and billboards were used. Industry is better stabilized. Summer eliminated many fly-by-night dealers and those now in business are operating on progressive scale. Radio week went over big here and interest created is still stimulating sales. There is every indication that present season will prove most profitable in all respects. General business conditions good.

# New Orleans

"Trade Cautious"

Both retailers and wholesalers entered season cautiously, refusing almost entirely to sign quotas, planning to buy on immediate requirements. This policy has already cost both retail and wholesale trade considerable business. Contrary to expectations, city had brisk demand, and country showed activity almost equal to last year. Late in September both dealers and jebbers of some brands of power units had exhausted stocks temporarily and some brands of batteries had unfilled orders. Dry batteries and storage batteries increasing in sales, despite production of eliminators. Radio specialty stores still doing greatest volume of business here. Department and large music stores have failed to take hold in a dominant way.

# Los Angeles

"Increasing"

Stimulated by special broadcast events radio business Southern California is exceeding last year by ten to fifteen per cent. Encouraging sign is fact that dealers are thinking less of sales and more of profits. Popularity of electrification has produced peculiar merchandising situation. One school of dealers is hard at work promoting sales of sets with A. C. tubes or built-

in power supply; another is selling established lines built for either battery or external socket power operation while third group is carrying both types and selling the one that has least sales resistance in individual cases. Undoubtedly public demand is for A.C. tubes or dry A-B units but some fear is expressed lest new products prove impractical. In wholesale business buying is spotty but month-end totals show up well.

# Toronto

"Parts Good"

While patent situation has affected receiver sales here to some extent it has not touched parts and exceptionally good turnover is reported. Much cheap stuff being brought forward and eagerly snapped by bargain hunters. Feature of situation is large number of private brand articles now sold including receivers, batteries and accessories. Practically all buyers work hard for price reductions and salesmanship consists largely in offering lowest quotation. In spite of statements that newer sets would not require much servicing there is urgent call for service. Consoles have the lead. Power units not as popular as expected due to inferior performance on twenty-five cycle. Sales total about same as last year with a bigger percentage in parts.

## Boston

"Good"

Radio business Boston territory good. Buying increasing and sales reported well above last month. Opinions vary concerning strongest demand; power units strong. Rectifiers selling well with increase reported by one manufacturer as fifty per cent above last year. Battery and speaker sales heavy. Interest strong in A.C. tube sets but sales spotty owing to skepticism, high cost and lack of merchandise.

# New York

"Had Lull"

Radio trade Metropolitan territory experienced unusual lull in mid-October after unprecedented amount of sales in September and early October. Total business so far this season, however, still averages fifteen per cent ahead of corresponding period last year. Trade now picking up and present conditions indicate holiday trade will at least equal if not exceed last year.

Retailers in some sections, particularly suburbs, are skeptical about new A. C. tube sets, claiming many service troubles have developed. However, dealers unanimous in belief this will soon be remedied and electric sets will occupy major portion of

sales total.





JOW-a new condenser of tremendous electrical stamina for use in A.C. circuits. Radio's latest advancements in A.C. set construction demand condensers of higher voltage breakdown. To meet these present day requirements, the Sprague laboratories have produced this new type Sprague Midget with a tested flash breakdown of 5000 to 6000 volts.

Safe for continuous A.C. operation up to 550 volts, 60 cycles, and up to 850 volts D.C.

The same Sprague standards which have made Sprague Midgets favorites are found in this new type. Waterproofed with asphalt covering and special process of triple impregnation, they insure accuracy, safe operation and assembly economy.

SPRAGUE SPECIALTIES COMPANY QUINCY, MASSACHUSETTS







"Corwico" Products

"Corwico" Products

"Best from the
Ground Up"
Antenna Wire
(Solid, Stranded and
Braided)
Complete Aerial Kits
Magnet Wire
Battery Cable
Bus Bar Wire
Hook-Up Wire
Lead-in Wire
Lead-in Wire
Long Aerial Wire
Litz Wire
Flexible Wire

The New Hook-Up Wire Now Being Specified In All The Popular Circuits

With Braidite you simply push back the insulation, make your connection, solder it and then the place, leaving no exposed section of wire. Braidite holds its shape permanently after bending, thus insuring a neat workmanlike looking job. Braidite is the fastest selling hook-up wire on the market, being specified in all the leading circuits of the day. Stock Braidite so that you will have it when called for.

Made in red. green, yellow, brown and black.

25 ft. solid copper core, list price per carton 30c. 25 ft. stranded copper core, list price per carton, 35c.

(Order a saxple carton today)

#### DEALERS, JOBBERS AND MANUFACTURERS

Write or wire today for complete catalog and discounts.

CORNISH WIRE COMPANY 30 CHURCH STREET, NEW YORK CITY

RESISTANCE SPECIALISTS
MANUFACTURERS OF ELECTRICAL AND RADIO ELECTRICAL AND RADIO

RHEOSTATS, CONTROLLERS AND REGULATORS SINCE 1912

NEW IMPROVED

# HIGH HEAT-HIGH OHM-HIGH WATT AIR COOLED POWER RHEOSTAT

"With the Element That Cannot Burn Out" For Socket Power Sets and Eliminators

For Socket Power Sets and E Designed and made specially for high current carrying capacities. Large refractory base. 2 % in. diameter. Single hole mount. Resistance element of best quality resistance whree (having lowest rising temperature co-efficient) wound on best grade India Mics imbedded in grooves, and covered with a high heat refractory cement, making the element permanent and everlasting, tightly fastened to the base. Made in the following ohmages as standard: 2-3-5-6-10-15-20-30-50-100-200 Ohms. Also made up with an extra connection and used as a Potentiometer in any of the above ohms. Furnished complete with Bakelite knob.





DEJUR CONDENSERS

Single—Double—Triple ypes in All Capacities.

TO DEALERS AND JOBBERS

TO MANUFACTURERS
Let us figure on your requirements. Send us specifications

De Jur Products Co.

199 LAFAYETTE STREET. NEW YORK CITY



# **TRUVOLT**

# An All-Wire Variable Voltage Control

ASH in on the big trend toward delectrified sets by selling Truvolt, the superior new wire voltage control for B-Eliminators and power devices.

The special construction of this resistance gives it a greater radiation surface, keeping it far cooler, on the same principle as air-cooled engines. This feature is being widely advertised and is creating a big demand with the fans.

- Made entirely of wire; permanently accurate; very long life.
- Permits potentiometer control; positive metallic contact at all times.
- 3. Nichrome wire resistance-very low temperature coefficient.

Type	Resistance	Current
	(ohms)	(Milliamperes)
T-5	0-to-500	224
T-10	0 to 1,000	158
T-20	0 to 2,000	112
T-50	0 to 5,000	71
T-100	0 to 10,000	50
T-200	0 to 20,000	35
T-250	0 to 25,000	32
T-500	0 to 50,000	22.5

All rated at 25 Watts-List \$3.50 each Also full line of fixed wire resistances.

Stock and sell this fast-selling item.

Write for descriptive booklet and full information to

Dept. 15-C, 175 Varick Street, New York, N. Y.

"This Is An Eliminator Year"

# LECT

# "Hitch Your Radio To A Star Antenna"



Get distance, selectively and clarity with the new type STAR ANTENNA TEM.

Better results—at one half the price of competitive aerials.

Shipped complete with a roof bracket and installation kit shown below.

**RETAILS** .....\$6.50

Circular and price sheet

SELLING BIG Dealers and Jobbers stock this item now



STAR **ANTENNA PRODUCTS** 

Main and Hickory Sts. Elkhart, Indiana





# CONDENSERS



### Filter Condensers

Bee Cee Filter Condensers are very con-servatively rated and can be depended upon to render continuous service when used at the working voltage specified. Hermetically sealed metal cases.

Quantity production on any type of quantity production on any type of paper condenser, or any combination of capacities for any working voltage up to 1,250 volts, D.C. We will be pleased to produce condensers for any manufac-turer's requirements.



Write for details.

# ROWN & AINE

2317-19-21 CALUMET AVENUE

CHICAGO

BRANCH OFFICES DENVER KANSAS CITY

LOS ANGELES PORTLAND

# You Can Always Sell a Test-A-Bat. Making A Fair Profit and A Good Friend Whenever You Sell a New Set Whenever You Sell a New Battery Whenever They Ask For A Hydrometer



They'll thank you for the advice for they need only press the button to see if the A battery is O.K. Simple to attach, simple to use.

#### **SAFE ACCURATE CONVENIENT**

Far superior to Hydrometers-No Risk of Acid Drippings-Simple and Easy to Use—No Need to Move Battery—Always on the Job—Readings Guaranteed to Be Accurate.

BEEDE ELECTRICAL INSTRUMENT COMPANY Manufacturers of Radio Meters of All Descriptions 136 Liberty Street, New York City



# FROST-RA **DE LUXE RADIO APPARATUS**

It has been our constant aim to develop radio apparatus that offered set builders greater value, increased dependability and longer life. Frost De Luxe Apparatus today is the finest line of QUALITY Radio Parts and Accessories on the market.



Our development of a line of Variable H i g h Resistance Units was an achievement of which any parts manufacturer might have been proud. We also brought out the most complete line of metal frame and bakelite rheostats and potentiometers that radio fans had ever seen. Our research work out the months of testing and experimenting.



FROST-RADIO

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Frost Gem Rheostat

The new Frost Gem Rheostat is a good small rheostat (diameter 1½ inches.) It combines compactness, precision workmanship, sturdiness and long service. Supplied with or without switch. Resistance element wound on fexible Bakelite winding strip—the finest material for the purpose.

Frost De Luxe Fixed Resistances are wound on flexi-ble Bakelite with terminals firmly "staked." Made in a wide range of re-sistances from 4 to 1000 hbms



# HERBERT H. FROST, Inc.

Main Offices and Factory ELKHART, IND.





MAKES BETTER

RADIO

# Selling Big!

These new additions to the fast-selling AERO line are going big. You are sure to have a big demand for these items during the coming season, so make it a point to acquaint yourself with the many features of the improved Universal Coils, Chokes, Transmitter Kits and Foundation Units.



#### The Improved AERO Universal Coil

At last—a true universal coil that is adaptable to any type of radio receiver under all conditions of These improved inductances are suitable for any straight tuned radio frequency circuit—both bridge and loss balanced, and are easily and ideally adaptable to 3, 4, 5, 6, and 7 tube sets and circuits. The improved Aero universal coils can be used with all types of tubes—201-A, 199, 112, and the new 240 and A.C. Tubes, and are offered in the following kits:

Kit		List Price
Kit of 4 Coils (for improv	ed Aero-Dyne 6)	\$15.00
Kit of 3 Coils (for Aero 7	)	12.00
Kit of 2 Coils (for Aero 4	.)	9.50
3 Circuit Tuner		5.50
Antenna Coupler		4.50
Wave Trap Unit		4.00
All coils are furnished f		

## **New AERO Choke Coils**

AERO Choke 60

.00035 condensers if desired.

Modern circuits of high sensitivity demand the use of radio frequency chokes in certain parts of the circuit. The Aero Croke-60 is designed to have a uniform choking action over a wide range of wave lengths, including Broadcast bands and Amateur Short Wave bands as well. Many chokes employed on short waves have an unpleasant characteristic of showing so-called "holes" in the tuning range, which is present also on the broadcast band but in a minor degree. These faults are corrected in the Aero Choke-60. Price . . . . \$1.50



#### AERO Choke 248

The Aero Choke 248 is especially designed for operation in Aero Trausmitter kits 2040K, 4080K, and 9018K, and other circuits. Aero Choke 248 presents a high impedance or choking action over the usual amateur wave lengths. It is wound with a conductor sufficiently liberal to handle transmitters up to 100 Watts.



## A New AERO Transmitter Kit



The new key 9080 Aero interchangeable kit has a range of 90 to 180 meters. The kit includes two mounting bases and two Aero choke 248 coils, and is designed for use in the Aero transmitter with Key 2040 kit choke coils.

Price

## A New Service

We are now able to supply Foundation Unit for all Standard Aero kits, drilled and engraved on Westinghouse Micarta, for the convenience of home set builders.

Prices and discounts on these Foundation

Units will be furnished on request.

AERO PRODUCTS, INC. Dept. 117

1772 Wilson Ave., Chicago, Ill.

# A Complete Line of AERIAL NECESSITIES

owner needs efficient ground and aerial

Your customers will find in the Amoroso Aerial Kits everything necessary for an efficient installa-

STYLE "A" \$3.50 STYLE "B" \$2.00



100

The NIFTY LEAD-IN is completely weather proof and well insulated with rubber.



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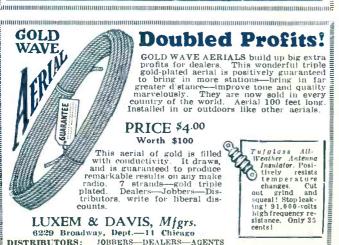
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The Amoroso Radio Clamp is made of copper with a clip of nickeled The flanges are bent so as to give added strength and prevent the clip from turning. An exclusive feature. Ask about these clamps.

MANUFACTURING CO. BOSTON, MASS.







# DEPENDABLE COIL SERVICE Radio Manufacturers

Battery Charger Coils Eliminator Chokes and Transformer Coils Coils for Loudspeakers Audio Transformers and Impedance Amplifiers Honeycomb Inductances

Send us your specifications for our quotation and shipping date. Service prompt.



UNIVERSAL WINDING CO. PROVIDENCE, R.I.



#### NATIONAL POWER TRANSFORMER

A heavy-duty transformer for 110-220 volts, 60 cycles A.C. Capable of handling the largest sets. Center tapped 7.5 and 5 volt secondaries are provided for filaments of both U-210 and UX-171 Power Tubes. Dimensions 41 in. wide x 4 in. deep x 43 in. high. Bakelite Panel-Black Crackle metal case. Made in two types-Type R has 300 volts secondary each side of center, for Raytheon BH or UX-280 Rectifier Tube. List Price, \$12.50. Type U has both 300 and 230 volts each side of center. List Price, each, \$14.50.



NATIONAL FILTER CHOKES Type 80

Two heavy chokes in single case to match NATIONAL POWER TRANSFORMER. For all Power Supply Filter Circuits.

List Price \$10.



National Filament Transformer F-226

For heating the new A.O. Tubes direct from Lamp Socket, replacing the old A-Buttery. Has 1.5, 2.5 and 5 volt taps for all types of A.C. Tubes.

List Price, \$10

Write for Bulletin RR-124 to

NATIONAL CO. Inc., W. A. Ready, Pres., Malden, Mass.

من مولاره و ما الرق مو و مو مولاره مو ما الرق مو ما الرق



[Output Transformer]

The above message is taken from the second month's insertion of the unusual Muter Advertising campaign now running in all the leading consumer Radio publications. This campaign is developing remarkable and widespread consumer interest and demand for the Muter Clarifier. This is the only device that protects the Speaker and coils from paralyzing "B" Current, thus assuring vast improvement in tone-quality and volume. The Clarifier is a compact, attractive little instrument, easily attached in a moment without disturbing set.

# Cash In On Muter Advertising

The Clarifier is only one item in the complete Muter Quality Popular Priced Line-all backed by consistent and extensive advertising and by international reputation for Quality and Permanence. Ask your jobber for dealer prices on the Muter Line. Send coupon today for Catalog.

## LESLIE F. MUTER COMPANY

76th and Greenwood Ave.

Dept. 6038-P

Chicago, Illinois

Complete Quality Popular Priced Line Send for Comprehensive Catalog



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LESLIE F. MUTER CO.

Dependable **Products** 



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Dept.	6	038-P,	Chicago,	III.

Send at once catalog of complete Muter Line. Jobber's Name



# Light Socket Power Equipment



Radio "A" Power Devices

Type 440-A

Low Voltage Transformer
For use on 105 to 125 volt (50 to 60 cycle)
A.C. lines to supply the filaments of the new
A.C. tubes. A.C. tubes.
The following voltages and currents are avail-

3.5

Price \$10

Type 438 UY Tube Socket type UY-227 or C-327 five prong de-

Price .50



Type 410 Rheostats

A.C. tubes require rheostats capable of carry-ing comparatively heavy currents at low voltages. Furnished in resistances of .5, and 1.5 ohms.

Price \$1.25

Type 439 Center-tap Resistance A.C. tubes require a center-tap resistance. The type 439 is adjustable to any type of



Radio "B" and "C" Power



# Type 445 Plate Supply and Biasing Unit

Any combination of four "B" voltages from 0 to 180 are available by means of a wire-wound resistance voltage divider with adjustable taps. Variable "C" voltages from 0 to 50 is also available. Designed for use on 105 to 125 volt (50 to 60 cycle)

A.C. lines, Uses UX-280 or CX-380 rectifier tube. Through terms of the R. C. A. license the unit may be sold only with

Type 445 Plate Supply and Biasing Unit.....\$55.00 Type UX-280 or CX-380 Rectifier Tube...... 5.00

Cambridge, Massachusetts

# SCIENTIFIC



The new SCIENTIFIC Drum Control has been designed to meet the need for a dependable, fine appearing drum control to be used in circuits requiring three ganged condensers.

Beautiful escutcheon shield will enhance the appearance of any set. Dial is calibrated 0 to 100 with figures and markings that stand out clearly. Action is powerful and smooth and develops no backlash. Friction-drive drum improves with use. Drum is made of finest pressed steel. Type UXB United Scientific .00035MF Three Gang Condenser is used. Condenser and drive are completely assembled at factory. The SCIENTHFIC Drum Control comes complete ready to be installed. Lists for only \$11.001 Your customers will buy it on sight. Write or wire for further information TODAY!

United Scientific Laboratories, Inc.

82 Fourth Avenue

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# **Another EBY Repeater**

It is one thing to move the first lot of merchandiseand quite another to stock a sure repeater.

Dealers have come to recognize the name EBY as a guarantee of rapid turnover. The New EBY Socket is a worthy companion to the famous EBY Binding Posts.

Generous discounts backed by consistent national advertising make the EBY line attractive to all live dealers.

The H. H. EBY Manufacturing Co. 4710 Stenton Ave., Philadelphia, Pa.

# Salesmen and "what-elsers

SUCCESSFUL retail merchant recently declared that all clerks could be divided into two classes: "Whatelsers" and Salesmen.

The "what-elser" has the right idea, of course —he wants to increase the average sale. But how often that crude question "What else?"

has just the opposite effect!

The trained modern salesman works differently. He knows the power of association. Cabbages and -not kings but corned beef. Hammers and nails. Collars and cuff links. Every item in your stock suggests a dozen others, half of which the customer may really want in addition to the thing he came to purchase.

## Modern Merchandising

This principle of association can be applied not merely to the salesman's handling of the customer, but to every form of retailing. It is one of a score



of methods of increasing the average sale discussed in "Modern Merchandising," the new Course and Service of the Alexander Hamilton Institute.

Leading authorities in every field of retailing have collaborated in the preparation of this Course which offers

not merely proven principles but concrete advice and help on every problem of modern store man-

Every retailer who knows that each department must be run along the most scientific and advanced lines if his establishment is to meet competition and grow will profit from this Course and Service.

"Progress and Profits," an unusual booklet, tells the whole story and shows how this digest of methods and principles covering every branch of retailing will help you make more profits now. We will gladly send you a complimentary copy. Simply fill in and mail the coupon.

# Among the authors of the new Modern Merchandising Course are the following men:

FREDERICK D. CORLEY, Vice-President of Marshall Field & Company, in charge of Retail Merchandising.

EDGAR J. KAUFMANN, President of Kaufmann's Department Stores, Pittsburgh
J. C. PENNEY, Chairman of the States Stores

Dr. Paul H. Nystrom, for six years Director of the Associated Mer-chandising Corporation

CHARLES M. GALES, President, Louis K. Liggett & Company

DR. LEE GALLOWAY, First Director of the School of Retailing, New York University; a well known authority on Store Management Col. David May, late Chairman of the Board, May Department Stores

J. C. Penney, Chairman of the Board, J. C. Penney Company JOSEPH CHAPMAN, President, L. S. Donaldson Company, Minneapolis

ERCY H. JOHNSTON, President. Chemical National Bank of New York PERCY

CLAYTON POTTER, President, United States Stores

Amos Parrish, Director, Amos Parrish & Company, Store Counselors

WILLIAM N. TAFT, Editor, Retail Ledger
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ALEXANDER HAMILTON INSTITUTE 131 Astor Place New York City



Please mail me a copy of "Progress and Profits.

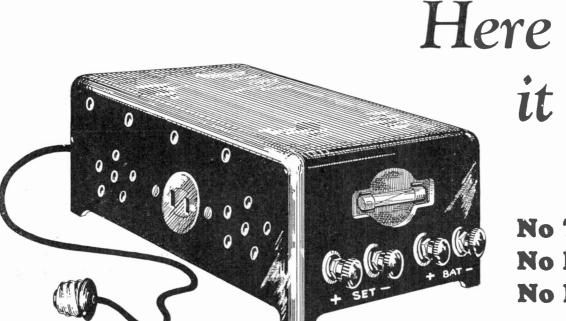
Position

Business

Address .

In CANADA, address the Alexander Hamilton Institute, Limited, C. P. R. Bldg., Toronto

In England, 67 Great Russell St., London In Australia, 11: Castlereagh St., Sydney



it is.

No Tubes No Liquid No Bother



The Automatic Charger for "A" Batteries

YOU'VE never seen anything like Charg-A-Matic — absolutely automatic—requires no attention — the only "fool-proof" charger on the market that really takes care of itself.

Charg-A-Matic charges the "A" Battery up to full capacity at 1 to 1¼ Amperes, then AUTOMAT-ICALLY reduces its charge to approximately .3 Amps. When the battery voltage drops to about 5.9, Charg-A-Matic AUTOMAT-ICALLY resumes full charging rate until capacity is reached.

It is equipped with plug for attaching "B" Eliminator and has

AUTOMATIC switch which shuts off charger and turns on "B" Eliminator when set is in use and AUTOMATICALLY turns off "B" Eliminator and turns charger on when set is off.

Once plugged in there is nothing to worry about—no liquids to replenish—no tubes to burn out—no acids to burn or stain—no attention of any kind required.

Charg-A-Matic is priced right, too. Dealers everywhere are finding it a quick seller and a profitable one. Now is the time to tie up with this profit maker. Get your order in today.

Retails at

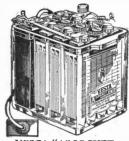
\$13.75

# JOHNSON MOTOR PRODUCTS CO.

1401 Carroll Avenue, Chicago

# VESTA for VOLUME

# The Complete Quality Line of Socket Power Units, Tubes and Batteries Offers EVERY Sales Advantage—



VESTA "A" SOCKET POWER UNITS

BUILT IN GLASS everything visi-ole, Built-in hydrometer. Choice of eliber Balkite or Vertrex rectifiers, With or without automatic relay. High or low charging rates. For use with 110 volt, 50-60 cycle AC current. In 4 and 6 volt sizes, 50 Amp. Hour capacity. List prices \$28 to \$37.50.



with Licensed
KITE RECTIFIER
d with two taps for high
charging rates. For use



VESTA GLASS RADIO "A"
BATTERY with
BUILT-IN-HYDROMETER BUILI-IN-HYDROMETER Water level always in plain view. State of charge always visible. In 50 and 100 Ampere hour sizes. Posi-tive plates are 25% oversize. Prices on request,

There's a Vesta Radio Power Unit to meet every demand. We have combined the ability. experience and quality of Vesta with such favorably known names as BALKITE, VER-TREX and WESTINGHOUSE.

This broadminded and far-seeing policy makes possible the most complete line with the highest sales possibilities.

No matter what your customer's ideas may be in radio power you can give it to him in the VESTA line.

Start right with this BIG Quality Line—of nationally advertised Radio Power Units. Tubes and Batteries—and build a successful business.

VESTA BATTERY CORPORATION 2100 Indiana Avenue CHICAGO, ILL.



Vesta Complete "A-B" Socket Power with Licensed WESTINGHOUSE RECTIFIER All in One. Contains "A" battery in glass case; built in hydrometer; "B" unit; Westinghouse rectifier; Automatic relay; High and Low charging rates.

No. A-B 400-"B" capacity 40 mils at 180 volts, list \$72.00 No. A-B 401-"B" capacity 60 mils at 180 volts, list \$77.00



VESTA "B" UNIT

VESTA "B" UNIT

Socket Power with Automatic

Relay.

Constant and uniform Current for the

"B" Circuit-- with perfect control over
entire Voltage in both amplifier and
detector circuits. Range of adjustment
for all sets.

B-200, 40 mils at 180 volts, list...\$39.50

B-201, 60 mils at 180 volts, list...\$44.50



VESTA VERTREX
TRICKLE CHARGER
HIGH and LOW charging rates. Supplied with or without relay. Compact in handsome crystal enamelled case. Charges foult batteries from 110 volt, 50-60 cycle, AC current.
C-301 without relay, list \$15.00
C-302 with relay, - list \$17.50



VESTA QUALITY TUBES

There's a Vesta tube for every rac purpose. Special non-microphonic fe ture. These tubes will make friends f the dealer because of their pure to and long life,

---WRITE NAME ON THIS COUPON

Vesta Battery Corporation, 2100 Indiana Ave., Chicago, U. S. A. Please have the Vesta Central Distributor near me submit the Vesta Dealer Plan. AUTO AND RADIO BATTERIES POWER UNITS TUBES

STEADY......as a River's Current......SILENT.....as a Sunset

# nfailing Power 15 Outstanding Value for Tomorrow's

"all-electric" RADIO

Another Sales Leader for 25-40 Cycle Alternating Current 

The New Complete GREENE "B"

\$27.50

(East of Rockies)

NOW LEADS THE INDUSTRY IN DESIGN

DESIGN
RESULTS AND VALUE
A 60-cycle AC Unit. For
smallest sets, or those with
7-tubes. 35 Milliamperes,
135-volts. Performance incomparable. Single linevoltage control, originated
by GREENE engineers. Any
child or novice can understand it. Needs no expert
skill. Now regarded as distinct forward step, making
obsolate all old-style devices
requiring variable adjustments. Small, compact,
takes less room than batteries. Never wears out.
No HUM. Tube included—
NOTHING ELSE TO BUY.



For all Sets up to 12-Tubes
The BROWN "B" SuperPower. Still a favorite of
engineers. Thousands in
use. For extra sensitive
sets. Has variable controls.
List, complete, East of
Parking \$23.50 List, complete, Rockies, \$33.50.



GREENE Leadership in advanced Design insured GREENE Leadership in SALES

PLEASE USE	THIS	COUPON
GREENE-BROWN ME	G. CO.,	(Dept. R.R. 5)
5100 Ravenswood A	ve., Chic	ago, U.S.A.

Please send your Dealer Proposition. Name .....

PIN COUPON TO YOUR LETTERHEAD.

HE clamorous nation-wide demand of setowners, dealers and leading builders of "all-electric" receiving sets for the superperforming light-socket devices for batteryless Radio, has established this new GREENE-Radio, has established this new GREENE-BROWN line as an outstanding engineering achievement and merchandising success.

Engineers, producers and buyers of radio-receivers, now recognize GREENE-BROWN ceivers, now recognize GREENE-BROWN current conversion principles as primary factors in improving radio reception. Even the most elaborate receiver or reproducing mechanism fails to constantly provide the utmost degree of clarity, smooth, undistorted volume, and sweet full-tone qualities demanded by setable of today where the power-supply defeated. buyers of today, where the power-supply de-pends on batteries which lose strength from each hour of service.

Lasting radio popularity and buyer satisfaction depend chiefly on full-powered reception of finest quality. GREENE-BROWN engineering, large-scale production and low prices enable dealers and set-manufacturers to meet all competition. Insures improved performance and salability for receiving sets of any size.

Radio-sets powered the GREENE-BROWN way stay sold! No servicing hazard. The sale completes the deal. FOOLPROOF construction. Simplified installation. Operation—entirely Automatic! Nothing to break-down, weaken or wear out. Fixed output voltages, plainly marked, and elimination of variable adjustments (exclusive in all GREENE models) insures constant controlled reception, at any distance. For Selectivity, Volume, Tone and Clarity utterly beyond belief—until your own ears prove it—subject a GREENE-BROWN Unit to any test. Then, if it doesn't sell itself to you—DON'T KEEP IT!

SET MANUFACTURERS: There is a GREENE Power Unit to fit every set, or our enginers will design one for you. Simply acquaint us with your needs. Write or WIRE.

SOLD WITH AN ABSOLUTE **GUARANTEE** Better than Batteries

ENJOYMENT TODAY'S RADIO POWER FOR TOMORROW'S

# Going STRONG/

ANDAR continues to gain ground in the speaker field—forging ahead steadily and brilliantly—going strong all along the line—thriving on competition—winning new laurels every week—cheered by fans and dealers alike.

There are many reasons for Sandar's outstanding success, including the consistent excellence of its performance, its unusually attractive appearance, and an exceptionally low price, \$27.50, lower than that of any other licensed speaker of its size and type on the market.

The Sandar Junior, retailing at \$16.50,

has also won its share of applause and approval, and, though still comparatively new, has already proven itself a worthy team-mate of the Senior model.

There is still an opportunity to get in on the profits accruing from Sandar's popularity by securing a franchise—write TODAY for terms and full information.

# SANDAR SPEAKER

SENIOR Model \$2750 (No. 25)
West of the Rockies \$3000

Licensed under

JUNIOR. Model \$ 1650 (No. 21)
West of the Rockies \$ 1725

SANDAR CORPORATION, Crescent Plaza Building, Long Island City, New York

# The Outstanding

# Profit Producer

of the Radio Industry





Distinctly original in design, \* VOGUE Model 12 offers a Speaker which presents an attractive appearance in any position. Carved art work grilles on both front and back make it extremely beautiful in any setting. Rich antique finish in dark brown crackle with grilles and base high-lighted with gold. Size 17 inches high, 8½ inches wide, base 10% inches long. 7½ inches wide.

List Price \$30

VOGUE Ortholian Model Cabinet Type Speaker contains an air column over 8 feet long, permitting longer tonal travel. Because of its construction, the Ortholian Model is capable of reproducing musical tones with unusual naturalness in color and volume. It is beautifully finished in shaded walnut and dark trim with carved grille and legs. Ample storage space for batterles and ellminators is provided. This Speaker has immediate acceptance. Dimensions 48 inches high, 14 inches deep, 22 inches wide.

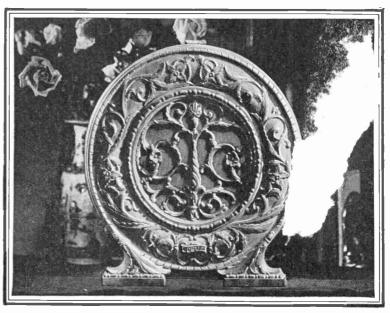
List Price \$55

VOGUE prices are slightly higher west of the Rockles.

VOGUE Model 10 contains an air column of over 30 in, and of special patented design. It is entirely new in its construction and offers entirely new perfection in its re-creative qualities. Beautifully finished with grille and base of carved art work touched with gold high lights. Size 20 in. high. long, 7½ in. wide.







\* VOGHE Model 8 is a Speaker of character. It adds a note of charm and luxury to any living room. Its design is a classic of masterful craftsmanship. The ornamental grille is surrounded by a gracefully curved border and the entire face, as well as the feet, is decorated with delicate carvings. Its rich brown crackle finish with gold high-lights and its screen of silk gold mesh help to make Model 8 a vision of loveliness. Entirely new acoustical principles insure delightful natural reproduction on any set. Size 14½ inches high, 13½ inches wide, 6% inches deep.

List Price \$19.50

BEFORE the entrance of VOGUE Speakers, there had never been a radio reproducer selling for less than \$20 which combined eye beauty with ear comfort. In VOGUE Model 8 you have a radio Speaker that gives superb faithfulness in re-creating any radio program, lends superb beauty and distinction to any setting, and sells for \$19.50.

VOGUE Speakers are the first Speakers to give complete satisfaction to the entire family. The woman thrills to the attractive appearance of VOGUE. The man is enthusiastic over VOGUE's delightful naturalness in reproducing anything that goes "on the air."

VOGUE Speakers, too, have the benefit of an intensive and consistent publicity program in magazines of national circulation and unquestioned strength, such as Liberty, House Beautiful, Harper's Bazar, etc.

VOGUE Speakers have become the most popular separate unit Speakers on the radio market—for VOGUE offers unprecedented beauty in appearance and performance, prices which acclaim VOGUE to be a distinct value, and recognition built by appealing and powerful advertising.

You can share in the tremendous profits VOGUE dealers are realizing on this universally popular line. You will never know what a truly efficient Speaker can do for your business unless you arrange immediately to join the family of prosperous VOGUE dealers. Write at once to



RICHARD T. DAVIS, Inc. 5252 Broadway, Chicago

\* The reproducing units of VOGUE Models 8, 10 and 12, are contained in a metal housing which prevents damage in shipment.





# The Majestic Most popular B Power Unit for radio sets in the world

The Super"B", illustrated above is only \$2950, complete with Majestic Super~Power B~Rectifier Tube.

GRIGSBY - GRUNOW - HINDS - CO. 4572 ARMITAGE AVE. CHICAGO-ILL.

# The swing to Balkite is no accident



Balkite "A" Contains no battery. The same as Balkite "AB" but for the "A" circuit only. No a battery and charger but a perfected light socket "A" power supply. One of the most remarkable developments in the entire radio field. Price \$35.



Balkite "B" One of the longest lived devices in radio. The accepted tried and proved light socket "B" power supply. The first Balkite "B," after 5 years, is still rendering satisfactory service. Over 300,000 in use. Three models: "B"-W, 67-90 volts, \$22.50; "B"-135," 135 volts, \$35; "B"-180, 180 volts, \$42.50. Balkite now costs no more than the ordinary "B" eliminator.



**Balkite Chargers** 

Standard for "A" batteries. Noiseless. Can be used during reception. Prices drastically reduced. Model "J,"\* rates 2.5 and .5 amperes, for both rapid and trickle charging, \$17.50. Model "N"\* Trickle Charger, rate .5 and .8 amperes, \$9.50. Model "K" Trickle Charger, \$7.50.

\*Special models for 25-40 cycles at slightly higher prices

Prices are higher West of the Rockies and in Canada There is an enormous swing to Balkite in the Radio Power Field. Balkite sales are greater. The number of Balkite dealers is greater. The number of jobbers who want Balkite is greater.

This swing is not an accident. In fact, when in the settling-down stage of any industry the trade begins showing a decided preference for one manufacturer it is never an accident. What has happened is that time and experience have made clear to both jobber and dealer which lines are profitable and which are not.

Why the swing should be so decisive at this particular moment in the case of Balkite is quite clear.

First: Year after year Balkite has been the pioneer in its field. This year as usual the Balkite line is the most ad-

vanced line of Radio Power Units on the market. Out-claimed all summer by a score of lines, the season's best sellers are again Balkite.

# Second:

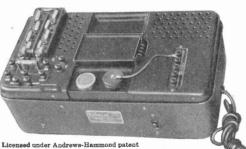
Time shows more and more the correctness

and reliability of the Balkite electrolytic principle. Electrolytic rectification is not only more popular than ever with the trade but its advantages are so great that other large manufacturers are using it under license. Balkite has now three licensees in the radio field: Vesta, USL and Gould.

**Third:** Balkite's reputation has been built by performance at the hands of its owners. Once sold Balkite radio power units stay sold. We believe that the Balkite service record is unequalled in the entire radio field.

Fourth: Balkite is the third largest advertiser in radio. Balkite's consistent advertising is only part of a larger policy that has always given the trade every possible help in selling its goods to the public.

The swing to Balkite is only an indication that Balkite policies are bearing fruit in profit to both jobber and dealer. The line is complete. With it you need no other. Concentrate on Balkite and you'll make money.

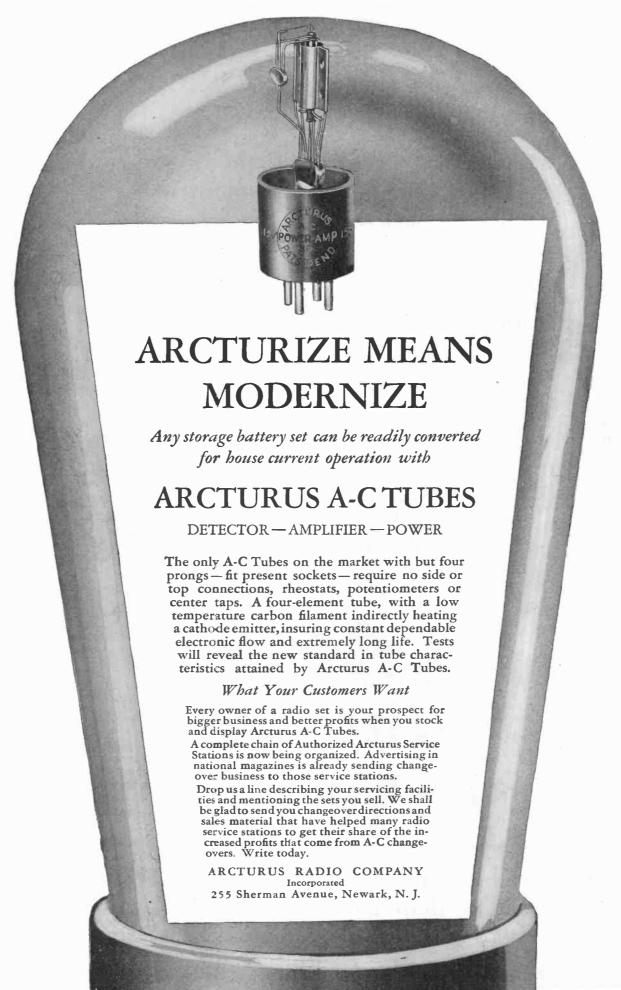


Balkite "AB" Contains no battery.

A complete unit, replacing both "A" and "B" batteries and supplying radio current directly from the light socket. Contains no battery in any form. Operates only while the set is in use. Two models: "AB" 6-135, \*135 volts "B" current, \$64.50; "AB" 6-180, 180 volts, \$74.50. Special model for Radiola 28, \$63.50.

FANSTEEL PRODUCTS COMPANY, INC., NORTH CHICAGO, ILLINOIS

# Balkite Radio Power Units



am the Voice of the

me, even the finest of sets is wanting. For I speak where others whisper ... and whisper where others are mute. I tell everything and miss nothing ... I greet Volume with a smile, and snub Distortion with disdain. I am Music's mirror ... friend to the brasses ... ally of the winds and reeds ... helpmate of the basso ... guardian of the soprano. Others, masked in similar guise, attempt to impersonate me. But in vain. For I am the real Voice of the radio receiver. I am the Farrand Oval Speaker.



More than ever before—"THE EAR SAYS BUY!" to a Farrand demonstration. Are YOU sharing in this greater-than-ever Farrand season?

FARRAND MANUFACTURING CO., INC., LONG ISLAND CITY, N. Y.



# A Big-Improvement

THE new White A-B Primary Electric Power Unit is not a substitute for batteries. It is a mighty improvement—more dependable—more efficient—more economical. Requires no batteries whatever—no trickle charger. Never charged—never discharged. Plugs into power socket. Practically automatic in operation. Supplies even, full-volume current at all times.

This new White improves reception and constantly maintains the highest possible standard of operation. Noiseless and fool-proof, it is a permanent fixture, that enhances the worth of any receiving set in an astounding

manner. Quickly pays for itself by abolishing battery expense and cost of recharging.

Relies entirely upon 110-volt A. C. 60 cycle current for operation. "A" unit delivers 6-volt D. C. current at 2½ Amperes. "B" side output, 180 volts at 85 Milliamperes—a tremendous voltage acquired only in the WHITE unit. More than ample for any set up to 9 tubes. A complete A-B combination. Faultless in every respect. Built to render continuously satisfactory service. Designed to fit console cabinet. Housed in 20

gauge metal case—handsomely finished in sage-green lacquer. Always in working order.

Here is a Unit to make friends for your store. Priced right and backed by a nation-wide newspaper advertising program. Why sell less?

Julian M. White Mfg. Co.

Makers, also, of "A" and of "B" Units

Sioux City, Iowa

# Real Radio Fans



The new Exide Super 'AB" Power Unit, with socket power operation.

# jump at this Unit



The new Excide Super
"B" Power Unit—ready
to supply vigorous, sustained "B" power to
any size set.

Exide "A" Power Unit in 6-volt and 4-volt sizes.

It has an instant appeal to everyone who wants to get the best out of his set . . . .

EVERY man who really wants to get the most out of his set—who wants to buy the best—will be a good live prospect for this new Exide Power Unit.

It instantly banishes power worries. Exide has stepped into the future with this unit—the very last word in radio power engineering—built on the most advanced storage battery principles.

Early replacements or repairs are eliminated. Continued service is assured. The product of years of experience in making radio batteries—this unit furnishes ideal

power—equal to battery
power—with the dependability for which Exide Batteries have always been famous.

The new Exide Super "AB" Power Unit is a long-term investment in Radio Power. It will always furnish ample, automatic power for any set. The radio user can count on this unit even though he change his set in size or make. NOW is the time to push the Exide Super "AB" Power Unit—while it's big news to radio fans. National advertising is boosting sales. You should make the sales to your customers. Write us for complete information today.

#### Complete Exide Line

This brand-new addition to the Exide complete line only makes it more profitable for you to handle. The Exide Super "AB" Power Unit, the Exide Super "B" Power Unit, the Exide Standard "A" Power Unit, the Exide Master Control Switch, the Exide Standard "A" Storage Battery and the Exide "B" Storage Battery all represent a standard of perfection in power accessories which is unequaled in the radio field. Your customers will look for this superior line. It is advertised and carries a worth while margin of profit. Be ready to make sales.



Standard Exide 6-volt "A"
Battery—also made in 4volt size. Rugged—built
in one piece.

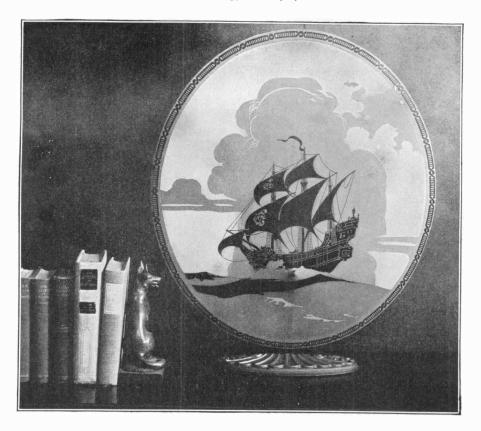


Excide 24-volt
"B" Battery
with glass cells.
6000 - milliampere capacity.
Also made in
48-volt size.



THE ELECTRIC STORAGE BATTERY COMPANY, PHILADELPHIA

Exide Batteries of Canada, Limited, Toronto



# The Finest Cone Speaker Ever Built to Retail for

At last—a new cone speaker worthy of the finest set ever built. The new Timmons concert grand cone speaker.

An amazing "silver-throated" speaker that faithfully reproduces the entire musical range in a vivid galaxy of splendid tones entirely new to radio. Voices are at their natural pitch. The bass booms out with all its resonant overtones. The high notes sparkle with new life—with a new delicacy of reproduction that lives in a colorful symphony of tone. A brute for volume, for power, for punishment—

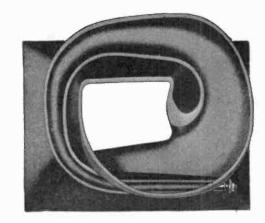
it will withstand high voltages indefinitely. It will resist wrack and rough handling longer because it is carefully built of the finest materials available.

A new shape,—elliptical; a new actuating principle—off-center drive; a new rugged, powerful unit. Only by the combining of these Timmons developments was this, the world's finest cone speaker, produced. See it. Hear it. It will be a revelation to you for there is nothing else like it on the market. Your jobber will supply your demands, or write to

TIMMONS RADIO PRODUCTS CORP., Germantown, Philadelphia

# TIMMONS CCONCERT GRAND EAKER

86 INCHES OF TONE TRAVEL



RE-CREATES
ALL THE
NOTES

# It's the 86-Inch Tone Chamber that sells Newcombe-Hawley Reproducers

THE Newcombe-Hawley 86-inch tone chamber is so outstanding in performance, both for mellow tone quality and ample volume, that Newcombe-

Hawley Reproducers have established a new standard of radio program re-creation. A tone chamber of this remarkable length reproduces every note and tonal shading of a radio program with amazing fidelity.

The Newcombe-Hawley line appeals strongly to radio set owners, because it offers a combination of fine furniture with a truly remarkable musical instru-

ment. You should investigate the wide selection of Newcombe-Hawley models, from the small drum speaker to the large console with room for the radio set and accessories. Write for catalog today!



Send for latest catalog with complete description of all models



MAIL THE COUPON



Newcombe Hawley, Inc. 201 First Ave., N., St. Charles, Illinois
Please send me full information about the Newcombe-Hawley line.

Name.....

Address



Showing Tone Chamber and Accessories

It speeds the sale to say Cabinet work by ADLER-ROYAL

# ADLER-ROYAL



RADIO CABINETS

Special Adler-Royal Console EXCLUSIVELY

for RADIOLA 16 and 17

This charming console, portraying the distinctive technique of its famous artist-designer, was fashioned by Adler-Royal craftsmen especially for the Radiola Models 16 and 17. Adler-Royal Cabinets, by their distinctive charm, project an appeal all their own. They contribute this noticeable sales advantage to the sets which they enclose. However favorably known the set, it speeds the sale to say "Cabinet work by Adler-Royal."

We specialize in designing and executing exclusive cabinet models for Radio Set Manufacturers. Let us plan your 1928 Leaders NOW.





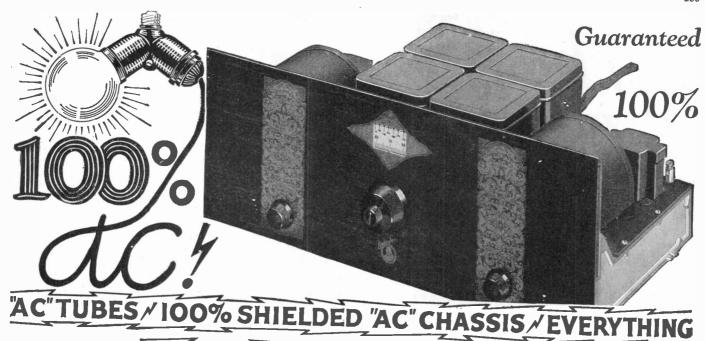


APCO MOSSBERG CORP.

18 LAMB ST.,

ATTLEBORO, MASS.

NEW YORK OFFICE: 130 W. 42nd STREET





Buckingham Perfect Orthophonic Model 20. Built of rare imported woods, strikingly finished. Built-in84in. tone chamber, Utah unit.



Buckingham Semi-Hiboy Console Model 2. Genuine welnut plywood, beautifully finished.

COMPLETE AT AMAZING LOW PRICE JOR your trade that insists up-on genuine direct "AC" sets with "AC" tubes, and demands superior performance—true "AC" performance without apologies-

Buckingham offers a guaranteed "AC" chassis complete with 'AC" tubes and everything (positively nothing else to buy) which can be mounted in any console such as pictured on this page and retailed by you for \$175 to \$250 complete—at a good long satisfactory profit!

And what a set! Positively no hum or "line" noise. Selective (without being critical). Simply marvelous tone. Tremendous volume when wanted. Distance range to satisfy the most rabid "DX" fan.

teries, no water, no acids, no makeshifts. Operates on 100-125 volts. Get the amazing price!

For battery or power unit operation, the same Buckingham All-Metal Totally Shielded Six chassis—designed for 201 and power tubes. Buckingham has the most rigidly built, the strongest chassis made-ships perfectly, reaches you 100% right, ready to

One dial control without backlash [compensator for extreme DX and fine tuning]. Expensive beauty, outside and in—yet astonishingly low priced, with a long dealer profit provided by a new retail merchandising plan.

Outdistance competition with the Buckingham. Wire or send No "A" eliminator. No bat- coupon for all facts and proof.



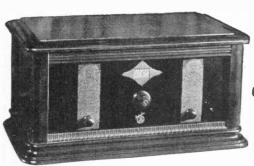
Buckingham Perfect Console Model 18. Beautiful woods, de-lightfully contrasted. Built-in 52 in. tone chamber, Utah unit.



Buckingham Orthophonic Junior Model 5. Built-in 48 in. tone chamber, Utah unit,

BUCKINGHAM RADIO CORPORATION CHICAGO

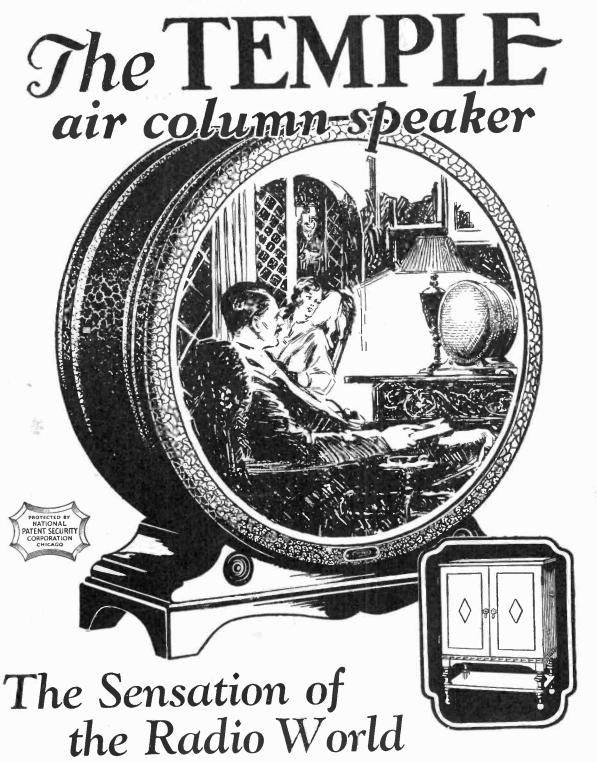
Fourth Successful season



Solid walnut, matched burl sides and top, beautiful lacquer finish. Full nickel piano hinged top with stop. A real piece of fine furniture guaranteed to ship without damage and not to warp or blemish in use.



	r	
1	i	REMINDER
	i	Write
	ì	BUCKINGHAM RADIO CORPORATION DEPT. 1311
	ŀ	General Offices: 25 East Austin Ave., Chicago
		Without obligation, you may send complete information about the Buckingham Dealer Franchise and the complete line of Buckingham console receivers. Interested in:
	1	Direct "AC" Battery or Eliminator type
	i	Firm
	ĺ	IndividuaL
		Address
	i	City_ State



No improvement in Radio has had such a wonderful reception as the Temple Air Column Speaker. Because it is built on a principle scientifically correct, it brings in every Radio Program with a richness and purity of tone that is amazing. The Temple is not just another speaker for you to sell. To the contrary, it is truly a musical instrument that sells itself on a comparative basis. Hook it up on a Temple Comparator and then watch your customers select the Temple over all others.

Temple Models priced at \$29.00, \$37.50, \$48.50, \$65.00, \$85.00

TEMPLE, INC., 213 S. Peoria St., Chicago Sales Offices in all Principal Cities

LEADERS IN SPEAKER DESIGN





#### PRICES

ype 2, for 110-120 Volt AC 50 or 60 yele Current, \$35.00.

For receiving sets having not more than eight tubes and not having type UX171 power tube or equivalent.

Type 2A, for 110-120 Volt AC 50 or 60 Cycle Current, \$42,50.
For all sets using type UX171, power tube or equivalent and for all large sets having nine or more tubes.

Type 2C, for 110-120-Volt AC 25, 30 or 40 cycle current, \$47.50.

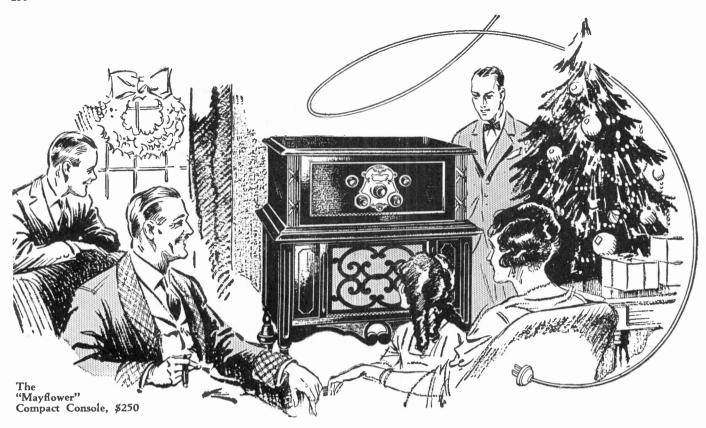
Prices include type BH Raytheon tube. Any of these models will be furnished with an automatic control switch built in the unit for \$2.50 additional. With this the B unit is automatically switched on or off when switch on the radio set panel is turned.

# Nationally Advertised—Nationally Accepted

THE KINGSTON B CURRENT SUPPLY UNIT will lead your sales this season. Nationally known, nationally endorsed, nationally advertised (The Saturday Evening Post, the National Geographic Magazine and others) a unit that will keep the set always at its perfection peak, that is handsome, expertly made and positively guaranteed—here is a unit that has everything the consumer demands, everything the dealer desires. Has three different voltage terminals, each adjustable over a wide range, making possible any desired voltage from 5 to 200. Fourth variable voltage may be easily had by connecting separate variable resistor to one of the terminals. Size: 9 inches long, 81/4 inches high, 51/4 inches wide.

Make the Kingston your leader.

KOKOMO ELECTRIC CO., Kokomo, Indiana



# A Prosperous Gift-Selling Season is ahead of Cleartone Dealers

# We Positively CAN Deliver Promptly!

We were far-sighted—we made large advance purchases, months ago, of raw materials and also parts, (such as A. C. tubes, speaker units, condensers, etc.) which enter into the making of the New Cleartone Electric Radio Receiver.

We insisted on immediate delivery and stored these parts and materials. It was a great investment, but it insured continuous full production.

Our far-sightedness is bearing fruit—WE CAN DELIVER!—and, this should be of wonderful assistance to you when the selling season is on.

Thanksgiving marks the start of the "big push" for Christmas sales—that is an old merchandising rule.

And, this year, retail selling will be carried on intensively right up to Saturday the 24th.

Dealers who sell the New Cleartone Electric Radio Receiver will reap a big harvest, because, they can make installations quickly—and right up to the last minute!

The New Cleartone will "stay sold" too—because it has quality built into every part of it, because it was proved an efficient electric set last year, and because it is a wonderful performer.

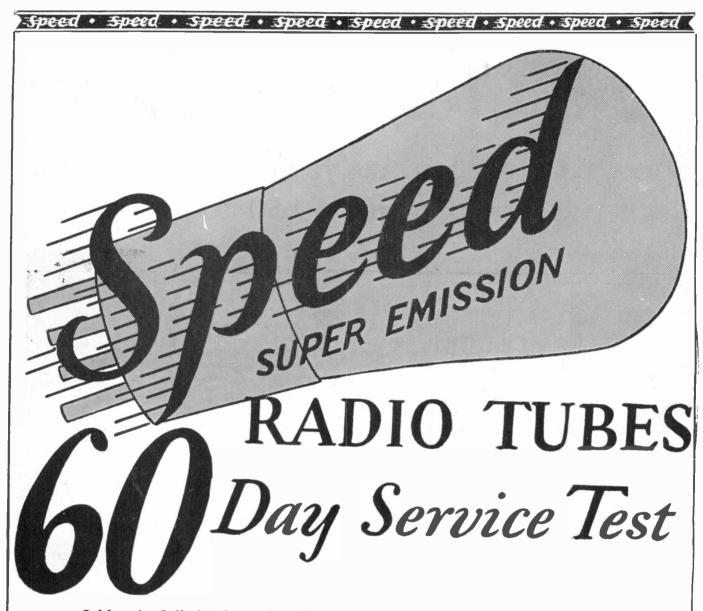
In addition, a strong newspaper advertising campaign will bring customers to you right through the selling season.

There's no time to lose now—WRITE TODAY—we will answer with full details.

#### THE CLEARTONE RADIO CO.

Division of The Cincinnati Time Recorder Co., Cincinnati, O.





Jobbers! Sell this line of really worthwhile tubes to your dealers with a genuine SIXTY-DAY SERVICE TRIAL. They will find them more efficient, more satisfactory, more uniform.

Let them pass the same offer across the counter to their customers. We give your dealers a sixty-day service test as adequate proof of our confidence in Speed Super-Emission Radio Tubes! Give your dealers their chance for real profits in this live line of tubes. Lift them out of the 30% discount class. Get behind a real tube. Shake off the shackles and build now for the future.

Get our unique co-operative selling plan—let us tell you how we help you build—get our discounts—they mean worthwhile profits—reach us, we are worth while knowing.

The triangular corner below will do the trick. Mail it!

# CABLE SUPPLY CO., Inc.

Executive Offices: 31 Union Square
NEW YORK CITY

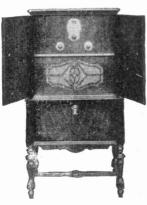
Speed · Speed

# TO MEET EVERY TASTE TO FIT EVERY PURSE

# Sonora Offers Seven New Radio Creations at Prices from \$69.50 to \$375



E-870—De Luxe Fiighboy
In period design cabinet of hand-rubbed burled walnut, with latest type bullersonora Cone Speaker. Unrivaled among sixtube receivers for ability to pick up selected stations and for sensitivity to every wave length. A revelation in tone quality. Price \$250.



E-865—Standard Highboy
All the performance value of the Sonora
Selective Six housed in beautiful burled walnut cabinet with built-in Sonora Cone
Speaker. Operates with either outside or inside antennae. Dial light. Shadow-line tuning. A dollar-for-dollar value hitherto unapproached. Price \$198.



G-880—Light Six Table Radio
In compact, selected walnut cabinet. Threetuned radio frequency, amplifying stages,
detector and two stages of transformer audio
amplification. Truly astounding in ability
to pick up selected stations and fidelity of
sone. Price \$69.50.

Sonora now offers to the trade the finest radio instruments the world has ever known. This claim is not made in a spirit of boasting but is proved to the hilt by the enthusiasm with which Sonora radios are accepted both by Sonora dealers and their most critical customers. For Sonora has improved its own wonderful product—improved the technical exactness of circuit and chassis—improved the beauty, material and finest of its already famous cabinets—improved even the glorious mellowness of tone through which Sonora first won to fame.

The seven new models offered by Sonora are taking the world by storm. They are altering all preconceived ideas about radio performance and radio values. They have created new conceptions of what is meant by selectivity and sensitivity—ability to pick up any desired station, delicate response to every wave length. To listen to their amazingly faithful rendition of every tone and overtone in the entire range of acoustics is to experience a new sensation and to gain a novel appreciation of what radio can do. And their price is as astonishing as their performance. At \$69.50 to \$375, there is nothing in their range of prices to approach them in value received. Sonora is growing fast but there are still good territories open to those who can represent Sonora properly. We shall be glad to hear from you.





ALL MODELS SINGLE DIAL CONTROL







F-875—De Luxe Highboy
Exquisitely housed in special grade butled
walnut Neo-Renaissance cabinet with handrubbed gloss finish. Bronze-inlay walnutbutled control panel. Unequaled for range,
tone and volume.Special loop with full 180°
rotation built into hinged door. Built-in
Sonora Cone Speaker. Nothing to equal it at
any price. Yet only \$375.



E-860—Junior Highboy

Specially designed for those who desire their radio in an attractive highboy cabinet but prefer that speaker shall not be included. Remarkable range, sharp selectivity, natural tone and absence of oscillations. Cabinet in high grade walnut with two-toned doors. Price \$165.



E-850—Selective Six Table Radio Beautiful burled walnut case. Supremely selective and sensitive. Three stages of famous R. F. L. (balanced bridge) radio amplification. Copper-shielded to eliminate interference. Dial illumination. Shadowline tuning. A definite advance in rone quality and performance, Price \$99.50.

# Meet the Demand for Electric Operation with a True "A" Eliminator

BOX contains no battery. It consists of a A transformer to step-down alternating house lighting current to a low voltage, which is then passed through a rectifying valve that allows current to flow in one direction only, creating a pulsating direct current. This is filtered through a circuit consisting of a choke and two of the well known ABOX condensers which remove the pulsations and smooth the current into pure, humfree, 6 volt direct current - ideal for radio "A" power supply and of sufficient quantity to operate any set up to eight tubes.

Dependable "B" units are available now and by simply making two connections to an ABOX, you can convert any set in your store into a true electric receiver.

See your jobber and investigate the remarkable ABOX dealers' merchandising plan.

Send for interesting booklet, "ABOX and The Light Socket"

Licensed by The Andrews-Ham-mond Corpora-tion, under Pat-ent No. 1,637, 795 and appli-cations



Slightly higher west of the Rockies Input-110 volts, 50-60 cycles A.C. Output-6 volt direct current, 2 amperes. Shipping weight, 25 lbs. Unlimited shelf life.

4-volt model for Radiola sets or \$2750
any receiver using small tubes

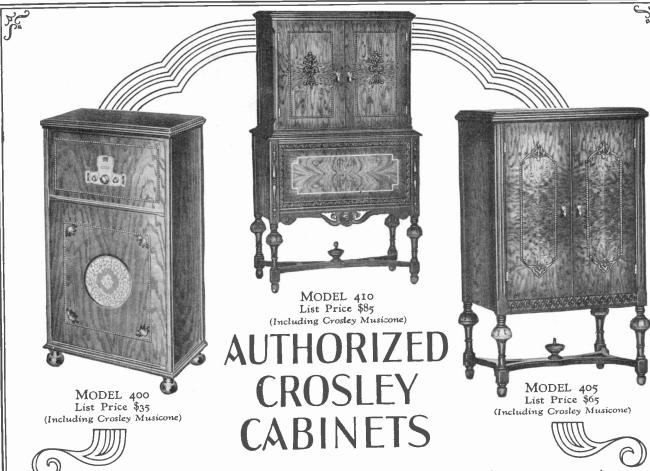
The ABOX Filter is an entirely different unit from the Eliminator, being the filter circuit alone in a small, compact unit. If you have a suitable charger, it can easily be converted into an "A" Eliminator by substituting the ABOX Filter for the storage battery. Shipping weight, 11 lbs. Price, \$19.50. Slightly higher west of the Rockies.

Send for Special Circular Send for Special Circular

# The Abox Company

215 North Michigan Avenue

Chicago, Illinois



ROSLEY DISTRIBUTORS are finding a new market of opportunity with these beautiful art furniture radio cabinets. Dealers everywhere are selling the merchandise quickly and at a real profit. And the vast factories of the manufacturer are delivering 2000 cabinets per day to serve them well.

There's a real policy and organization behind the striking success of these attractive products. The H. T. Roberts Company, presenting them, is composed of a group of recognized specialists in the production of radio furniture and radio musical instruments. A group of men, who from actual experience, understand the needs of the trade, and are able to develop merchandise for you with a quick, profitable market before it.

If you aren't selling "Authorized Crosley Cabinets" now, send today for free, illustrated catalog, and we will gladly put you in touch with your nearest Crosley Jobber.

And other Distributors, not handling Crosley, will be more than interested in our new line of distinctive cabinets for selected Jobbers. Write today for attractive, free catalog.

All Roberts Products are Fully Guaranteed in Workmanship and Materials.

# H.T.ROBERTS CO.

Executive Offices 1338-40 S. Michigan Ave. Chicago New York Offices
33 W. 42nd Street
New York City

Exclusively representing factories with assets over \$20,000,000

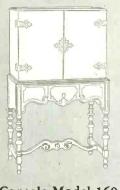




# MURDOCK



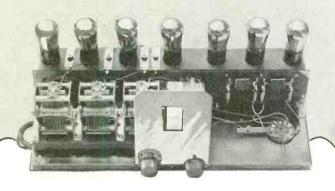
Console Model 130



Console Model 160

Murdock Radio is manufactured under licenses

covering patents owned or controlled by the Radio Corp. of America, Latour Corp., Hazeltine Corp.



SEVEN TUBES COMPLETE SHIELDING SINGLE DIAL



This remarkable value, together with the logic of the Murdock policy of distribution exclusively through authorized dealers, is the simple secret of why

## MURDOCK RADIO

has achieved such immediate and far-reaching recognition as the outstanding value of the year.

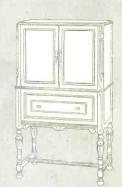
No camouflage, no frills, nothing but facts—facts so plain, so strong and so replete with customer appeal that you have only to give your buyers a chance of grasping them to cash in bigger and better than ever before in the history of radio.

Full information regarding Murdock Radio, together with illustrated catalog, will be mailed upon request.

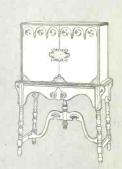


Six beautiful console cabinets have been selected from a large assortment and approved by the Wm. J. Murdock Company as being particularly suitable for their products. These cabinets are equipped with cut and drilled panels, permitting easy installation of Murdock Radio Model 65.

Ranging in price from \$37.50 to \$115.00 list.



Console Model 145



Console Model 180



THE MURDOCK CHASSIS-MODEL 65

A compact, seven tube Neutrodyne receiver, completely shielded. Station settings indicated by handsome, illuminated, rotating drum. Specially matched coils insure selectivity. Easily mounted in console cabinet . \$65

#### MURDOCK MODEL 75

WM. J. MURDOCK CO. — RADIO SINCE 1904 — CHELSEA, MASS.

# DOUBLY PROFITABLE











Guthrie radio itself—and the profit on B batteries, B eliminators, trickle chargers and other accessories in which he has built up good will, and that must be used with Guthrie sets.

When you sell Guthrie sets, you can offer a 2 dial, 6 tube set that absolutely meets all competition regardless of price; and at the selling price, the greatest radio value and the greatest profit earner you've ever had in your store.

Set up a Guthrie for demonstration—the reception is entrancing—the beauty appeals—the value sells—sells them fast! Write or wire today—Guthries will sell the holiday trade as they never have before.

THE GUTHRIE COMPANY, Inc., Elyria, Ohio



### Sterling R-81 Outsells because—

- —it brings out the finest tone quality of the receiver by exact power regulation, not too much, not too little, but just right.
- —it provides plenty of power for 4 to 8 tubes including power tube.
- —it sells at a price that 90% of radio owners are willing to pay.
- -it is simple to install and operate.
- -it carries the Raytheon Seal of Approval the confirming stamp of dependability and long life.
- —it stays sold—free from servicing and comebacks.

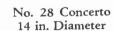
-it is backed by Sterling's 21 year record of electrical reliability.

These are the reasons why the Sterling R-81 is outselling from New England to the Coast. Don't overlook this opportunity for volume and clean profits. Cash in on Sterling. Get in touch with your jobber today.





## TRIMM Cones



\$10.00

West of Rockies, \$10.75 Canada, \$13.50

No. 38 Concerto Grande 17 in. Diameter

\$16.00

West of Rockies, \$16.75 Canada, \$22.00

There is a potential sale hidden in every radio home in your neighborhood. Every set owner desires the utmost in reception and therefore welcomes a chance to hear the marvelous Trimm Cone.

Deep vibrant notes are reproduced with a richness—natural, impressive; lofty pipings of the flute are rendered with an exactness—smooth, distortionless.

Built on the balanced armature principle, Trimm Cones are particularly well adapted to operation with semi-power and power tubes. They take the higher voltages and

maximum amplification without blasting or distortion.



Rear view. showing handy handle, removable base and wall mounting bracket Free edge of cone is fully protected. Unit rugged-ly built, of ample proportions, and all parts are rust-proofed before assembly.

Trimm Cones are packed in a special wire-bound wooden container, assuring transportation and delivery in perfect condition.





### Your Service Problem Is Solved!



Pattern No. 133 Radio Set Analyzer

When you buy Jewell Radio Set Analyzers for your service men, your service problem is solved. It is understandable and easy for a service man to operate and is thoroughly reliable.

With this Radio Set Analyzer your service man can enter a home with perfect assurance that he will find the exact trouble with the radio set and be on his way again in a few minutes, knowing that he has once more left a satisfied customer behind. When it is considered that forty-two individual and complete tests are made in the ordinary analysis of a six tube set, the remarkable nature of this testing instrument is appreciated.

On the Jewell Pattern No. 133 Radio Set Analyzer, plainly marked, individual push-button switches for each test are used, in conjunction with a special plug which is inserted in turn in each socket of the radio set to give the complete characteristics of each stage. A, B and C voltages, plate current and grid bias are instantly obtained by pressing the proper button. It gives a good tube test also. A separate set of terminals provides for the use of the instrument for circuit tests.

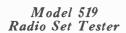
Write for descriptive circular No. 1124.

"27 Years Making Good Instruments"

Jewell Electrical Instrument Co. 1650 Walnut St., Chicago















### Constant--Even "AB" Supply at Lower Cost!

YOU can keep your radio working at its best, constantly and easily with Arco Power Equipment. No "off" nights. No excuses—every hour a perfect one. Clear direct current, smooth and unfailing, assures faultless radio reception.

Just plug an Arco Power Unit in any convenient wall socket and no matter how frequently or how much you use your radio—Arco is ready instantly with snappy live power waiting to be released. You can keep the vivid beauty of life-like reproduction of voice or music without the sacrifice of distance or selectivity.

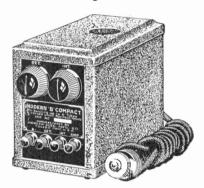
Arco Power Units are less expensive—this is an important feature for you to seriously consider. The field of sale is vastly enlarged. More sales—more profits. Send for the poster and special offer now.

This is the attractive Arco "AB" Power Unit. It will fit in ideally with any home interior. The color is unobtrusive shadow brown in crystal finish. Arco Units are small and will easily slide into the battery compartment of your console. There are no numerous jars to be filled with acids, alkalis or water. No "gangs" of tubes to burn out. No odor, no noise.

### Arco Electrical Corporation FORT WAYNE, INDIANA CHICAGO, ILLINOIS

Arco Electrical Corporation 211 East Columbia Avenue Fort Wayne, Indiana	Mail This!
Send me the poster with the Special Offer	
Name	
Address	

## a "B" power unit that stays sold!



## MODERN "B" Compact

Radio dealers selling Modern "B" Compacts enjoy the satisfaction of knowing that every sale means a satisfied customer—without comeback or complaint.

Designed and built by engineers, tested and inspected under the most rigid standards, each Modern "B" Compact is a continuous source of satisfaction and increased radio enjoyment.

Ample capacity for seven and eight tube sets; rugged construction to stand line over loads; a filter circuit heavy enough to eliminate all hum—such are the superior qualifications of the Modern "B" Compact.

### Raytheon Approved

Price, without tube \$26.50

(West of Rockies \$28.50)

New	
and	
Better •	

Modern engineering now makes available the fine volume possibilities of transformer amplification with the finest of tone quality.

### MODERN Type M Transformers

are being specified by additional engineers and designers every

week. Write for details.

The Modern Electric Mfg. Co.
Toledo, Ohio



You cannot measure CeCo Tube performance and quality with a micrometer. Only the "yard stick" of experience, scientific skill and experimentation can determine the super-value of CeCo Tubes in steadiness, clarity, volume, longer life. If your technical skill and equipment qualify you to make an engineering test of CeCo Tubes, we invite you to do so. If not, we direct your attention to the recommendations of authorities (whose opinions are of unquestioned weight in the world of radio), including Browning, Lynch, Cockaday, Harkness, Hurd, Best, Bernard, Henney and others. All have used and recommended CeCo—The Tube of Longer Life.

Write for Complete Data Sheets.

C. E. MFG. CO., Inc. Providence, R. I., U. S. A. Largest exclusive Tube Manufacturers in the World.





= E (O

There's a CeCo Tube for Every Radio Need-

General Purpose Tubes Special Purpose Tubes Power Tubes Filament Type Rectifiers A. C. Tubes

### A Pedestal Speaker

to complete your line—

The Octacone pedestal model cone speaker at \$29.50 is a piece of radio merchandise that is winning the hearts of radio dealers no less than it is the public.

No Octacone ever comes back. It is made to sell and stay sold. You know that already from the wonderful record of the Octacone table model. It is a thoroughly well designed and well built speaker that not only reproduces every

note in the scale with full rich tone and extreme volume, but also is strongly constructed of stout steel with rubber set unit and full-floating cone. You cannot damage an Octacone even with abuse.

Your eye as well as your ear will recommend the Octacone to you, and to your customers. And the price is attractive, even more so when the Octacone is put to the actual test—performance.

Get to know the Octacone. At the end of the season you'll be glad you did.



PAUSIN ENGINEERING COMPANY

NEWARK, N. J.

\$19<sup>.50</sup>

OCTACONE



\$29.50

## Dependable RECTIFIER

Makes It

Trouble-FREE

GENERAL INSTRUMENT

PERMANENT



### Eliminator

MOST grief this season among "A" Eliminators has been caused by inefficient rectifiers. After great exhaustive scientific research extending over a period of many months, we have found a DEPENDABLE rectifier that has a long life. It has made the PERMANENT "A" Eliminator one of the most DEPENDABLE on the market this season.

The PERMANENT "A" will permanently solve your "A" power supply problem. Because it does not employ a trickle charger or storage battery in any shape or form whatever, the PERMANENT "A" is a GENUINE eliminator. It will operate ANY receiver SILENTLY. There are no tubes. There is no acid to spill. No rewiring whatever is required. We believe you ought to write or wire TODAY for further details.

PERMANENT "A" Eliminator: Delivers 2 — 2½ amperes. Operates on 110 volts A.C., 60 cycles. Consumes only between 50 and 60 watts at maximum load. Size 8¾ inches high, 6 inches wide and 8½ inches long. Weighs approximately 21 lbs.

List Price

\$39.50

GENERAL INSTRUMENT CORP.

477 Broadway, New York City

## Announcement from

### RADIO PROTECTIVE ASSOCIATION

The Radio Protective Association is an organization of independent manufacturers, with an annual volume of business in excess of Fifty Million Dollars. It is striving for a free and open market in the radio industry in the United States, opposing any effort to monopolize this business. It will protect to the fullest extent under the law the independent manufacturer, the independent jobber and the independent dealer.

Therefore, this is to notify jobbers, dealers and users of radio apparatus that the Radio Protective Association is prepared and will use its resources, legal and patent counsel, and the moral support of its members, to defend the jobbers, dealers and users of the radio apparatus manufactured by its members in any suit which may be brought, anywhere in the United States, by the Radio Corporation of America, the General Electric Company, the Westinghouse Electric and Manufacturing Company, and the American Telephone and Telegraph Company, alleging infringement of their patent claims.

Because of the vital principle involved in this issue, the membership of this Association is growing rapidly, and it welcomes information and co-operation from every source.

### RADIO PROTECTIVE ASSOCIATION

An Illinois Corporation, Not for Profit

134 SOUTH LA SALLE STREET

CHICAGO



### by Master Builders

The Bush & Lane Piano Company having stood predominant for years in the Piano industry as master craftsmen in tone quality and cabinetwork, now announce The Bush & Lane All Electric Radio—guaranteeing the same exacting precision of workmanship and craftsmanship which has made the name of Bush & Lane products synonymous with all that is the finest in Music.

The TRUE notes of the human voice and the rich mellowness of all musical instruments are a reality—not a distorted reproduction—when they come from the air thru the Bush & Lane All Electric Radio.

Write for full information of Jobbers Sales Plan



PIANO COMPANY

Radio Division
HOLLAND MICHIGAN

ALL ELECTRIC - A. C. TUBES - (Licensed)

Music Store Electrical Dealer

Radio Store Radio Jobber

### Radio Retailing is "Your Paper"

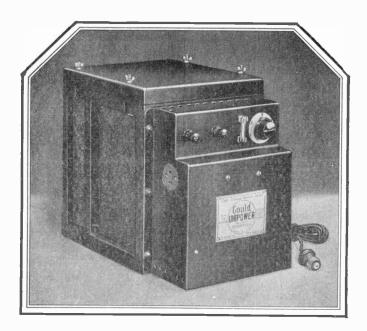
You are holding in your hand the foremost Radio how-to-sell publication printed today. Are the members of your organization receiving the benefits of its service? Think what it would mean for them to receive their own individual copy each month, to read at their leisure in their home. This is one trade paper that your people will read and from which they will derive untold benefit. Make sure that they do read it by seeing that they receive their own, individual copy.

\$1 a year

Cash with order

Radio Retailing, Tenth Ave. at 36th St., New York City Enter my subscription to Radio Retail I am enclosing one dollar.	
Name	
Address	
Position	
Company	

### A NEW IMPROVED UNIPOWER



Kathanode type batteries were first developed for submarines in European navies. With Kathanode design, porous mats of glass wool are placed next to the positive plates. They serve two purposes: first, they prevent disintegration of plates due to continuous charging or overcharging; second, they constantly draw fresh acid to the plates by capillary attraction, thus increasing power and efficiency of the battery. In radio operation the smooth even current supplied by Kathanode batteries is found to improve greatly the results given by any set.

## The same reliable tested design ... plus Kathanode

A new submarine type battery element gives Gould Unipower still longer life—and practically ends all service expense.

Dealers have always sold Gould Unipower with full confidence in its reputation for perfect performance and reliability. The same time-tested design that won this reputation is retained in the new Unipower.

But in the hidden battery element is an important improvement—almost a sensational advance. Gould Kathanode construction—an exclusive feature, first

developed for Gould submarine batteries, is now applied for the first time to radio.

This latest advance greatly increases the life of Unipower, lessens care, reduces the chance of damage from careless or inexperienced operation, and improves the results from the set.

The new Gould Unipower appeals to both kinds of customers—those who know so little that they want "fool-proof" equipment; and those who know so much that they understand why Kathanode means a new standard of performance and durability. For full details write at once to the Gould Storage Battery Co., Inc., 250 Park Ave., New York City.

The new IMPROVED INPROVED INPROVED INPRODUCT

## Again—Velvet Speakers score a Resounding Hit!



WITH the introduction of three new console models, the Velvet Speaker line commands renewed admiration of dealers and set owners alike. Pioneers in the long air column speaker field, the Borkman Radio Corporation continues in the lead, offering a complete assortment of distinctive reproducers ranging in price from \$7.50 to \$100.

The new Velvet Console and Consolette Speakers are beautiful, rich-toned instruments, having nine foot air column horns and large diaphragm, double-stylus Velvet Units. The Consoles are built with compartments to fit the popular sets, with special panels available for Crosley and Atwater Kent receivers. There is ample space for all power units.

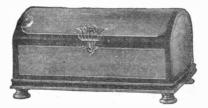
Dealers everywhere find ready sales for Velvet Speakers. Every territory contains many prospects, and the Velvet line offers a model for every taste. Write for detailed specifications and prices.

## Telebrat Per H. S. Pot. Off

### Radio Speakers

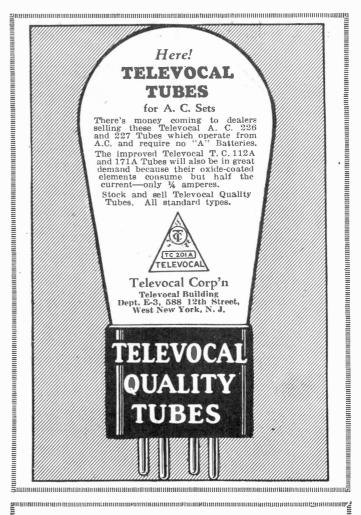
Manf. by Borkman Radio Corp., Salt Lake City, Utah

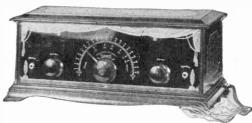
General Sales Office
230-E Ohio Street, Chicago



No. 21 Jewel Case List Price, \$40.00

Other Velvet Speakers from \$7.50 to \$100





### SUPERFLEX

Pat. No. 1,643,015

O amount of money spent for ADVERTISING will make a RADIO more SELECTIVE.

USERS are NOT interested in the amount of money spent for ADVERTISING, but they ARE interested in their own radio SEPARATING THE STATIONS, and if it does not DO SO they will not be SATISFIED.

A SATISFIED CUSTOMER is the BEST advertising possible to obtain.

SUPERFLEX radios SEPARATE THE STATIONS—like magic.

SUPERFLEX radios have inbuilt STATIC SNUBBER, and on nights when the music equals static in strength, it is simple to absorb static to practical inaudibility and fill the room with CLEAR MUSIC from great distances. Let us prove this to YOU. SUPERFLEX radios are fast increasing in popularity, due entirely to:—

Absorbing Static and Interference Clear Reproduction Long Distance

Volume Selectivity Easy Tuning Beauty

REASONABLE PRICES

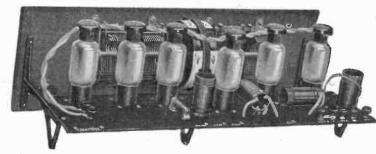
DEALERS:—Write for our franchise plan, discount and co-operative advertising in your local newspapers. DO IT NOW!

RADIO PRODUCTS CORPORATION 3816 N. 28th St., Birmingham, Alabama

## NOW MEET THE DEMAND

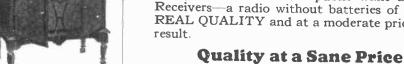


Table Model 2728-TAC





Every dealer knows the public want and are demanding "A-C" Radio Receivers—a radio without batteries of any kind—and if you can supply REAL QUALITY and at a moderate price, quick and numerous sales will result.



Premier Quality Chassis and complete Receivers are sanely priced to meet every pocket-book and may be had as chassis only or complete Table and Console models. Regardless of price, however, they are appreciated most for their wonderful tone quality. Premier "6-in-line" will meet every requirement of your trade and dealers who KNOW quality are rapidly obtaining exclusive franchises which brings along with it a REAL discount which nets them a handsome profit on every sale.

Premier are not what you might term large production radio manufacturers, but we do make QUALITY Chassis and Receivers in fair production volume and sell direct to Dealers in the twelve Middle West states; ALL OTHER BUSINESS IS HANDLED THROUGH JOBBERS OR DISTRIBUTORS.

Premier have been in business 22 years manufacturing telephones and other electrical devices—Radio for seven years—and manufacture every part from the raw material.

### **Priced to Meet Every Purse**

No accessories to buy-Plug in-Operate. List Price \$160 up to \$300 for "De Luxe" Model Console. **BIG DISCOUNT TO DEALERS** 



Console Model No. 2728-CAC

"De Luxe" Model No. 2731-CAC

### PREMIER ELECTRIC COMPANY

ESTABLISHED IN 1905-MANUFACTURERS EVER SINCE Grace & Ravenswood Aves., Chicago, U. S. A. Premier Electric Company, Ltd., London, Ont., Canada AII. COUP

PREMIER ELECTRIC CO.. Grace & Ravenswood, Chicago, Ill.

FREE TRIAL

We will entertain requests

from responsible Dealers

and Jobbers for demonstration privilege without obli-

gation if they will fill out

coupon and mail.

Please furnish us full par-ticulars regarding your Pre-tier "6-in-Line" Radio Chassis complete Receiving Sets and may obtain free demonstration obligation.

Please Sign Official Title

### Tell This To Your Trade!



The Cuno Radio Reel, with 25 feet of cord on a self-winding reel, puts the speaker 'ust where it's

It is simple, reliable, with only two screws to attach.

This is a real fast seller for your trade, with a good profit and quick turnover. Just like putting a radio set on wheels.



Model 687, Cuno Radio Reel

Handsomely finished in nickel and mahogany brown enamel. Complete with automatic ratchet controlled rewinding reel, 25 feet high grade cord and terminals. Each \$3.75



Millions are just waiting to be shown. THE CUNO-ENGINEERING CORP. Meriden, Conn.

Manufacturers of the famous "Electric-Match" Cigar Lighter for autos and for household use

Write for illustrated literature.

### Listed by Board of Fire Underwriters "Cash in" \$1.00 on the New **ELECTRAD** Lamp Socket Antenna Due to its superior features, the Electrad Lamp Socket Antenna is an easy-selling and profitable item. This antenna makes every electrical outlet a neat, efficient aerial. It takes no current, does away with unsightly wiring, and is absolutely SAFE. Tested at 2500 Volts A.C. Add this item to your stock, Mr. Dealer and 'cash in" on the demand. Write for full information Dept. 85B, 175 Varick Street, New York, N. Y.

### for Radiola 16 Console



ADE of walnut veneer and hardwoods beautifully finished in blended walnut to give a pleasing color contrast with the panel of the receiver. 41 inches high, 26 inches wide, 1+ inches deep. Will house 100A speaker. Ample space for batteries or eliminators.

Liberal dealer discounts. Other model for the 17

PLYMOUTH FURNITURE CO. 25 E. Juneau Ave., Milwaukee, Wis.



### A Little Item That Makes a Big Hit

HERE is a power control switch, assembled for quick connection, that you can sell at \$3.50 and make money. Its low price and high quality make a hit with both dealer and fans.

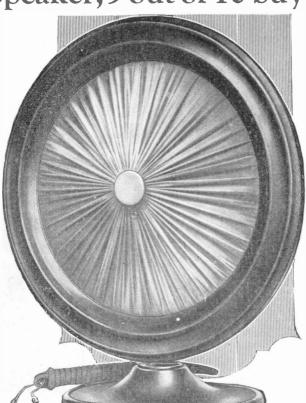
Voltage drop factor is .1 volt per ampere; coil resistance .1 ohm; and pressure on Trickle Charger Points, 334 oz.—the equal in every respect of any switch on the market.

There is also a Reliable utility type switch retailing for \$2.00. The coupon below will bring complete details.

## Automatic Power Control

Reliable Parts Mfg. Co., Wellington, Ohio Please send me more complete information, dealers' prices and table of voltage drops on Reliable switches.	E
Name	
Address	
Jobber	۰

## DEALERS! Show this Speaker, 9 out of 10 buy.



SONDCHORDE Junior

T'S READY! The Junior Model of the nationally famous—SONOCHORDE—with all the quality—all the exclusive features—even to the beautiful silk front and protected back. The SONOCHORDE line is now complete—two Cone Speakers that actually do what others claim. More dealers were oversold last year on SONOCHORDE Cones than any

other speaker made—wherever SONOCHORDE is demonstrated it is sold. You, too, can make faster and better sales with these remarkable Cone Speakers

Write for details and illustrated circular.

BOUDETTE MFG. CO. Chelsea, Mass. Dept. C



Overall
Dimensions
12 in. Wide
10 5 in. High



List Price \$12.50 Slightly Higher in the West

### New Mantel Cone

A NEW nine-inch model, with handsome twotone walnut and mahogany frame. Especially designed to meet the requirements for a compact speaker without sacrificing tonal quality or volume. Attractive in appearance—is particularly adapted to conserve space. A real leader—moderately priced for volume sales.

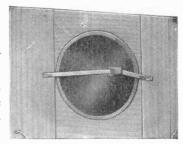
#### **Baritone Picture Cones**

Beautiful oil paintings on genuine velvet. Add to this a mellow-toned Baritone Cone Speaker, and you will readily appreciate the unusual value in these Baritone Picture Cones.

The cone speaker and unit are efficient on all pitches. You hear rounded notes throughout the entire audible range, and the speaker and unit are so mounted that not only does the sound deflect from the wall, but actually comes through the picture.

#### 9 IN. BOX CONE

Especially designed to fit in consoles. Is a marvel. Must be heard to be appreciated.



The many applications of the new box cone with its excellent reproducing qualities has caused wide comment throughout the trade. Write for complete specifications.

All Baritone Speakers offer genuine and natural radio reception with perfect amplification over the entire audible range.

### BARITONE MFG. CO.

844 W. Jackson Blvd., Chicago, Ill.

### BARITONE

### BEAUTIFUL RADIOLA FURNITURE

### for Radiola 17

Table with shelf that supports 100 A speaker above the set which eliminates trouble from placing speaker on set.

Large drawer in Table.



No. 931 for Radiola 17 and 100A Speaker

All Patterns Lacquer Finish
Solid Mahogany
Match Radiola Finish



No. 924 for Radiola 16

### for Radiola 16

A compact table with ventilated compartment large enough for any Eliminator Equipment.

Let our furniture work for you.

It will help sell sets.

Complete Line of Cabinet and Table Models for All Radiolas.

Write for Catalogue and Prices.

Watsontown Table & Furniture Co. Watsontown, Pa.

Makers of Fine Furniture Since 1893

### Cabinetry and tone combined

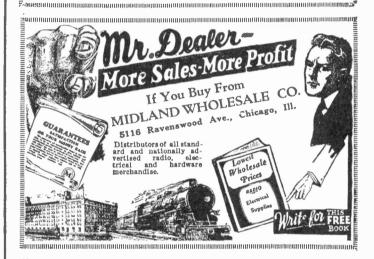


Artistic — graceful — luxurious!y beautiful, this cabinet houses the 75-in. air column Aston-Cathedral horn with its superlative tone-reproducing qualities—the horn that has won instant favor.

Dimensions are—width, 23-in., depth, 15½-in., height, 30-in. Made of selected genuine Walnut Plywood, finished in rich Chestnut brown.

Price, complete with unit and \$59.50 feet of cord............ \$59.50

STANDARD PIANO BENCH MFG. CO. 1221-27 West Lake St., Chicago



### One Dollar!

I am sending my dollar. Enter my subscription to Radio Retailing for a year. I'm interested in having the tried and tested sales and store plans, ideas and methods of the most successful radio dealers everywhere. I can use their successful ideas on organizing, selling, financing, managing, advertising, displaying, demonstrating, servicing. Start my subscription with the next issue, please.

RADIO RETAILING, Tenth Ave. at 36th St., New York City

remain rive, at John Bu, I tew Tork City
NAME
STREET
CITY STATE
NAME OF COMPANY
BESIDES RADIO WE SELL
Mail this coupon today

THE REPORT OF THE PROPERTY OF

## TIP TABLE CONE SPEAKER Model 70

### is Furniture as well\_\_\_\_

Teletone Tip Table Cone Speaker. It stands out not only as a new Teletone, but as an astonishing advance in cone speaker designing and reproduction. As shown in the illustration, it is a speaker which can be sold as furniture as well.

Its highly finished two-tone mahogany case is especially rich. The mahogany table top on which the speaker is mounted is 18 inches in diameter, thus permitting its use as a decorative end or lamp table. Bridge with music beneath the finger tips is one of the many powerful selling features that you can develop for this speaker. The cone is so mounted as to use the entire wooden casing and table top as a sounding board.

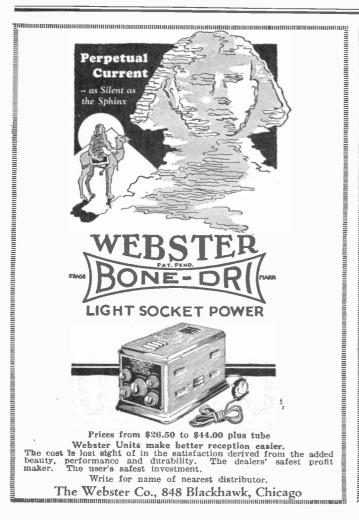


Model 70 is furniture as well and plays perfectly in table position.

### List Price, \$40.00

Tip Table Cone Speaker Model 70, packed in individual corrugated containers, net weight 9½ pounds, shipping weight 20 pounds each. Equipped with a twenty foot cord.

TELETONE CORPORATION OF AMERICA Third St. & Van Alst Ave., LONG ISLAND CITY, N. Y.







### millions may now enjoy the thrill of improved reception with MUTER B POWER

Outstanding Characteristics of the

### MUTER B Power Unit

FIXED CONTROLS used with separate fixed voltage taps, giving ample range and definite knowledge of voltage received.

CAPACITY ten tubes or seven with a power tube.

PATING 40 mile at 150

RATING 40 mils at 150 volts. Will deliver 180 volts for new type 171 power tube.

CONDENSERS. Muter filter condensers of ample capac-ity and acknowledged qual-ity ensure long life and uniform output.

Uses Standard Cunningham or Radio Corp. Full Wave Vacuum Rectifying Tube because of long life and stability. Used on 110 to 120 volt, 60 cycle A. C. current only.

No noise-no vibration

List

OWER UNIT

The Muter Policy of "Dependable quality at a popular price" has brought the enjoyment of clear, true, uninterrupted reception with the best possible "B" Power Unit within the means of every set

Stock No. 3000 for 213 or 280 Tube lists at \$24.50. Stock No. 3050 for Raytheon B. H. Tube-List price \$26.00.

#### Ask Your Jobber About The New Muter B Power Unit

This unit is bringing quicker turn-over and increased volume because it ASSURES dependable quality at a remarkably low price.

The new B Power Unit is only one item in the Muter complete Quality Popular Price Line—all backed by consistent and extensive advertising. Ask your Jobber for Dealer prices on the Muter Line. Send coupon to-day for catalog.

### Leslie F. Muter Co.

76th and Greenwood Avenue Dept. 6048-PX Chicago, Ill.



### **DEPENDABLE PRODUCTS**

The Complete Quality, Popular Priced Line

Send for Comprehensive Catalog

LESLIE F. MUTER CO. 76th and Greenwood Ave. Dept. 6048-PX, Chicago, Ill.

	Send at once catalog of complete Muter Line.	
THUE	Name	
SON MARIE	Address	
MEMBER	City	
OSOCIATION .	State	
	Jobber's Name	

### WARD **Electric Soldering Irons**



No. 168-\$2.00

A complete line of soldering irons designed for radio work—or wherever a soldering tool is required.

Repeat orders, over a period of years, from the leading jobbors throughout the country prove beyond anything we could ever tell you that the workmanship and quality of these irons is of the best.

Heavy Irons for Manufacturers. Send to nearest office for complete details.

Exclusive Agents, Surpless Dunn & Co. 34 No. Clinton St. Chicago, Ill. 74 - 76 Murray St. New York City

WARD MFG. CO.

937-9 Wellington Ave. 

Chicago, Ill. ................................

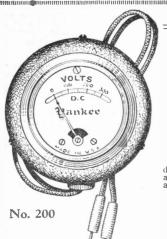
CLIP TIME OFF WIRING JOBS BY USING An Insulating Approved by the Underwriter Lab twisted wire enda Cartons of 100 - Standard Package 1000 For Free Working Samples Sign Below and Mail Name Address COLT'S PAT. FIRE ARMS MFG. CO., HARTFORD, CONN.



Choose from 33 Sonatrons
...and get the superior results of tubes carefully adapted to their particular work. Dry Cell, Storage Battery and Hi-Mu Tubes, Power Detectors and Amplifers ... tubes for "B" Eliminator operation. All known for their uniform high quality, splendid performance and dependability. Sold at all dealers.

SONATRON TUBE COMPANY





### Yankee D. C. VOLTMETER

for testing
B-Eliminators

A high resistance instrument drawing less than 1½ milli-amps at full scale deflection. Always accurate and dependable.

0-300 Volts Illustrated 1/2 Size

YANKEE Meters are quick sellers and big profit-makers. Stock up with our complete line of Pocket Meters, Panel Meters and "B" Eliminator Testers.

Send for Illustrated Circular

### The New Yankee A & B TESTER

The only instrument on the market that will test both 6-volt A-Batteries and all B-Batteries. A double use indicator that has made a tremendous hit with the radio user.

Illustrated 1/2 Size



Lundquist Tool & Mfg. Company 144 Green St. Worcester, Mass.

Provide every need in rendering service!





No. 210 Tube Checker.



No. 346 Voltmeter

These instruments are not only of value to you; every set owner should have them. It means less worry and more profit for

### METERS

No. 210 Tube Checker

Indispensable for dealers and service men. Quantities of tubes may be checked in a short time, and poor ones weeded out. An invaluable aid in keeping tubes constantly up to maximum efficiency.

List \$7.50

#### No. 346 Voltmeter

A high resistance voltmeter for checking the voltage of B eliminators and radio B battery circuits—something that hitherto required laboratory instruments. Enables the service man or dealer to determine at once the condition of the plate circuit of all tubes.

List \$5.00

### Readrite Meter Works

6 College Ave. ESTABLISHED 1904 Bluffton, Ohio

## MAGNAYOX

## Speaker Quality Plus

Only the Electro-dynamic type speaker can give the wonderful quality of radio reception possible with modern sets and broadcasting. This is the speaker created, patented and made famous by Magnavox.

As a radio merchant or set builder you should hear these new speakers in comparison with other speakers. It will result in sales and profits for you in introducing such a startling improvement to your trade.

#### Aristocrat Model



Aristocrat Model

Floor model cabinet. Butt burl walnut panels; two tone mahogany legs and corners, with R-4 speaker unit, 6 volt ½ ampere direct current type (operated from A battery) \$85. list. With R-5 unit, 110 volt direct current type (operated from light socket) \$90. list.

Beverly model is table type cabinet, mahogany finish, curved sides, equipped as above, \$10 less than Aristocrat prices. No tubes required.



R-4 Unit

For easy installation in radio or phonograph cabinets. Price \$50. R-5 Unit \$55.

### Dynamic Speaker and Amplifier Unit

for 110 volt, 60 cycle AC

Using one 216 B type and one 210 type rectifier tube. Unit only, Type R-500, easily installed in cabinets, list \$120. LOBOY Cabinet as shown \$165.

Write for full description of our dynamic power cone speaking and magnetic cone type speakers.

THE MAGNAVOX CO., Oakland, California Chicago Sales Office—1315 So. Michigan Ave.



Loboy Cabinet



Transform the S-C-R-A-T-C-H

In Your Speaker To a Rich Mellow Tone with a

An output transformer that will Revitalize old speakers.

Recommended by Radio Engineers as a necessary accessory to improve set performance. A Sample Unit will convince you how it will improve tone and volume in all speakers.

LIST \$10.00

#### SCANLAN ELECTRIC MFG. COMPANY

1113 North Franklin Street, Chicago, Illinois

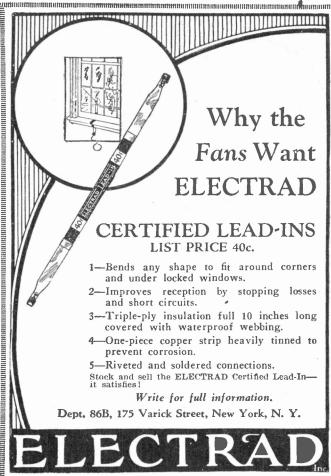
Write for complete information on audio frequency transformers and power compacts. If your jobber cannot supply you, fill in the coupon

SCANLAN ELECTRIC MFG. CO. 1113 North Franklin Street, Chicago, Illinois Gentlemen: Please send me... .....Scanlan Speaker Chest

less dealer's disc. ...Antique Bronze.....Antique Brass... Walnut. Send complete information on Scanlan Speaker Chest.

....Address City...







### on't Overlook **Opportunities**

Men who regularly keep in touch with the market through other channels often overlook the many opportunities that are to be found in

### SEARCHLIGHT SECTION

For Every Business Want "Think SEARCHLIGHT First"



For Your "B" Battery Eliminator Ask You Dealer for Guaranteed

60 Milliamperes \$4.50

85 Milliamperes \$4.50

400 Milliamperes With Ionizer
300 Volts for A, Band C
Eliminators with
Charts and Diagrams
\$7.00

Manufactured by the Q R Company CHICAG

Established 1900. References: Dun, Bradstreet or any bank anywhere

### Radio Cabinets by UDELL



A beautiful new 32-page Catalog illustrating and describing the greatest line of Radio Cabinets in the country is ready.

Write for your copy today.

THE UDELL WORKS 28th St. at Barnes Ave. Indianapolis

#### THINGS DON'T **JUST HAPPEN**

MANTO LEGICO DE CENTRE COLLINO EN INCLUENCIA DE LA COLLINO DE LA

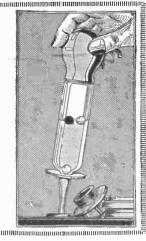
That nothing to equal the natented Ghaslym Balls for accuracy, unbreakability and simplicity of reading has been discovered is why the big manufacturers of Batterles use them as Charge Indicators in Glass-Cased Batteries and Power Units.

Easiest to Read Nothing to Break

Swim all three—charged fully Sinks the white—charge still right Sinks the green—charge is lean Sinks the red—charge is dead.

Ask your jobber. If he cannot supply, write us, sending jobber's name. Chaslyn Corrosion Cure for Battery Terminals protects contacts. A large tube is 30c.

THE CHASLYN COMPANY 4615 Ravenswood Ave., Chicago, Ill.



### NEW A. C. ELECTRIC SET

Going Strong

Also the Battery Senior, Junior six-tube and the new Junior seven-tube for batteries. Write for

THE LANGBEIN-KAUFMAN RADIO CO. Dept. M, New Haven, Conn.

### THE ARISTOCRAT of Radio



Model A

### The HYATT 6-TUBE General Utility Receiver

Try it and you'll Buy it!

Creates a sensation wherever shown.

No radio store is complete without the HYATT.

The rich two-toned brown leather cabinet, loop panel embossed in gold relief, the walnut bakelite panel and knobs-creates a color combination that is most attractive.

### Designed for the Home

The light weight and compactness makes it available at all times and places.

Selective, powerful and dependable.

Dealer licenses are available only to those who have a good business reputation in their communities.



#### SALESMAN AVAILABLE

SALESMAN who is now calling on radio dealers and jobbers in the Southwest. Have been in this territory since 1923, headquarters Dallas, Texas. Age forty, clear record. Previous experience includes several years in an important executive position. Reference, present employer an AAA 1 manufacturer. SA-49, Radio Retailing, Bell Telephone Bldg., St. Louis, Mo.

### Manufacturer's Representative Wanted

We manufacture a complete line of radio coils and wish to obtain additional representation.

Responsible representative will be given exclusive representation in his territory on regular commission basis.

RW-47 Radio Retailing Bell Telephone Bldg., St. Louis, Mo.

#### SALES ENGINEER

Now employed 4½ years with high grade motor and electrical manufacturer. Desires to enter radio sales, engineering or service. University graduate, 32. A student of radio over 18 years. Fellow, Radio Club of America. Available on short notice.

SA-48, Radio Retailing
Tenth Ave. at 36th St., New York City

### FREE RADIO **EMPLOYMENT SERVICE**

Employers in any line of the Radio Employers in any line of the Radio industry (or in allied industries) should call on our Free Radio Employment Service when additional employees are needed. Thoroughly trained, experienced men supplied anywhere in the U. S. or Canada on 48 hours' notice. No charge for service. Send post card today for our free monthly bulletin. Address National Radio Institute, Dept. R.R., Washington, D. C.

Technical Service (Agency) 217 Broadway, New York

#### RADIO PERSONNEL

EXECUTIVE—ENGINEERING PRODUCTION AND SALES

#### R.C.A. DEALERS

Send for our list of special bargains on standard replacement parts for Radiola Sets and Speakers.

AMERICAN SALES CO. 21 Warren St., New York City

#### WE NEED

Crosley Tridynes

Any model Radiola III's, 111A's, and amplifiers. Crosley sets of all descriptions. Tower Cones, old style.

OKAY RADIO CO., 417 11th ST.,

Washington, D. C.

### Radio Buyer and Manager WANTED

One of St. Louis's largest stores wants a high class man to take full charge of their Radio Department. Must understand Radios from A to Z, be a good buyer and organizer of both the selling and service ends of the business. Steady position and good salary to the right man.

P-45, Radio Retailing, Bell Telephone Bldg., St. Louis, Mo.

### for your

#### **SURPLUS RADIO STOCKS**

What have you for sale? AMERICAN SALES CO. 21 Warren Street, New York City. Established 1919

### Α S

We want your

SURPLUS RADIO STOCK Send us your list and lowest cash price

EMPIRE RADIO CO. 216 Washington St., Boston, Mass.

Superior Radio Crystals Superior Radio Crystals
World Famous Brands Concert Tested Radio
Crystals for Reflex or Crystal Sets
Unconditionally Guaranteed
Discounts furnished upon Request
(ALIFORNIA RADIO MINERALS
Harry Grant. Jr.
Successors to K. O. PRODUCTS CO.
904 Oak Grove Ave., Burlingame, California.

#### We have cash for

### Surplus Radio Goods

Write us what you have and lowest cash price.

Dewey Radio Company

148 Summer St., Boston, Mass.

#### LEGAL NOTICE

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF

AUGUST 24, 1912

Of Radio Retailing, published monthly at New York, N. Y., for Oct. 1, 1927.

State of New York Ss..

County of New York

State of New York ss.
County of New York ss.
County of New York ss.
County of New York ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared C. H. Thompson, who, having been duly sworn according to law, deposes and says that he is the Secretary of the McGraw-Hill Publishing Company, Inc., publishers of Radio Retailing, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, McGraw-Hill Publishing Company, Inc., 10th Ave. at 36th St., New York, N. Y. Editor, None. Managing Editor, W. C. Alley, 10th Ave. at 36th St., New York, N. Y. Business Manager, M. Clements, 10th Ave. at 36th St., New York, N. Y.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total

#### LEGAL NOTICE

LEGAL NOTICE

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information is required from daily publications only.)

McGRAW-HILL PUBLISHING
C. H. THOMPSON, Secretary.
Sworn to and subscribed before me this 30th day of September, 1927.
[Seal.] MARTIN J. WIEMER.
Notary Public Queens County Certificate No. 1819. Certificate filed in New York County No. 272.
(My Commission expires March 30, 1928.)

# Do you need this Man?

- This advertisement represents a man who wants a position with a financially sound radio company, manufacturing, distributing or retail. He wants charge of general sales promotion, service and advertising.
- His experience qualifies him. He has had many years in research, design, construction and operating experience. He has held amateur and commercial licenses since the early days of radio. He is thoroughly familiar with every phase of the radio game, short wave, CW, transmission, broadcasting and reception.
- He understands merchandising and sales promotion in their broadest sense. He knows how to sell radios, how to line up a dealer group that will spell profit for the distributor, and knows how to see that every dealer makes money. He has initiative and ability.
- As for radio experience, he learned to build and operate radios in the first days of the old cohera and spark coil, when a five-inch spark transmitter was considered a powerful set and one hundred miles record DX. He has been in constant contact with radio ever since, and understands the possibilities and the impossibilities of present day radios. He knows all the advantages and disadvantages of the various competitive sets on the market.
- Coupled with his radio experience, he has to his credit several years as sales manager of a growing automobile company placing hundreds of cars per year in a comparatively small community, and is used to handling salesmen. He is also an expert on electrical refrigeration and farm light plants, a very valuable summer addition to any retail radio business today.
- This man is not quite thirty years old, single, in perfect health and is willing to locate anywhere that offers him an opportunity to produce. He expects compensation only in proportion to the results he brings. He has brains and imagination. He thinks in fundamentals and can inject individuality and distinction into your advertising, your selling methods and your product.
- With a reasonable drawing account, he would prefer compensation on a basis of a percentage of the gross sales. This man is not expensive. Any alert radio company can afford him. He is at present managing a business of his own, selling several popular makes of radios, a line of electrical refrigerators and farm light plants in a small town of 20,000. He is available on short notice as he has several offers for his present business should he care to sell.
- Some radio company has probably been looking for just such a man as this, who wants a definite job and frankly advertises for it. Communications addressed care of this publication will bring a prompt reply direct from him.

PW-46, Radio Retailing Tenth Ave. at 36th St., New York City



These Battery Cables composed of Stranded Wires insulated with Colored Rubber and enclosed in an attractive Braid over all Wires. For use in connecting A, B and C Batteries or Eliminators to Set. Furnished with brass soldered lug terminals on all ends for neat and quick attaching cable to batteries or eliminator. Each wire of separate Solid Color. Made in 5, 6, 7, 8, 9 or 10 Wires. Packed in individual cartons.



No.				No.			
				114- 5. Wires			
				116- 6 Wires			
				117- 7 Wires			
113- 8 Wires							
				127- 9 Wires			
119-10. Wires	54	inches 1	.15	128-10Wires	10	foot	2.75

#### Birnbach Radio Battery Connectors

Made of Stranded Wires, insulated with rubber and covered with a distinctive braid. All ends assembled with brass soldered lng terminals to fit the binding post or clips on all batteries. A handy accessory for use in connecting Dry Cell "A" Batteries, B and C Batteries. Carton contains 25 of each size.

No.			
RC 33-in.	Connectorseach	\$0.04	
RC 66-in.	Connectorseach	.05	BIRNBACH
RC 88-in.	Connectorseach	.06	DIKINDING
RC1212-in.	Connectorseach	.07	Page 1

Birnbach Loud Speaker Extension Cord Units You can move your Loud Speaker into any room desired. A BIRNBACH EXTENSION CORD UNIT improves the tone quality when power tubes are used, by placing the Speaker away from the Set. Made in six sizes and furnished complete with Connector. Packed in individual cartons.



No.										
16610	foot.	complete								\$0.75
12020	foot,	complete								1.00
12130	foot,	complete						è		1.40
122 40	foot,	complete							ě	1.80
12350	foot,	complete		-	PK.	14				2.20
124100	foot,	complete								4.20

### Birnbach Replacement Cords

These Five Foot Cords are to be used for replacement of worn Loud Speaker or Head Set Cords.

	e.	ach
102-Loud	Speaker Cord Pin Tips	.35
103-Loud	Speaker Cord Pin and Spade Tips	.35
106-Loud	Speaker Cord Pin and Eye Tips	.35
104—Head	Set Cord Pin Tips	.50
105—Head	Set Cord Pin and Spade Tips	.50
107-Head	Set Cord Pin and Eye Tips	.50



#### BIRNBACH BAKELITE

Tuners in Beautiful Duco Colors





### Birnbach "180" Bakelite 3-Circuit Tuner

This Tuner is larger in size than our No. 60 and in this form it is the most efficient TUNER ever designed. Distant stations can be tuned in with greater volume and the very best tone quality. For use with .0005 Mfd. Condenser, Tuning range 200 to over 570 meters.

No. 180. BIRNBACH Colored Bakelite 3-Circuit Tuner.......\$3.50
No. 180. BIRNBACH Colored Bakelite Radio Frequency Coil....... 1.50

#### Birnbach "400" Bakelite Post Strip

A new and convenient strip for sub panel mounting, moulded in Bakelite with 9 characters engraved. Packed in individual cartons. No. 400—Birnbach Bakelite Post Strip ..... each \$0.65





BIRNBACH RADIO CO. 254 West 31st Street, New York City

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A Radiotron for every purpose

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RADIOTRON UV-199

RADIOTRON UX-199

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RADIOTRON WX-12

RADIOTRON UX-200

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RADIOTRON UV-876

RADIOTRON UV-986

RADIOTRON UV-877

The standard by which other vacuum







Reception of the finer broadcasting programs of today may be blurred into a pitiable imitation of the real thing by just one "orphan" tube in an otherwise first class radio set.

Radiotrons are built to the specifications of the engineers of RCA.
Westinghouse and General Electric, in great laboratory factories
which contain the most remarkable electrical equipment to the



### RCA Radiotron

Your tube customers hold you responsible as their purchasing agent. sure of their continued goodwill by supplying them with RCA Radiotrons. You cannot afford to make your customers a try-out field for tubes of unproved quality.





One of the twelve striking

color pages advertising

RCA Raulotrons to the consum during 1927 in

leading magazines. More

national advertising to

the consumer has been

placed or RCA Radio-

trous than on all other

makes of vacuum tubes.

## Radiotron