

Radio Retailing

The Business Magazine of the Radio Industry

A McGraw-Hill Publication

FEBRUARY, 1929

*The Quality Tube/
for Quality Dealers*



For volume and clarity of tone . . . for better reception with longer range and longer life . . . for every quality that gives better radio performance, use La Salle high vacuum radio tubes.



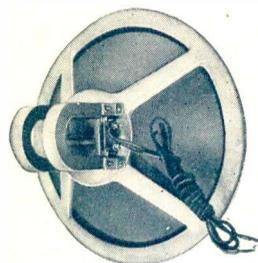
La Salle

HIGH VACUUM RADIO TUBES

LA SALLE RADIO CORPORATION
DIVISION OF MATCHLESS ELECTRIC COMPANY

143 WEST AUSTIN AVENUE
CHICAGO, ILLINOIS.

More than the "last" word
—the FUTURE word in
DYNAMIC OPERATION



An unprecedented opportunity for
MANUFACTURERS

to equip their product with Dynamic operation that is not only far superior in performance to prevailing standards...but lower in cost, easier to install, and *trouble-proof!*

With the INDUCTOR Dynamic Speaker, Farrand has revolutionized Dynamic usage, performance and costs. All heavy, expensive parts found in ordinary Dynamic Speakers are absent.

No FIELD COIL — No IRON COIL HOUSING
No POWER TRANSFORMER — No DRY RECTIFIER
No CONDENSER

Write at once for full details

Farrand
INDUCTOR
Dynamic Speaker

FARRAND MANUFACTURING COMPANY, INC., LONG ISLAND CITY, N. Y.

Furniture Merchandising

A BRILLIANT and successful Retail Merchandising Record introduces Mr. I. H. Hartman to Atwater Kent dealers. Through his organization, his great talent for Merchandising, his extensive experience and knowledge of Furniture now become available in the marketing of Atwater Kent Radio Furniture. The No. 160 cabinet pictured demonstrates Mr. Hartman's unusual ability to present outstanding value.



MR. I. H. HARTMAN
President
RADIO CABINET MANUFACTURING CORPORATION

RADIO enters a new and greater phase . . . the era of Radio Furniture! Convinced that the day of mechanical stability and simplicity is at hand the Public has turned to features of permanent worth, beauty and value in complete Ensemble!

Quite naturally then that this trend should signalize the large scale entry into Radio of Mr. I. H. Hartman—unquestionably one of the most conspicuous figures in the Furniture Industry.

Himself a leader . . . seeking equivalent leadership . . . he turned quite naturally to Atwater Kent. Thus in an onward sweep of supremacy two great forces become associated in service to all Atwater Kent Dealers.

To the building of Atwater Kent Radio Furniture, Mr. Hartman brings a proved understanding of the Public's demand in Style, Price, Value. As a Retailer his keen sense of demand was responsible for the merchandising of Hundreds of Millions of Dollars of Furniture.

In the field of retailing, Radio has already felt Mr. Hartman's influence. From an insignificant start, a Radio Department under his guidance developed into one of the largest Radio Retail outlets in the world!

In his sphere of Retailing—the ability to Create and Produce has ranked equally with the ability to Sell! As President of the RCM Corporation, he has characteristically set a basic policy of sound, intrinsic Value.

Examination of the RCM Cabinet pictured makes this evident. Striking a new keynote of high value is the ALL WALNUT construction. Note on inspection also the finer details of Hardware . . . the trim and artistic front panel . . . with Burl Walnut doors swinging flush against the side, fluted for finished appearance.

***I**N BIDDING for the cooperation of Atwater Kent Dealers, Mr. Hartman pledges the full support of his experience . . . and eagerly shares the responsibilities of maintaining leadership.*

THE name Hartman is synonymous with successful furniture merchandising. Prior to organizing the Radio Cabinet Manufacturing Corporation recently, Mr. Hartman's entire career has been devoted to the furniture industry. As a directing member of the great Hartman organization, Mr. Hartman has been schooled in every branch of retailing. Mr. Hartman is a practical merchandiser sensibly aware of the dealer's requirements. The policies of the RCM Corporation are avowedly intended to promote new and timely selling opportunities for all Atwater Kent Radio Dealers.

ATWATER KENT dealers are invited to make immediate inquiry through their Atwater Kent Distributor. He is prepared to fully acquaint you with the importance of this announcement . . . and to acquaint you with the scope of RCM cooperation in merchandising.

CORPORATION · CHICAGO

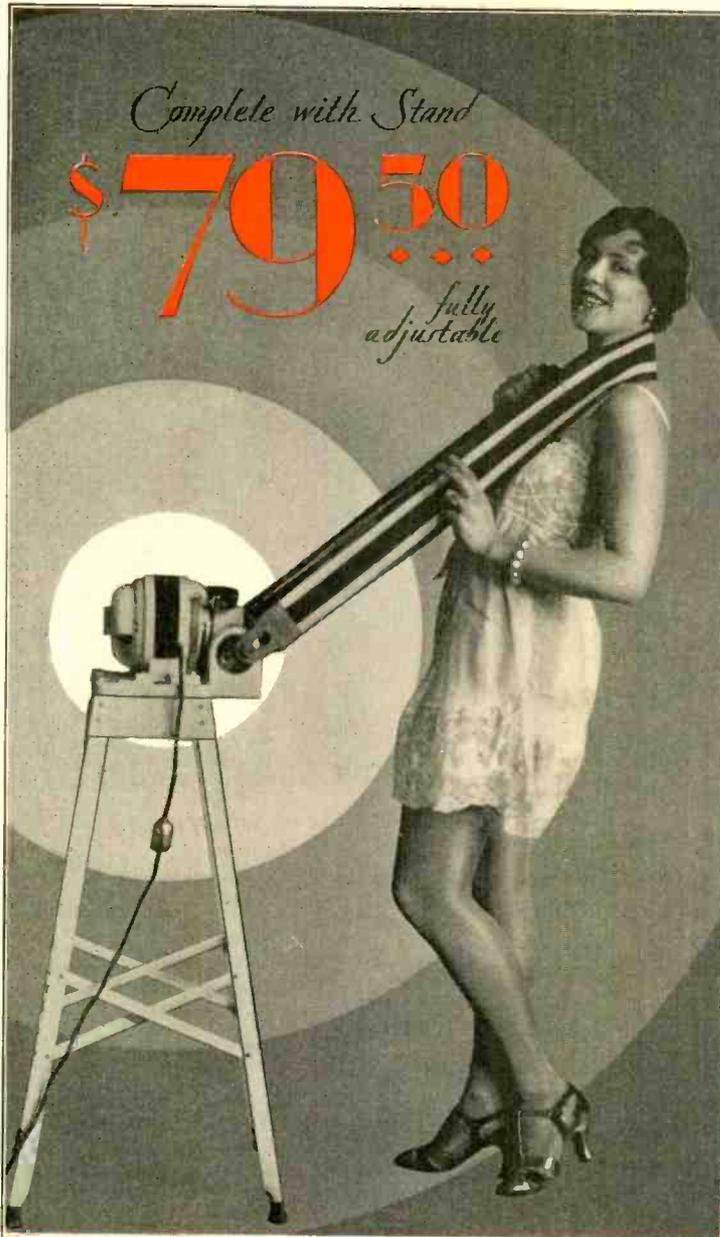
General Offices: FURNITURE MART

RADIO Furniture

TO · YOUR · ATWATER · KENT · DISTRIBUTOR ·

If Mr. Hartman's experience can help me, I am willing to accept his cooperation. Please acquaint me with full details of the RCM Corporation announcement.

Name.....
Address.....
City.....



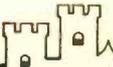
Now is the opportunity for radio dealers to boost their Spring and Summer sales with a fast moving item that is a year-round seller. Exercising and reducing machines are here to stay. Public demand is increasing by leaps and bounds, and there's a place in any radio department for this new electrical appliance that's been taking the country by storm.

Dealers holding a Tower franchise are backed by national advertising and a cooperative sales service that means quick turnover and increased profits.

If you have not seen the new machine or heard the entire story about this wonderful sales item write or wire immediately for full details.

TOWER MFG. CORP., 122 BROOKLINE AVE., BOSTON, MASS.

TOWER

EXERCISER  REDUCER

FOR information regarding the new Tower Exerciser and Reducer, write Tower Mfg. Corp., Boston or any distributor below.

WHOLESALE DISTRIBUTORS

<p>Alabama Birmingham, Moore-Handley Hdwe. Co.</p> <p>Arizona Phoenix, Illinois El. Co.</p> <p>California Los Angeles, Radio Sup. Co., Leo J. Meyberg Co., Illinois El. Co., Western Surgical Sup. Co., San Francisco, Robert Weinstock Co., Fobes Sup. Co., Leo J. Meyberg Co., Marcus-Lesoine.</p> <p>Colorado Denver, Hendrie & Bolthoff Mfg. Co., The Mine & Smelter Sup. Co.</p> <p>Connecticut New Haven, The Hessel & Hoppen Co.</p> <p>Delaware Wilmington, H. C. Roberts E. S. Co.</p> <p>Dist. of Columbia Washington, H. C. Roberts E. S. Co.</p> <p>Florida Jacksonville, G. E. Sup. Co., Miami, G. E. Sup. Co., Tampa, G. E. Sup. Co.</p> <p>Idaho Pocatello, Intermountain Elec. Co.</p> <p>Illinois Chicago, New England Mills Co., Illinois El. Co., Gibbs & Co., Peoria, Ill. El. Co., Streator, Williams Hdwe. Co., Rock Island, R. I. Hdwe. Co.</p> <p>Indiana Indianapolis, The Varney El. Co., Van Camp Hdwe. & Iron Co., Evansville, The Varney El. Co.</p> <p>Iowa Davenport, Crescent El. Co., Dubuque, Crescent El. Co., Mason City, Julius Andrae & Son Co., Sioux City, McGraw El. Co.</p> <p>Kentucky Louisville, Belknap Hdwe. & Mfg. Co., Tafel El. Co.</p> <p>Louisiana New Orleans, Interstate El. Co., New Orleans El. Sup. Co., Shreveport, Interstate El. Co.</p> <p>Maine Portland, G. E. Sup. Co.</p> <p>Maryland Baltimore, H. C. Roberts E. S. Co.</p> <p>Massachusetts Boston, Frankel-Smith Co., G. E. Sup. Co., Wetmore-Savage E. S. Co., Wetmore-Savage A. E. Co., Springfield, B. H. Spinney Co., Wetmore-Savage E. S. Co., G. E. Sup. Co., Worcester, Wetmore-Savage E. S. Co.</p> <p>Michigan Detroit, Com. El. Supply Co., Grand Rapids, C. J. Litscher El. Co., Com. El. Co., Kalamazoo, C. J. Litscher El. Co., Jackson, C. J. Litscher El. Co., Flint, Com. El. Co.</p> <p>Minnesota St. Paul, Gr. Northern E. A. Co., Minneapolis, Gr.</p>	<p>Northern E. A. Co., Hall Hdwe. Co., Duluth, Gr. Northern E. A. Co., Marshall-Wells Co.</p> <p>Missouri St. Louis, Com. El. Co., The Straus Co., Kansas City, Columbian El. Co.</p> <p>Nebraska Omaha, McGraw El. Co., Lincoln, R. S. Proudft Co.</p> <p>New Jersey Trenton, H. C. Roberts E. S. Co.</p> <p>New York Albany, H. C. Roberts E. S. Co., Syracuse, H. C. Roberts E. S. Co., Binghamton, H. C. Roberts E. S. Co., Buffalo, Joseph Strauss Co., Utica, H. C. Roberts E. S. Co., Troy, Hinsdill El. Co., N.Y. City, Chisholm Co., Times Appliance Co., Alpha El. Co.</p> <p>North Dakota Fargo, Gr. Northern E. A. Co.</p> <p>Ohio Cleveland, Clarke Motor Equip. Co., Erner El. Co., Akron, Hdwe. & Sup. Co., Toledo, Toledo Auto Equip. Co.</p> <p>Oklahoma Tulsa, Dodge El. Co., E. A. Co., Oklahoma City, E. A. Co.</p> <p>Oregon Portland, Fobes Sup. Co., Marshall-Wells Co.</p> <p>Pennsylvania Philadelphia, H. C. Roberts E. S. Co., Pittsburgh, Iron City El. Co., Edliss Barbers' Sup. Co., Reading, H. C. Roberts E. S. Co.</p> <p>Rhode Island Providence, Wetmore-Savage E. S. Co., Union El. Sup. Co.</p> <p>Tennessee Memphis, Braid El. Co., McGraw El. Co., Com. El. Co., Nashville, Braid El. Company.</p> <p>Texas Fort Worth, The Shield Co., Dallas, El. Appliance Co., El Paso, The Mine & Smelter Co., Houston, El. Appliance Co. Inc., San Antonio, El. Appliance Co.</p> <p>Utah Salt Lake City, Intermountain El. Co.</p> <p>Virginia Richmond, Tower-Binford El. Co.</p> <p>Washington Seattle, Fobes Sup. Co., Spokane, Fobes Sup. Co., Marshall-Wells Co.</p> <p>Wisconsin Milwaukee, Julius Andrae & Sons Co.</p> <p>Hawaii Honolulu, Mutual Telephone Co.</p> <p>Cuba Havana, Menendez & Co., 19 Riela St.</p>
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Radio Retailing

The Business Magazine of the Radio Industry

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Radio Retailing for FEBRUARY, 1929

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How to get your share of the 3,000,000 sets that will be sold this year.

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This dealer finds a valuable market in selling turntable devices to theaters

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“A World of Information”

Editor, Radio Retailing:

I read over the January issue of “Radio Retailing” from cover to cover, and have been very much impressed with the world of valuable information it contained.

The purpose of this letter is to extend to you and to your associates my sincere congratulations on the wonderful paper you are publishing.

I have arranged with our purchasing department to send individual subscriptions for all our salesmen for 1929. I cannot think of anything we could do that would be more helpful to them.

HAROLD J. WRAPE, President,

The Benwood-Linze Company.

President, Federated Radio Trades Association.
St. Louis, Mo.

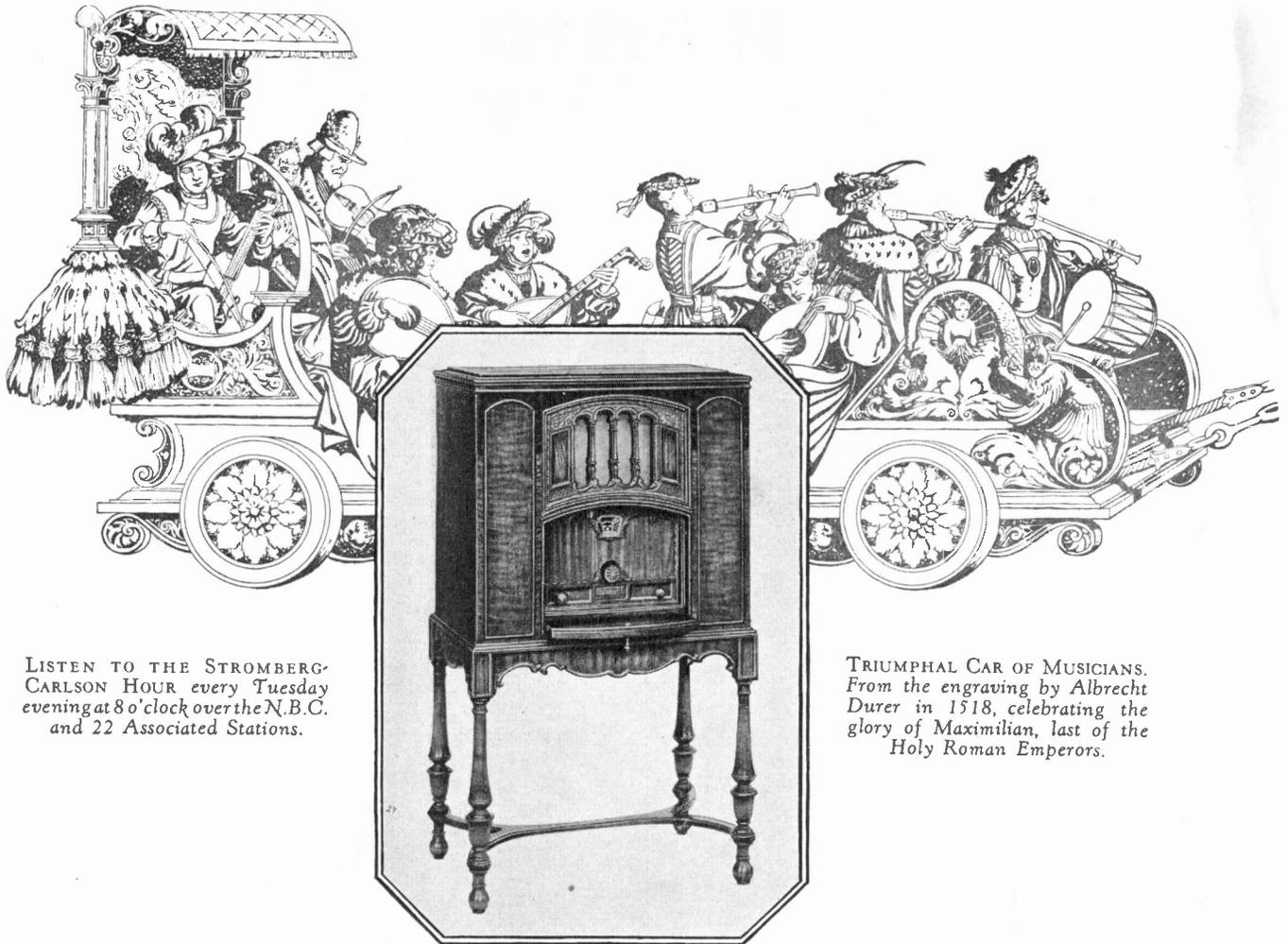
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LONDON, E. C. 8 Bouverie St.



LISTEN TO THE STROMBERG-CARLSON HOUR every Tuesday evening at 8 o'clock over the N.B.C. and 22 Associated Stations.

TRIUMPHAL CAR OF MUSICIANS. From the engraving by Albrecht Durer in 1518, celebrating the glory of Maximilian, last of the Holy Roman Emperors.

A New Triumph in Tone

The No. 638 Stromberg-Carlson for A. C. areas employs 5 UY-227, 2 UX-171-A and one UX-280 Radiotron Tubes. Built in Dynamic Speaker, concealed by sliding panels. Totally shielded. Tunes with single selector, illuminated. Operates direct from any house-lighting circuit. Unique provision for playing records—turning Receiver's volume control counter clockwise switches phonograph connection into the circuit of the Receiver while phonograph connection is made permanently at the back. Chassis base of sheet steel of sufficient height to enclose all wiring. Coil windings enclosed in compact metal casings and filled with sealing compound to protect against moisture and mechanical damage. All exposed surfaces of select beautifully grained Walnut, panels of five ply construction, other parts including legs and stretcher of solid Walnut. Prices without tubes; 60 cycle, \$380; 25-60 cycle, \$385; D. C., \$370. (Prices East of Rockies).

A GAIN Stromberg-Carlson leads radio forward!! In this magnificent new No. 638 Console Receiver with self-contained dynamic speaker, tonal advantages heretofore only approximated are now fully achieved.

Through special arrangement of the internal construction of the cabinet it is now possible to present a Receiver having the compactness afforded by a built-in speaker, and at same time the superlative tonal excellence always associated with a Stromberg-Carlson.

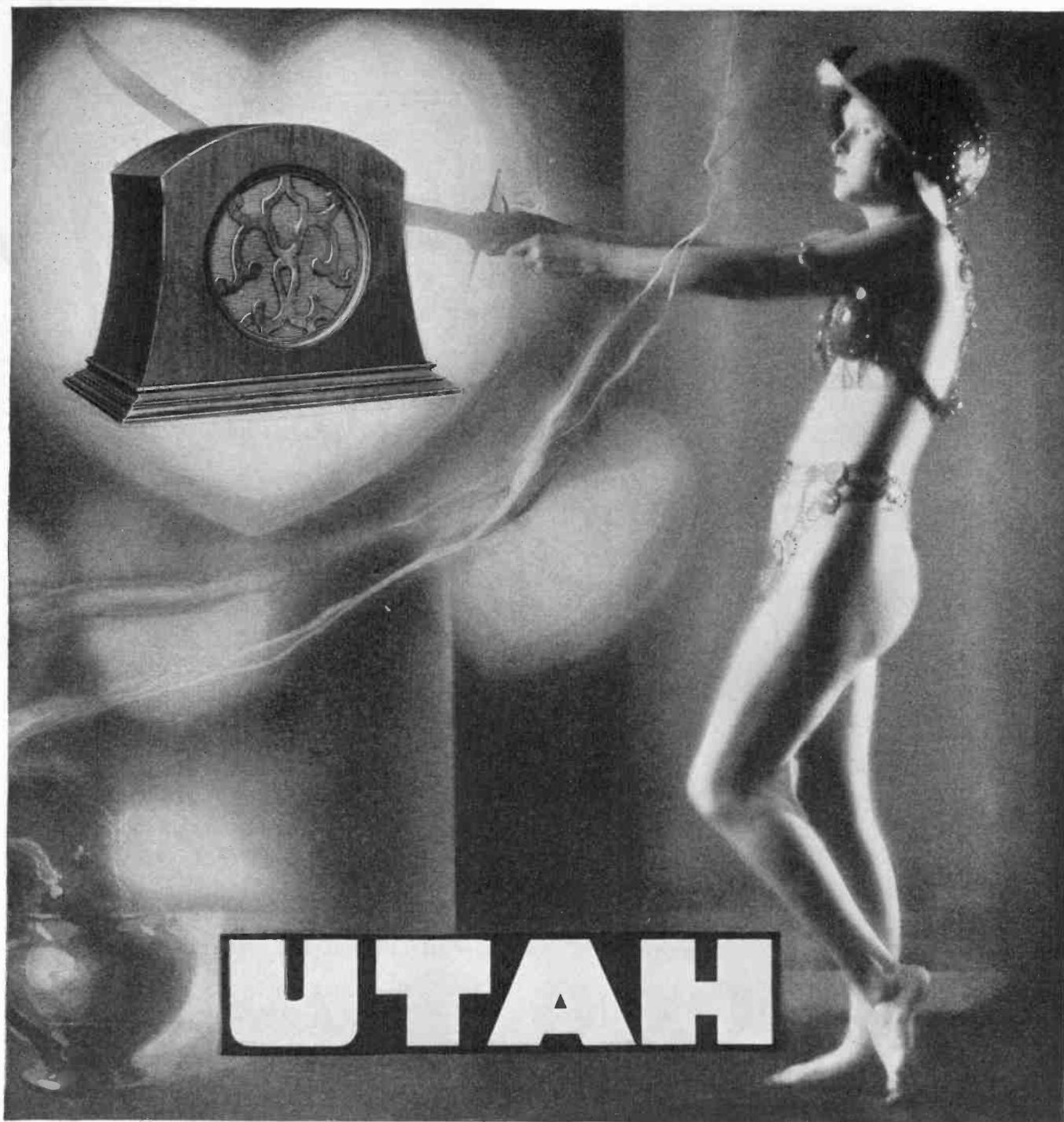
The Console embodying this latest triumph is unsurpassed for beauty of graceful line, ornamentation and proportion. It is of the usual Stromberg-Carlson high standard of two-toned Walnut cabinet-work.

Stromberg-Carlson models for A. C. and D. C. areas range in price from \$185 to \$1205, East of Rockies.

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

Stromberg-Carlson

MAKERS OF VOICE TRANSMISSION AND VOICE RECEPTION APPARATUS FOR THIRTY-FIVE YEARS



JUST as old St. Valentine, centuries ago, gave joy to his many

friends with messages of cheer, so does radio bring to millions the glad music, the gay songs and laughing voices of today.... How

The One True Voice of Radio

much greater the joy of listening in when the radio is Utah

equipped.... Utah speakers bring the programs to listeners in true volume, every note cutting thru the air—clear, distinct, perfect.

UTAH RADIO PRODUCTS COMPANY .. 1615 South Michigan Avenue .. Chicago, Illinois

ALL SET AND READY TO GO!—

**A Smashing Sales Drive in
152 LEADING NEWSPAPERS and
THE SATURDAY EVENING POST**



to make **BOND**
the Big "Buy-Word" in
**FLASHLIGHTS
& BATTERIES**

RESULTS rung up by the sensational BOND "\$10,000 Slogan Contest" were big!—Bigger, in fact, than we have ever dreamed of. Several hundred thousands of people took time to investigate the remarkable features of BOND Flashlights and Batteries and to send us their slogan ideas.

Now, we're out to make a great success *greater!*—
During the months of February, March and April

\$200,000 will be spent

to put over in an even *more* impressive way the striking features of BOND *colored* Flashlights and BOND Mono-Cell Batteries. In 152 important newspapers and in The Saturday Evening Post large-space advertisements will direct attention to these popular new spotlights with their *colorful* fibre tubes and to the amazing BOND Mono-Cells which restore their own power!

RIDE TO NEW RECORDS with BOND!

Climb on the BOND-wagon! . . . This Spring campaign is only a starter in the extensive advertising plans we have mapped out for 1929 . . . Prepare for *continuous* action!—We'll give it to you a-plenty!

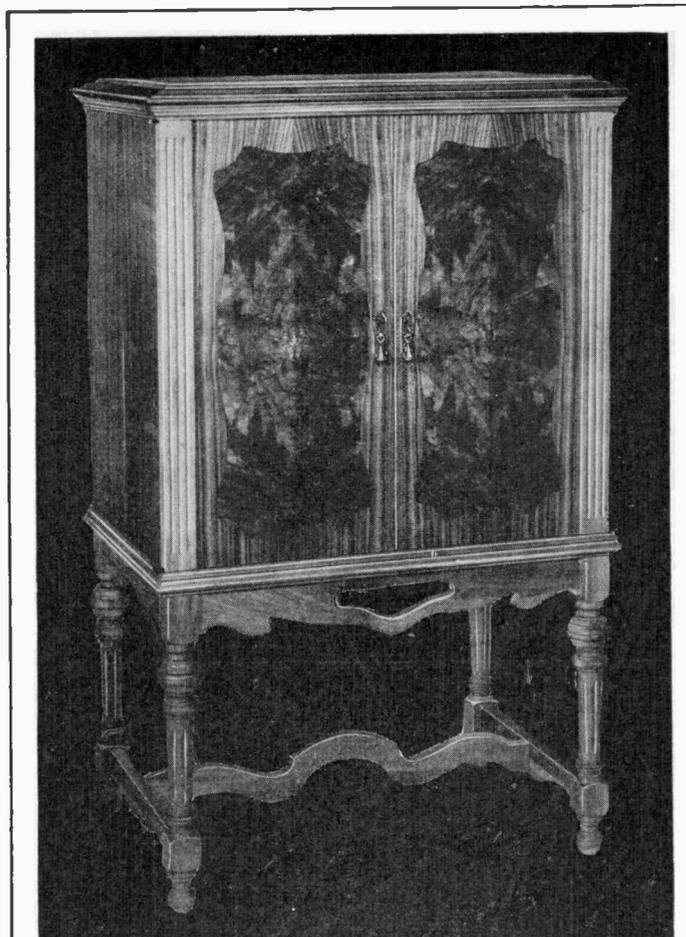
BOND ELECTRIC CORPORATION

Chicago

JERSEY CITY, N. J.

San Francisco





Display this new Grebe De Luxe Console and you put your salesrooms in the custom-built musical instrument class. Demonstrate it and you make sales that carry a generous profit.

-with stirring depth of tone

PICKING up the best that's on the air with the Grebe AC-6 Receiver, the De Luxe Console gives it recital reproduction through the 14" built-in, power-amplified dynamic speaker. Tonal accuracy at all degrees of vol-

ume is secured by using two 250 tubes in push-pull. At levels from minimum audibility to the full volume required for dancing in large rooms the De Luxe gives a depth of tone stirring in its fidelity.

GREBE
SYNCHROPHASE
RADIO

A. H. GREBE & CO., INC.
Richmond Hill, N. Y.

Makers of Quality Radio Since 1909

Western Branch:
443 So. San Pedro Street
Los Angeles, Calif.

GET IT BETTER WITH A GREBE

~ NEW ~
**PARTICULARLY
 SUITED FOR
 ATWATER KENT**

*Model 40
 or 46 with
 Dynamic Speaker*

THIS new, beautiful, sturdy Radio Master cabinet makes a splendid setting for the Atwater Kent model 40 or 46 with dynamic speaker.

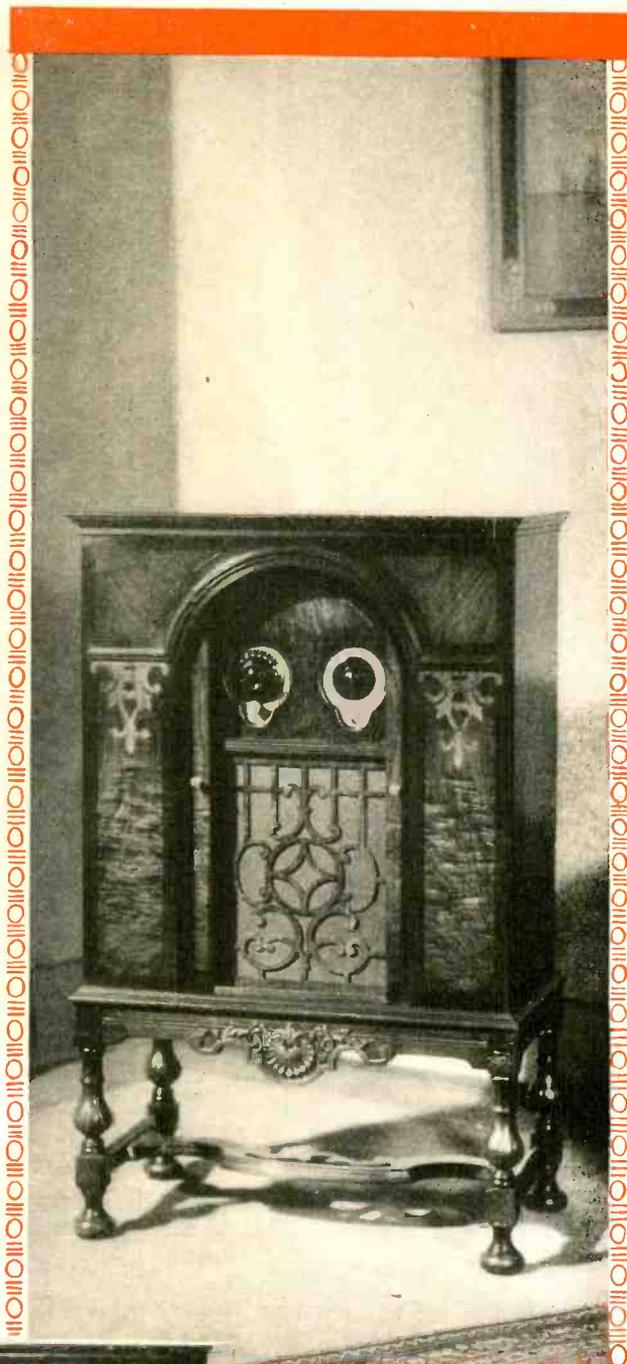
Front panel may be had plain, or cut to fit over A. K. controls. Dynamic speaker fits behind the grille screen.

This cabinet is constructed of selected heavy walnut plywood with matched butt walnut front and doors.

Sliding doors are suspended on fibre bearings from a brass rod. Positive, smooth operation — indefinite wear without trouble are insured by this construction.

Beautiful wood — splendid design — superior workmanship, make this cabinet outstanding.

RADIO MASTER CORPORATION
 BAY CITY, MICHIGAN



Radio Master
 ONE OF THE WARD INDUSTRIES



SONATRON goes on the AIR *from Coast-to-Coast!*



Soon—
80,000
tubes a day!
And a new
factory in
Chicago!

ON March 3rd the Sonatron Tube Company will inaugurate a series of broadcasts over the Columbia Broadcasting System. Every Sunday evening thereafter from 8:00 to 8:30 o'clock Eastern standard time, Sonatron will present a program of the highest type, using the finest available talent, over a network of stations that will extend from one coast to another.

Powerful and consistent newspaper advertising will "sell" these programs to the listening public . . . Thus Sonatron adds another effective unit to a campaign which includes dominating full page advertising in the Saturday Evening Post and which will bring a tremendous demand to the counter of every Sonatron dealer in 1929. *Sonatron goes on the air!*

SONATRON TUBE COMPANY 108 W. Lake Street 16 Hudson Street 55-57 State Street
CHICAGO NEW YORK NEWARK, N. J.

SONATRON

THE WORLD'S LARGEST RADIO TUBE LINE



List price, complete with Peerless Dynamic Reproducer, switch and cord, \$90. Size of tabletop, 14" x 30". Operates from direct or alternating 25 or 60 cycle house lighting current.



(A) Push-pull switch. Completely turns off all power used in radio and speaker. (B) Power plug for radio set. (C) Five feet of silk power cord. The only wire necessary to your wall plug.

New

the Peerless Dynamic
Now Available In A

Radio Table

RADIO fans are greeting this new Peerless creation with enthusiasm. For it fills a real need—a fine piece of furniture, *plus* reproduction such as only a Peerless can give.

The authentic Gothic design is carried out in the Radio Table as in all Peerless Reproducers. Finished in soft, subdued walnut it makes a prized addition to any home. *Inside* is the Peerless Dynamic Reproducer, built-in by skilled Peerless craftsmen.

Your display room is incomplete without this newest addition to radio reproduction. The discriminating owner of an electric radio receiving set will choose the Peerless Radio Table.

Made by

UNITED REPRODUCERS CORPORATION
Peerless Division, Rochester, N. Y.

Export Department, 130 West 42nd Street, New York, N. Y.

20,000 of the Finest Radio Tubes Daily Turned out by the CeCo Mfg Co.

STRIKING evidence of the rapidly growing popularity of CeCo tubes is the fact that in the CeCo factories at Providence, R. I., over 20,000 tubes are turned out each day.

The enthusiastic approval of both the dealer and consumer has been won for CeCo sheerly upon its performance. The sweeter, more natural, more life-like tone that characterizes each of the many widely different types of CeCo tubes is due to three things:

First, the painstaking craftsmanship of a corps of carefully trained expert tube makers.

Second, the finest materials that money can buy.

As a further guarantee of continuous and even larger sales increases, CeCo tubes are extensively advertised all over the country, in leading newspapers, magazines and on the air. Do not miss CeCo's entertaining radio broadcast each Monday evening at 8:30 standard time (7:30 Central time) over the entire Columbia Broadcast System

For full information, prices, discounts, etc., write your jobber or direct to the

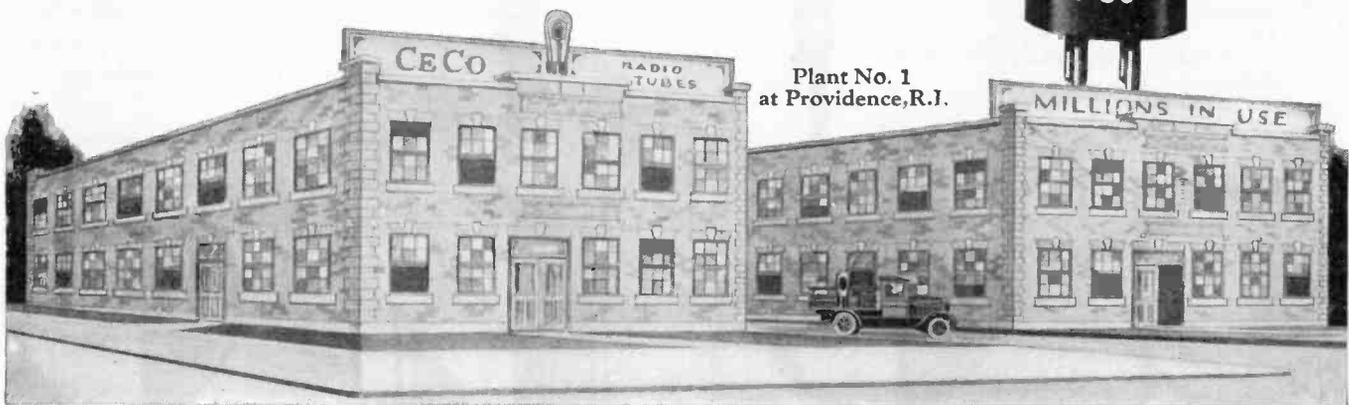
CeCo Mfg Co., Inc., Providence, R. I.
Makers of tubes for every radio need

Third, patient laboratory research and investigations by engineers and scientists who have been responsible for the particular design of each CeCo type.

The result is a tube whose uniform and unvarying excellence is unsurpassed by any other tube in the world—a tube that, in addition to its performing qualities, is designed and built for long and rugged use. These characteristics which have been so immediately recognized and appreciated by both public and trade alike are responsible, in large measure, for one of the most amazing sales developments in the radio industry.



CECO RADIO TUBES



different

FROM ALL OTHER DYNAMICS

**DR. FULTON
CUTTING'S**

New

CUTTING DYNAMIC POWER

The Cutting Dynamic Power Speaker Unit, weighing 65 pounds, consists of a power plant, power amplifier and electro-dynamic speaker. The speaker looks over-sized. It is large. It has a larger electro magnet, larger floating cone and a much larger single-turn driving coil. The clever design and combination of these elements have produced the effect that is little short of revolutionary.



\$268 LESS TUBES

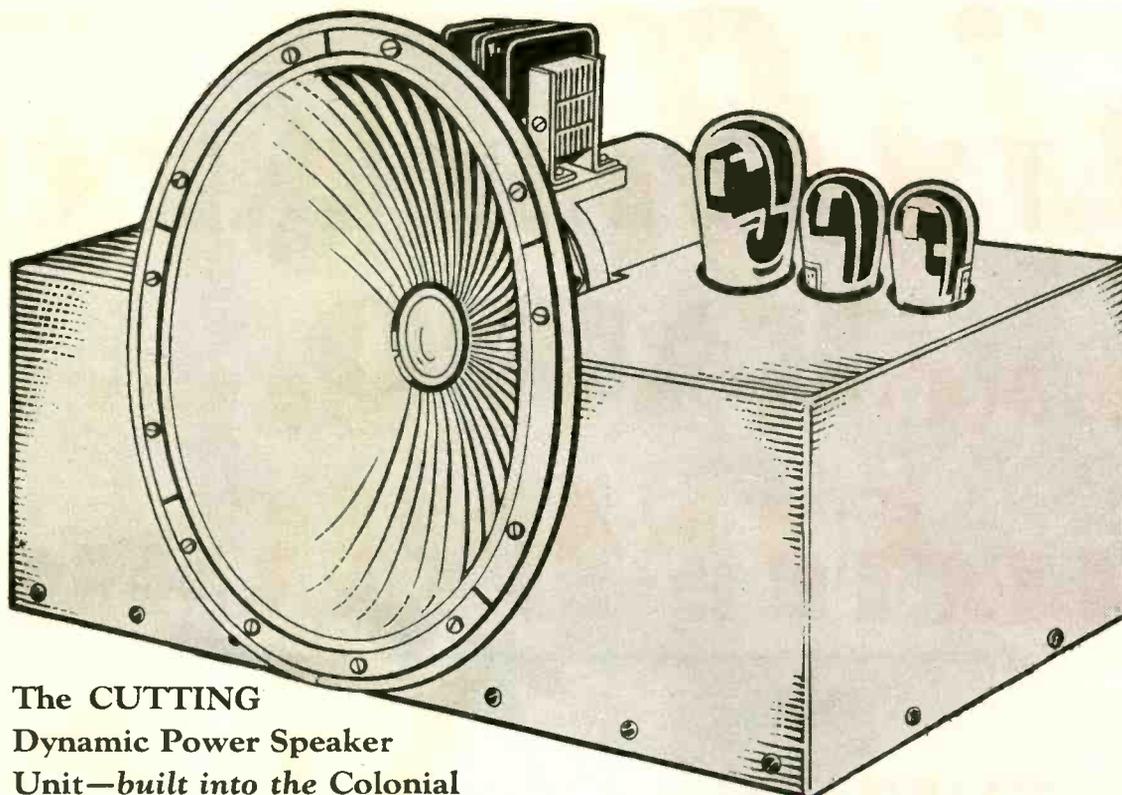
(D. C. models slightly higher)

Models for
DIRECT
as well as
Alternating Current

Beautiful consoles...all-steel, electrically shielded chassis...automatic voltage compensator...bridge volume control...pick-up jack for phonograph records...illuminated panel. Audio system employs two 171 tubes in push pull. Laminated "A" metal transformers are used together with a frequency gain mesh.

Licensed under patents of R. C. A., General Electric, Westinghouse, and American Tel. & Tel. Co's.

C O L L O



The CUTTING
Dynamic Power Speaker
Unit—built into the Colonial

Invention

**RADIO'S CLEAREST VOICE
...Piling Up New Sales Records**

WHEREVER seen and heard, the NEW All-Electric Colonial has been hailed as the year's greatest radio sensation. First in New York...then Philadelphia...more recently in Chicago, Cleveland, Detroit, Pittsburgh, Baltimore, Boston and other large distributing centers. Repeat orders are pouring in at a constantly increasing rate.

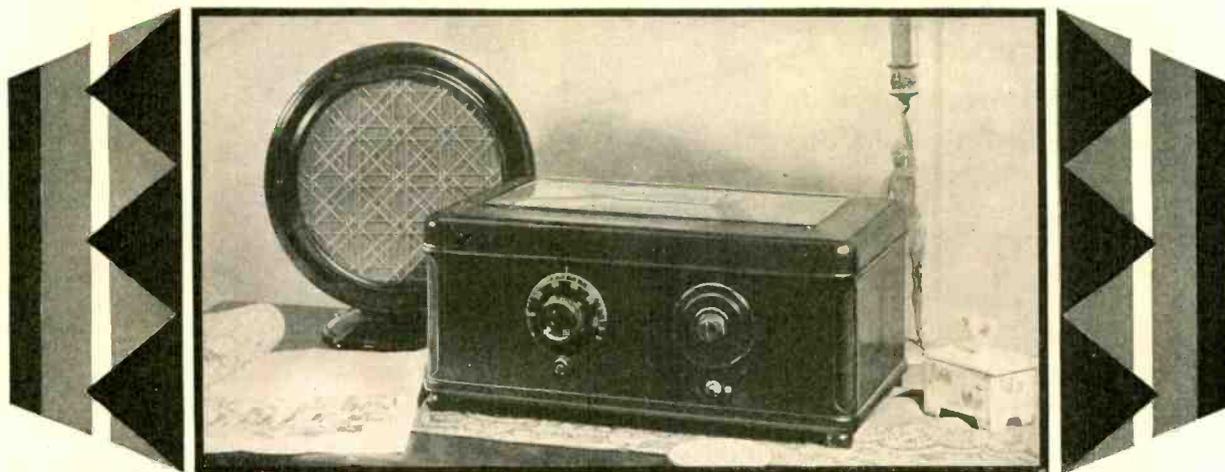
Colonial's sensational success is due to its phenomenal product, its broad dealer cooperation, its strong advertising and the outstanding fact that one sells another. *Write, wire or telephone for dealer franchise information.*

COLONIAL RADIO CORPORATION
Long Island City, New York

NIALL

ATWATER KENT RADIO

ELECTRO-DYNAMIC!



MODEL 46. New all-electric receiver for use with Model F-2 Electro-Dynamic speaker or other speakers of the same electrical characteristics. FULL-VISION Dial. Panelled corners, ball feet. Double power tube stage. Requires 7 A.C. tubes and 1 rectifying tube. Without tubes, \$83

MODEL F-2 Electro-Dynamic speaker. True to the whole range of music. For use with Model 46 Receiver or other receivers supplying a D.C. field current. \$34

MODEL 53. New, compact, all-in-one set with Atwater Kent Electro-Dynamic speaker. Not much higher than your knee! Makes a beautiful little table for lamp or books—and becomes a musical instrument at the snap of a switch. FULL-VISION Dial. Requires 7 A. C. tubes and 1 rectifying tube. Without tubes, \$117

A new set

ATWATER KENT design, determined by the Atwater Kent formula: "Test—test—test—and test again"—
Atwater Kent precision manufacture—

These have produced an honest-to-goodness new receiver and Electro-Dynamic speaker which dealers and the public everywhere have instantly recognized as instruments of positive superiority. Yet the price is within the range of millions.

Here is merchandise that sells on sight and hearing...
Once more, Atwater Kent provides the stimulus for after-holiday and spring buying.



**MODEL F-2-C ELECTRO-DYNAMIC
CHASSIS SPEAKER**



MODEL 53
*All-in-one
Electro-Dynamic*

ATWATER KENT RADIO

Greatest news of the New Year for ATWATER KENT DEALERS

ATWATER KENT again starts the year by bringing out a new set that is sweeping the country.

When your customers see and hear this Electro-Dynamic Atwater Kent they are going to ask: "Can anyone ever make a set that will out perform it?"

Best of all, this means business

NOW and steady demand all spring. Profits? Well, you know what Atwater Kent Radio has done for dealers who consistently feature it.

Get your orders to your distributor *now* and clear the house for action.

Your old friend Opportunity is knocking at your door with a sledge hammer.

*On the air—every Sunday night—
Atwater Kent Radio Hour—listen in!*

Prices slightly higher west of the Rockies



MODEL 45. Extra-powerful, extra-selective receiver, for use with magnetic speaker. FULL-VISION Dial. Requires 7 A. C. tubes and 1 rectifying tube. Without tubes, \$94



MODEL 56. The new all-in-one set that fits so beautifully anywhere. Magnetic speaker. FULL-VISION Dial. For 110-120 volt, 50-60 cycle alternating current. Requires 6 A. C. tubes and 1 rectifying tube. Without tubes, \$97
Magnetic speakers. Models E, E-2, E-3, each \$20.



MODEL 40. The world's most popular table model for use with magnetic speaker. FULL-VISION Dial. Requires 6 A. C. tubes and 1 rectifying tube. Without tubes, \$77

ATWATER KENT MANUFACTURING COMPANY *A. Atwater Kent, Pres.* 4700 Wissahickon Ave., Philadelphia, Pa.

A NAME famed in RADIO ... a name famed in

\$
~~44~~^{75*}

ALL WALNUT Construction!

All walnut construction has never been offered at anywhere near this price. Solid, all walnut panels and highly selected five-ply all walnut veneers assure your customer lasting, substantial value.

Many other unique and important specifications. Two-way hinges permit doors to swing flush and trim against the sides. The exposed door edges are fluted for finer appearance.

Imported Peruvian maple overlays artistically break up the solid mass of the Burl Walnut doors when closed. Heavy 5-ply full-width baffle-board securely bolted assuring rigidity. Panel is cut in permanent position. Krominized, non-tarnishable all brass hardware.

Solid one-piece front paneled to group the Controls. Very handsome grille. Mortised V dovetail stretcher construction insures permanent rigidity. Exceptional value—it invites comparison.

Suggested Retail List

\$154^{75*}

CABINET No. 160

Fitted with Atwater Kent Radio, Model No. 46 and Atwater Kent Electro Dynamic Speaker Model F-2-C, less tubes.

Model No. 160 Cabinet takes Model 40-42 or 46 Atwater Kent Radios.

* Prices slightly higher West of the Rockies



THIS SEAL IDENTIFIES

R. C. M. CORPORATION FURNITURE

RADIO · CABINET · MANUFACTURING

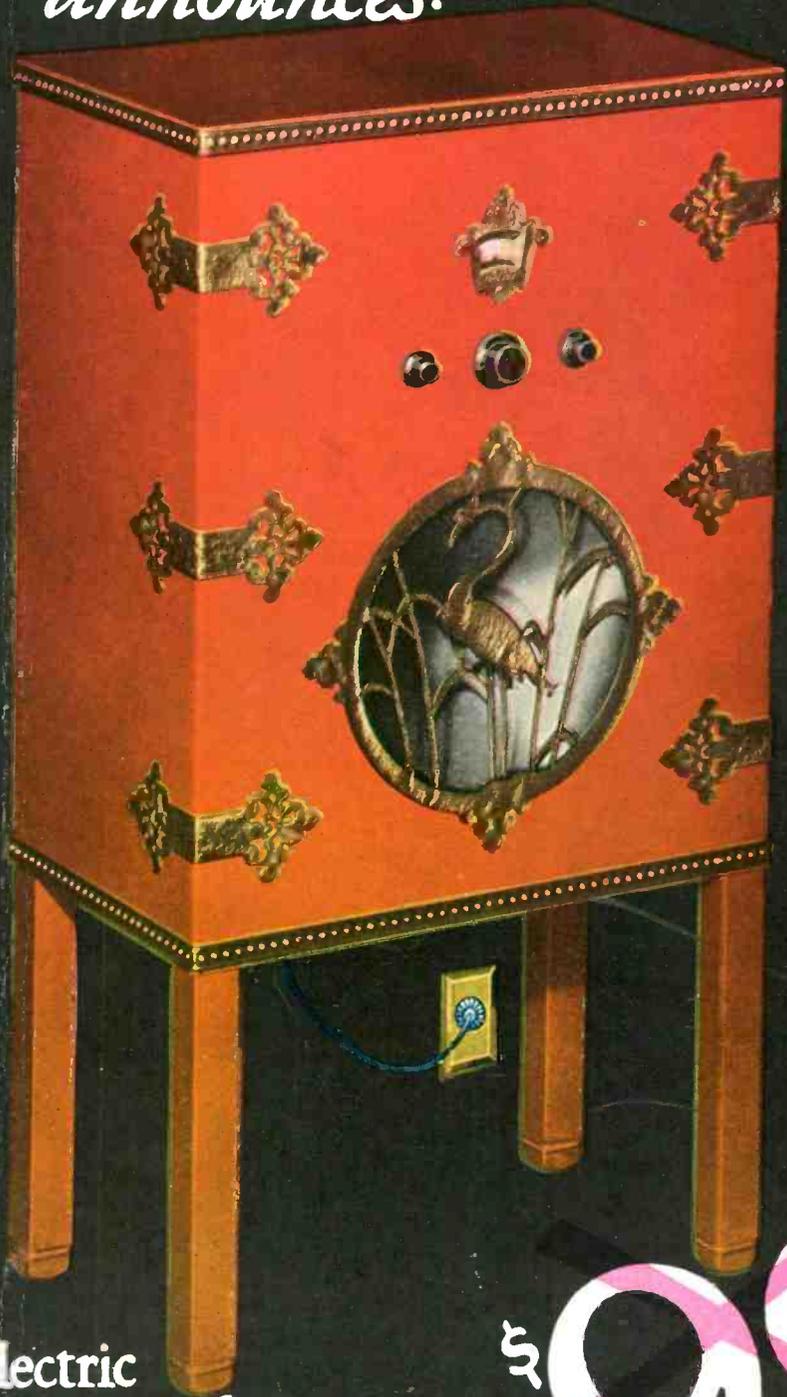
I. H. HARTMAN, *President*

Makers of ATWATER KENT

CROSLEY

announces:

3
optional
colors
Mandarin Red
Nanking Green
Manchu Black



Attach to
antenna
and add tubes

The AC Electric
Gemchest

\$99.

To radio's great value Crosley now adds STYLE. To perfection of radio reception Crosley introduces FASHION. Chinese Chippendale is the motif. Three popular, smart, stylish colors afford your trade a splendid choice—Mandarin Red, Nanking Green and Manchu Black. All gold trimmed.

The size of the chest is stylishly right. Not too big. Just enough color to complete the furnishing of any room.

In it is built the famous Crosley AC Electric GEMBOX and the Crosley dynamic type power speaker DYNACONE. The same cabinet with the Crosley 2 tube SHOWBOX built in only for \$124. Prices quoted do not include tubes.

Radio excellence! Decorative smartness! Color harmony! See other side of this announcement for complete line.

CROSLEY

announces:

Price Correction

After the black printing on this sheet, analysis of manufacturing costs made it possible to reduce prices on the Crosley Gemchest and Showchest described on the reverse side of this sheet. The price on each model has been reduced \$5.00.

NEW PRICES

GEMCHEST

\$94

SHOWCHEST

\$109



The New

8 tube JEWELBOX

\$105

Power detector, tuned antenna circuit, UY-227 tubes in all sockets except output and rectifying.

"The finest radio money can buy."

Power detector makes use of plate rectification instead of grid rectification as commonly used in radio. Result: *over-loading prevented* and tone improved.

Tuned antenna circuit creates selectivity and sensitivity to a degree of quality never before attained.

By use of UY-227 type tubes, except in output, filtering of circuits is improved.

Add to these features other improvements such as NEW volume control, improved audio system, full voltage supply, no power pack trouble and genuine neutrodyne balancing.

Sell this great value—be in radio *profitably* in 1929.

Write us for address of nearest Crosley jobber.

CROSLEY

8 Tube

SHOWBOX

\$80

This famous, finely balanced neutrodyne receiver—sensitive and selective to a marked degree is also available in a new black wrinkle finish brushed with white gold as well as the popular brown and gold finish.

Features of the SHOWBOX are FULL VOLTAGE on audio plates—perfected MERSHON Electrolytic condenser in power pack which will *not* break down—push-pull amplification — modern illuminated dial and many others found in sets at twice its price.

Crosley dynamic type power DYNACONE \$25



CROSLEY

Line for 1929

Strongest in the

Industry

Lowest priced FIRST CLASS AC electric radio on the market—The GEMBOX at \$65. Unusually sensitive and selective. Genuine neutrodyne and operates power speaker.

Crosley battery type sets are same superior neutrodyne circuits as found in Crosley AC Electric sets.

6 tube BANDBOX—operates power speaker—\$55.

5 tube Dry Cell BANDBOX, Jr., for places where battery recharging is impossible—operates loud speaker—\$35.

THE CROSLEY RADIO CORPORATION, CINCINNATI, OHIO
Powel Crosley, Jr., Pres.

Montana, Wyoming, Colorado, New Mexico and West prices slightly higher.
Prices quoted are without tube.

If you had \$180 for every "B" Eliminator in use, you'd be a multi-millionaire!



—and a great majority of these Eliminators will need new tubes and will be replaced by—

Raytheon BH

LONG LIFE RECTIFYING TUBE



MILLIONS of sets using "B" Eliminators, of over a hundred different makes, are in use with Raytheon BH Tubes as original or replaced equipment.

The sustained demand for Raytheon BH shows that these tubes are again being replaced with more of the same. It continues as a staple in the retail stock.

Raytheon BH Tubes come to you in the display carton holding four tubes shown at the left. It costs you \$10.80—sells for \$18.00—and makes you a profit of \$7.20. Standard shipping packages contain 3, 6, or 12 of these cartons—12, 24 or 48 tubes.

RAYTHEON MANUFACTURING CO.
Cambridge, Mass.

Coming

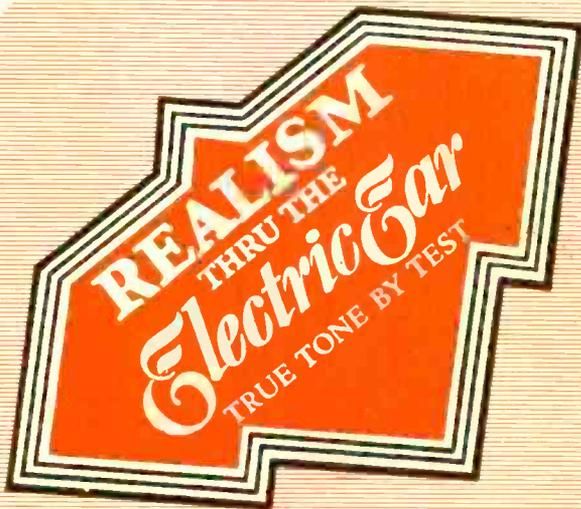
SOON will be announced a new, surpassing Stewart-Warner Radio. A super-quality line, with new surprising features of performance. It will mark a notable advance in radio manufacture.

The same Stewart-Warner scientists who evolved the wonderfully efficient Electric Ear test and brought Realism to Radio, now again have triumphed. The new set will be a worthy companion to our famous "800" line.

To you, Mr. Dealer, this will bring the radio opportunity you long have sought. Opening to you a new, fertile field of sales and profits, it will help you to build a sound, permanent, ever-growing trade.

This new radio will have exclusive advancements in design and equipment, adding immensely to its selling power.

—New features of performance, giving you outstanding advantages over competition.



STEWART-

The voice of

New

STEWART- WARNER

Radio

—A line complete, with a range of sizes and styles to meet every demand.

—A price representing value such as only could be offered by a maker with the resources of Stewart-Warner.

This corporation, leader in the precision instrument field, with 22 years' manufacturing experience and 22 million products in use, offers to dealers this unusual business opportunity.

The new line will be extensively advertised, aggressively merchandised. We want live, responsible dealers who will recognize the bigness of this opportunity.

You will be interested in our story. Get the full particulars. Territories are closing fast. Write or wire today.

STEWART-WARNER SPEEDOMETER CORPORATION, Chicago

*22 years in business—world-wide service
50 million dollars in resources
5th successful radio year*

WARNER

authority in radio



The ORCHESTROPE

S. B. McFADDEN
324 WEST MAIN STREET
Havana, Illinois

Dec. 1, 1928

Capehart Automatic Phonograph Corp.,
Huntington, Indiana.

Gentlemen -

I am writing you in reference to the wonderful Orchestrope. I installed one in the Metropole, a high class Cafe and Billiard Room in Bloomington and the 5¢ coin box was filled in four days after it was installed. There was \$53.40 in the instrument. This fact should greatly establish the popularity of the Orchestrope, as there was no wall box, and the customers had to line up to drop their nickels in the Orchestrope.

Mr. Conroy states he is highly pleased with the instrument and it has been a business getter for him.

I have over 20 Orchestropes out now and only two months since I took on the Orchestrope agency.

Very truly yours,
S. B. McFadden
S. B. McFadden

SBM:ML

**Sells 20
in Two Months**

User Takes in \$53.40 in 4 Days!



*Sold
Only Through Dealers*

A Musical Sensation

The Orchestrope is the only completely automatic and electric phonograph on the market today that will play 56 selections without repetition and continuously without attention. It automatically changes and turns—playing both sides of 28 records. Simple and trouble proof. Electro-dynamic reproduction with 3 stages of amplification result in superb tone; volume easily and quickly adjustable to any size room or auditorium. The beautiful cabinet work makes the Orchestrope an outstanding, attractive article of furniture.

The Capehart Orchestrope, the completely automatic phonograph which plays 28 records on both sides, continuously without attention, is a money maker for all who use it. From all parts of the country letters come to us like the one reproduced above telling how the Orchestrope increases business and more than pays its way. And because the Orchestrope is such a money maker for those who use it, it is a big profit maker for those who sell it.

\$2000 to \$5000 a Month

Positively, that is not an exaggeration! Live dealers in many parts of the country are equalling that sum every month. Why? Because wherever the Orchestrope is properly introduced it makes a sensation. Its ingenious mechanism which plays 28 records on both sides automatically and continuously—24 hours a day if desired—is a revelation to all who see it. Its superb tone, amplified and reproduced by an electro-dynamic speaker is a joy to all who hear it. The Orchestrope is an ornament and a credit to the most fastidious place of amusement or recreation; it will lend prestige to any place of business.

Here's the Market!

- Auto camps
- Barber shops
- Beauty parlors
- Billiard parlors
- Cafes
- Clubs
- Community houses
- Confectionary stores
- Dance halls
- Drug stores
- Hotels
- Luncheonettes
- News and cigar stores
- Pleasure boats
- Restaurants
- Road houses
- Soda fountains
- Summer parks
- Tea rooms
- Theaters
- Wayside hotels

Mail This Coupon Now!

CAPEHART AUTOMATIC PHONOGRAPH CORPORATION
Dept. 4852, Huntington, Indiana

Gentlemen:
Please send me, without obligation, descriptive literature on the new Capehart Orchestrope and detailed information regarding your exclusive dealer franchise with its profit-making possibilities.

Name

Address

City State

We have several choice localities still open for dealers who are prepared to introduce the Orchestrope with the right kind of enthusiasm and energy. If yours is an organization which can qualify we will gladly send you full particulars of the Orchestrope proposition and its profit-making possibilities. No obligations. Simply mail the coupon.

CAPEHART AUTOMATIC PHONOGRAPH CORP.
HUNTINGTON INDIANA

**Start profiting now—
A great market for
the new TRAV-LER
is open to you...**

57⁵⁰
STANDARD
\$75 DE LUXE
\$100 ARISTOCRAT

(Slightly higher west of the Rockies)

ALL PRICES LESS ACCESSORIES

THE season is on! Now is the time to push the Trav-Ler—the portable receiver with the qualities of a high-priced set. The demand for portables has increased every year until now the market possibilities of the complete Trav-Ler line are bigger than ever before. Everything points to profit for the dealer who handles Trav-Ler.

Trav-Ler is a compact, one-dial receiver, completely self-contained—equipped with loop and speaker and instantly portable. Absolutely no outside connections are required.

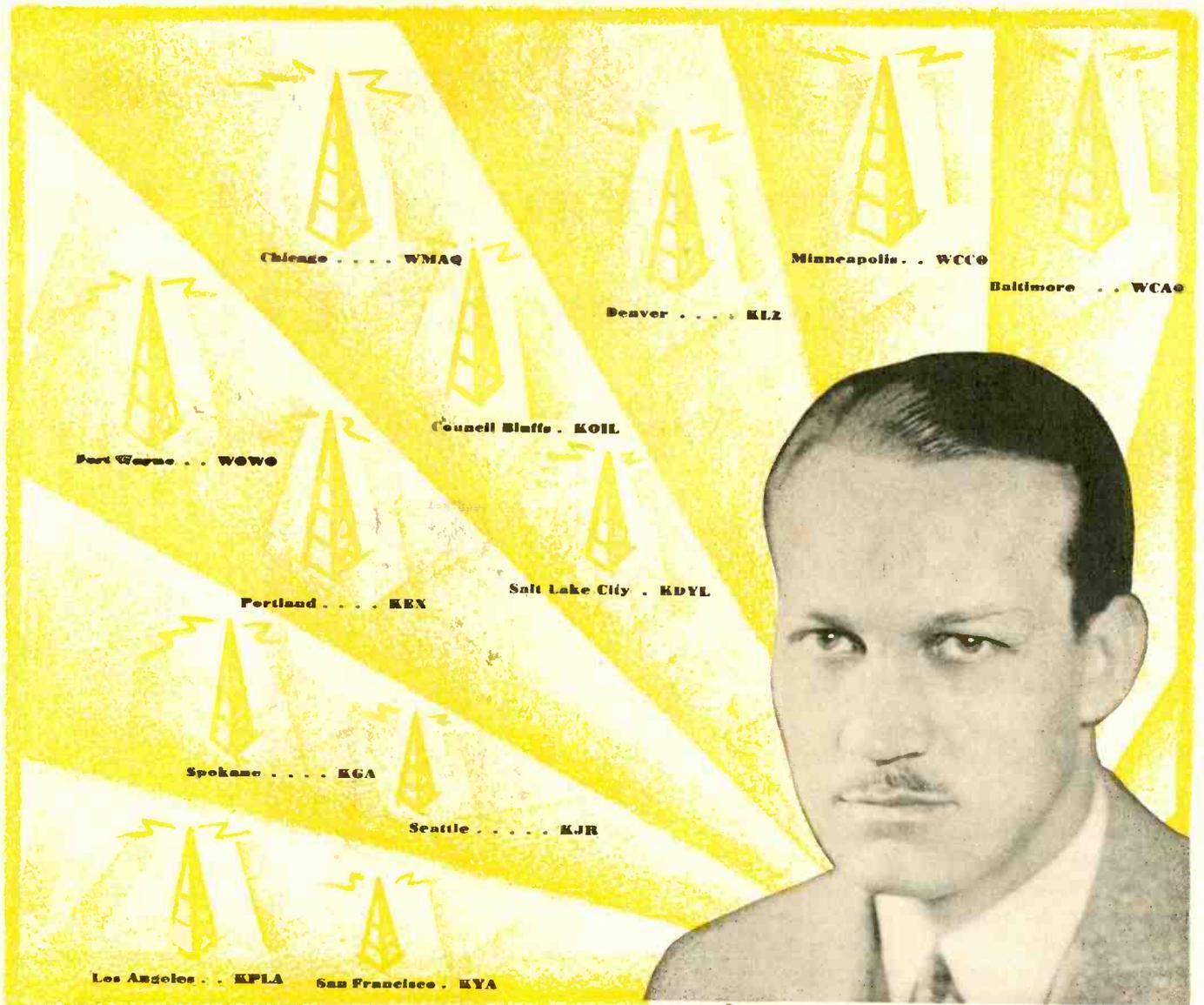
To aid Trav-Ler dealers; window streamers, window display cards, counter display cards and folders are available. In metropolitan centers newspaper advertising is also helping to bring in prospects and make sales.

The new 1929 Trav-Ler line is manufactured by the world's largest manufacturers of portable receivers. The sales policy extends full protection to dealers. Large additional profits are yours if you handle Trav-Ler. Write today for full details.

TRAV-LER MANUFACTURING CORPORATION
3402 North Halsted Street Chicago, Illinois



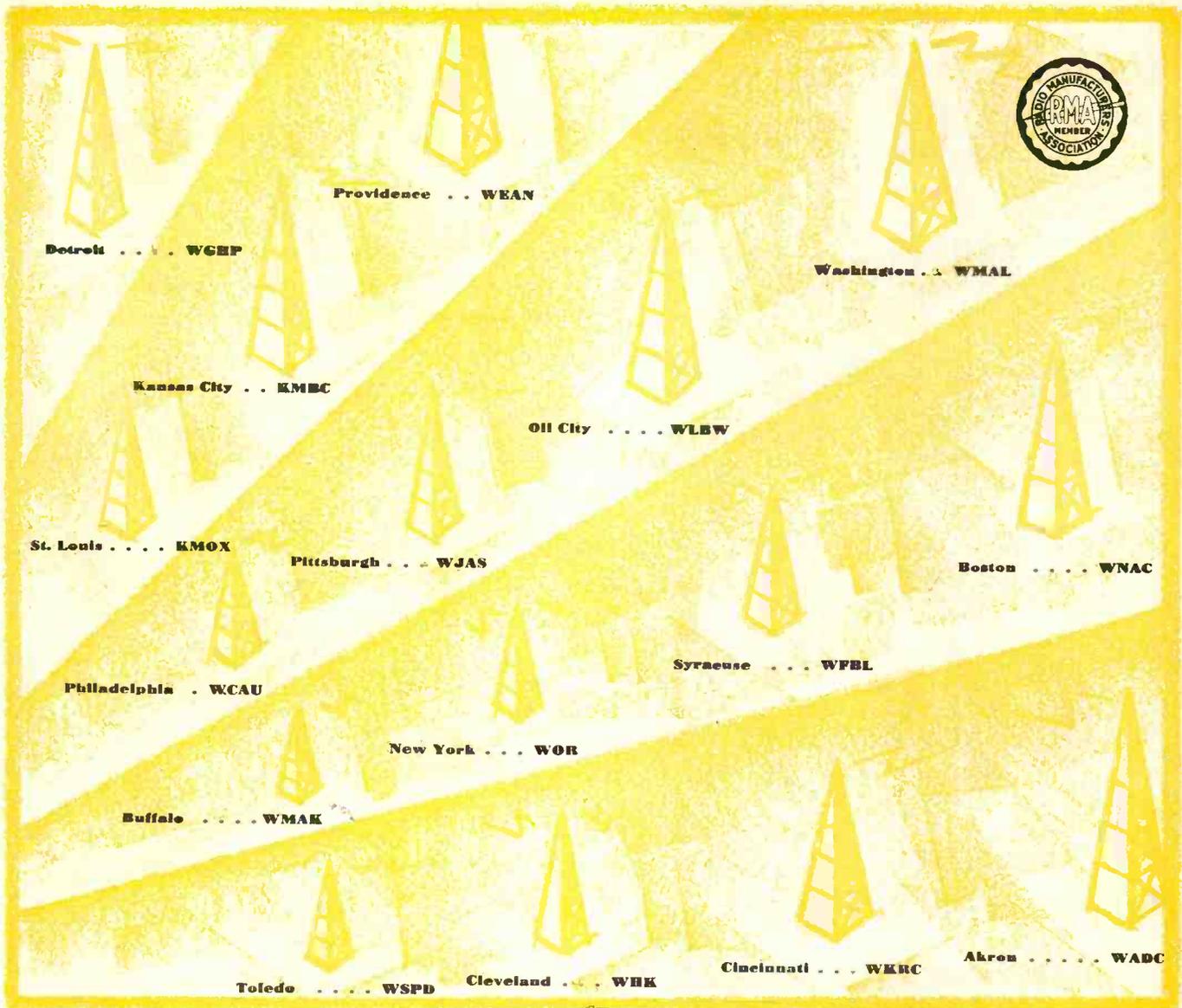
TRAV-LER



Louis A. Witten

***“You have heard me announce Kolster Programs to the millions of radio listeners . . . now hear this message that I have for you.*”**

“Kolster is going to do the finest broadcasting on the air throughout 1929. They have entrusted me to build the best programs ever given and I am determined to do it. The appropriation calls for an investment annually of more than \$200,000.00. And it is not only for advertising reasons that Kolster spends this...but to promote



Announcing:

better broadcasting generally. ¶“What steps are you taking to reap the harvest of local good-will everywhere which is created by these entertainments? ¶“Remember that whether you take any action or not, the good-will is *there*. ¶“Mention Kolster broadcasting in your own advertising, announce it in your window, talk about it to your customers. ¶“*Your name* will then become associated locally with the pleasure of the program . . . simply announce . . . ‘*Listen to the Kolster Program every Wednesday evening.*’ ¶“In conclusion, please note that the Pacific Coast Network was added to the Columbia Chain in January, making a total of 29 stations now carrying the Kolster programs.”

All your customers

**will see
and hear**

De Forest Audions posters, newspaper advertisements, Saturday Evening Post advertisements—thousands of them reaching millions of people. the De Forest Audions, a 41 piece military band led by the world famous conductor, Arthur Pryor, and many guest artists who are outstanding operatic and instrumental stars.

de Forest

Everyone knows about De Forest Audions, the 1000 hour *plus* Radio Vacuum Tubes, through our nationwide advertising campaign.

BROADCASTING

— over the nation-wide Columbia Chain which reaches 76% of the radio owners of America.

NEWSPAPERS

— every leading paper in 166 trading centers of the country carries the De Forest Message twice a week to 16 million.

BILLBOARDS

— more than 4000 of them in nearly 500 cities and towns in November and December.

MAGAZINES

— advertisements that reach a vast audience of 9 million readers in the Saturday Evening Post.

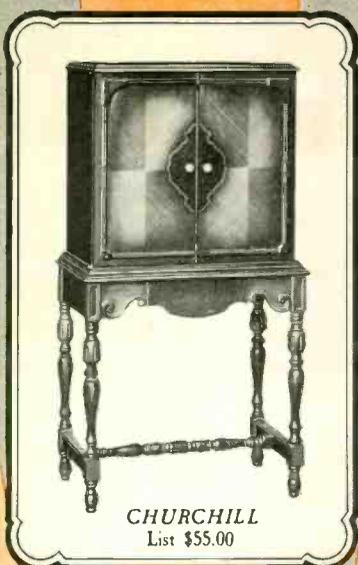
Make your store headquarters for De Forest Audions . . . the "high vacuum radio tubes"

Write today for new prices and dealer proposition

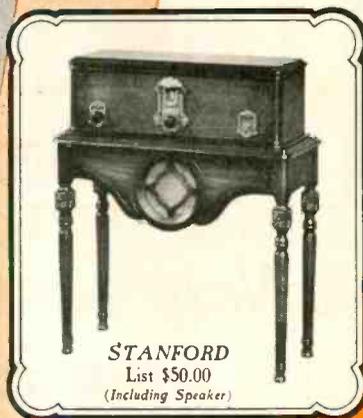
DE FOREST RADIO COMPANY
JERSEY CITY NEW JERSEY



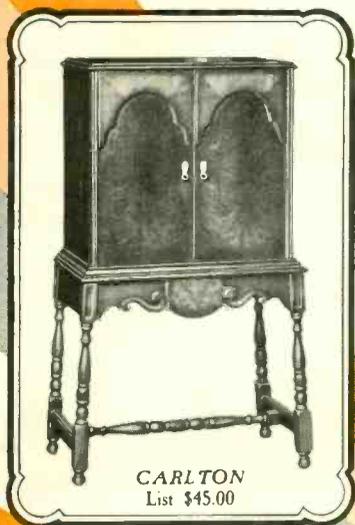
MARLOWE
List \$30.00



CHURCHILL
List \$55.00



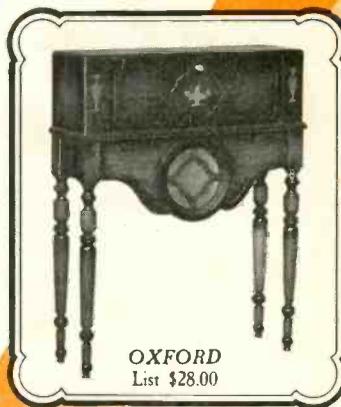
STANFORD
List \$50.00
(Including Speaker)



CARLTON
List \$45.00



WARWICK
List \$65.00



OXFORD
List \$28.00

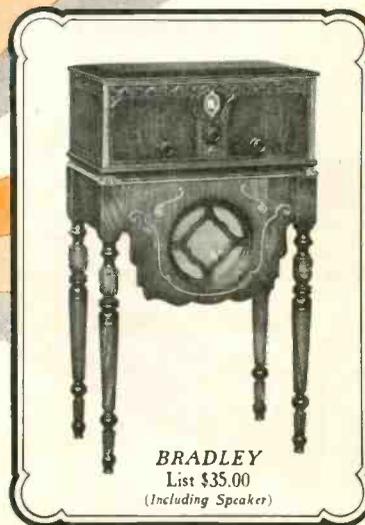
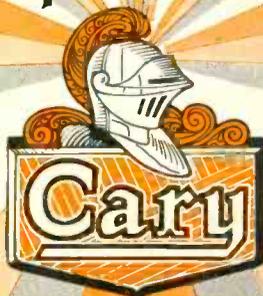
Cary

CABINETS

at astounding
Prices



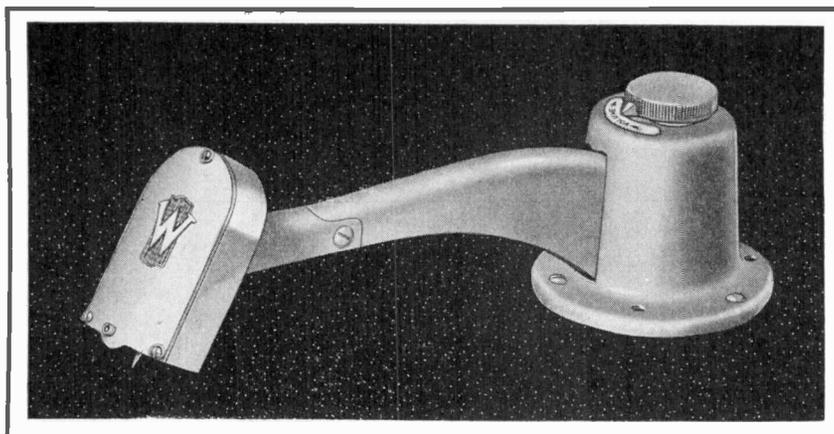
KENWOOD
List \$50.00
(Including Speaker)



BRADLEY
List \$35.00
(Including Speaker)

Made Entirely of Walnut in the "Walnut Center of America"

Cary Cabinet Corporation,
— SPRINGFIELD, MISSOURI —



New Features ...
new Selling Points ...
new PROFITS!

the Webster Electric Pick-up offers you all these . . . plus faithful tone reproduction!

The Webster Electric Pick-up embodies engineering refinements that make it highly superior to the general line of pick-ups. It has been specifically designed to overcome the objections so common in less finely-developed products. Sweeping public acceptance is now accorded the Webster Pick-up, for it is the one reproducer that faithfully recreates all recorded music!

Each individual part of the Webster Electric Pick-up is perfectly matched and delicately balanced. A frictionless stylus bearing—a pick-up head encased in a die-cast dead-metal housing, that eliminates objectionable resonance—and a supporting arm of the cantilever type, suspended in snugly fitting bearings—these features are all tangible selling points which you can convert into additional profit!

Test the Webster in your own showroom! Note



the thrilling realism of its reproduction—the brilliance of the full symphony orchestra—the unbelievable delicacy of the solitary tone of the violin—the distinct whisper of a low human voice. This is indeed perfection for you and your public!

The Webster Electric Pick-up is available in two

Models. Model 1-A includes pick-up head, supporting arm with a volume control incorporated in the base—an exclusive Webster feature—and necessary adapters. The Model 1-B includes pick-up head, separate volume control, and necessary adapters. Model 1-A is priced at a list of \$17.50, while Model 1-B is priced at a list of \$12.50.

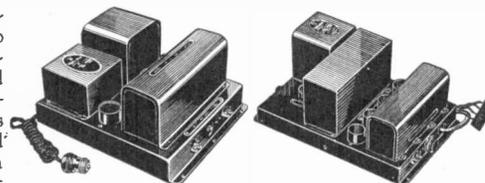
A very complete and practical assortment of sales helps—catalog pages, envelope enclosures, etc.—are supplied. Both models are packed in attractive self-selling counter display cartons—one Model 1-A to a carton and three Model 1-B to a carton—a small enough quantity to permit a constant stock yet secure quick turnover. The usual wholesale and retail discounts apply.

Your jobber now has the Webster Electric Pick-up in stock, and is ready to fill your orders. If he has not yet received his supply, order

direct from us. Get in on this new business as quickly as possible—it's a daily profit proposition!

Webster Power Amplifiers
Another Precision-Built
Webster Line

Skillfully engineered and built to precision standards, Webster Power Amplifiers provide vocal and musical amplification of new high



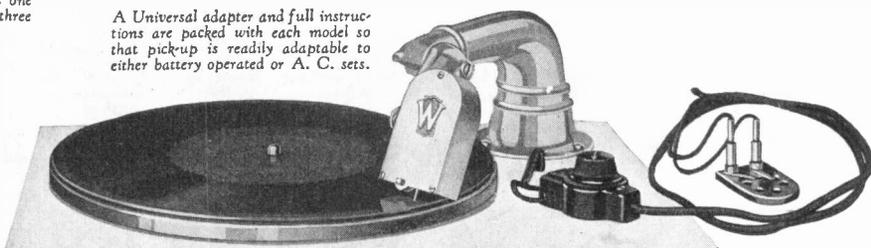
standards of perfection. A Webster Power Amplifier used in conjunction with the Webster Electric Pick-up is the ideal combination.

Model A-210 two-stage amplifier provides great volume with splendid tone quality. List \$105.00. Model A-310 three-stage amplifier produces exceptionally great volume but retains all tone qualities over entire musical range. List \$115.00. Model A-271 two-stage amplifier for home use with phonograph or radio. Fine tonal quality. List \$67.50. Prices slightly higher west of Rockies. Send for full details.



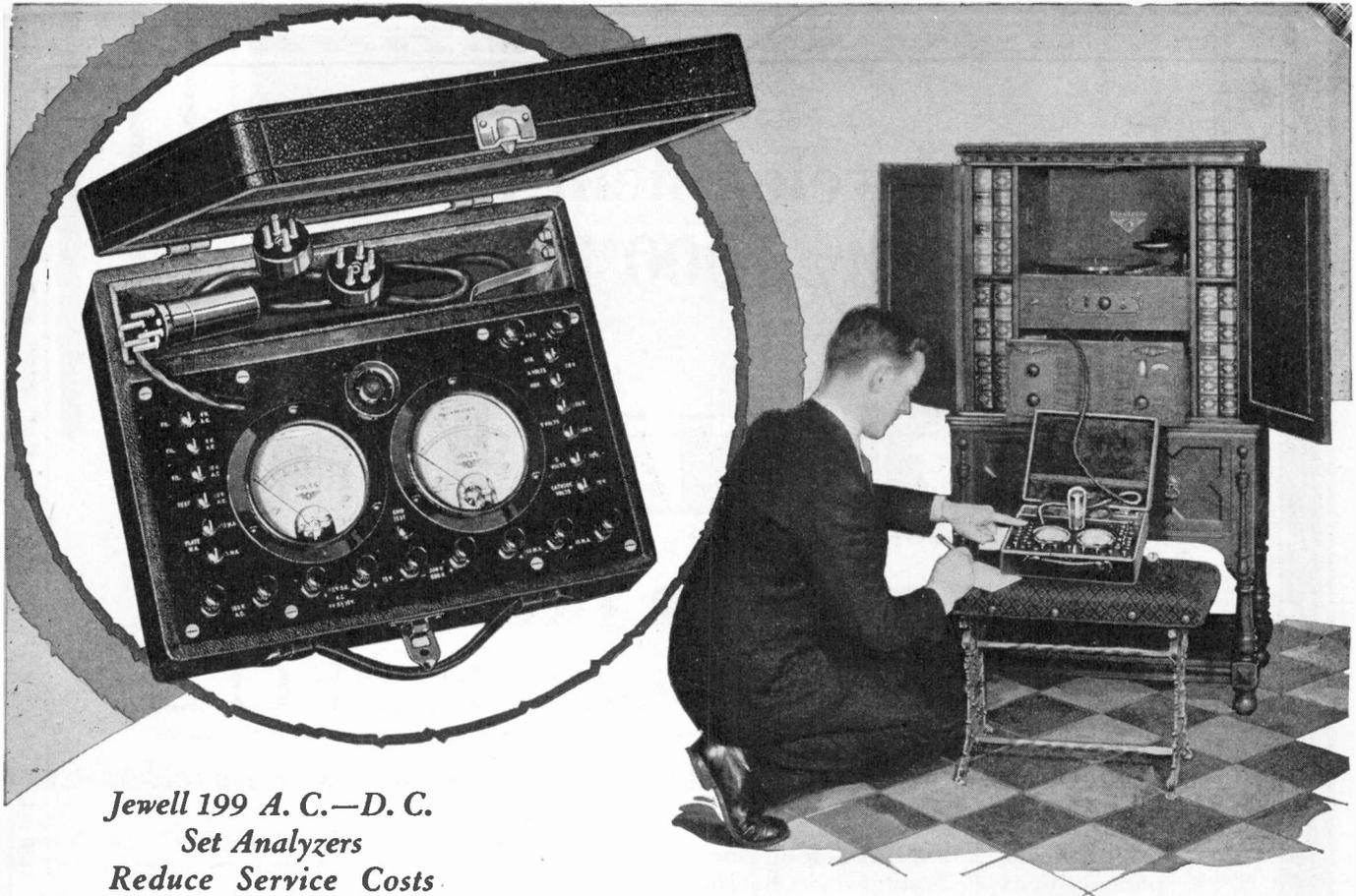
The attractive self-selling counter display carton which contains one Model 1-A or three Model 1-B.

Webster
W **Electric**
Pick-up



A Universal adapter and full instructions are packed with each model so that pick-up is readily adaptable to either battery operated or A. C. sets.

WEBSTER ELECTRIC COMPANY
 RACINE, WISCONSIN



**Jewell 199 A. C.—D. C.
Set Analyzers
Reduce Service Costs**

This efficient radio service instrument quickly locates set troubles. In the Jewell Method of Set Analysis the convenient 5 prong plug or 4 prong adapter is inserted in the tube socket and the complete electrical operation of each stage is thus quickly and accurately checked.

All readings are recorded on the handy Radio Set Analysis Chart, and the results of the test are checked against data covering the receiver, furnished in the Jewell Instruction and Data Book, which contains data on receivers of 25 leading manufacturers.

The Jewell Method of Set Analysis is thoroughly scientific, and therefore thoroughly efficient. It leaves nothing to guesswork, and consequently saves time and provides highly satisfactory results.

Mail the attached coupon for the complete story of Jewell Radio Receiver Service and a copy of the Jewell Instruction and Data Book which contains data on the receivers of 25 leading manufacturers.

Every Service Man Should Have a Jewell 199 Set Analyzer

The Jewell Method of Radio Set Analysis enables service men to locate receiver troubles quickly and with unerring accuracy.

The systematic manner in which tests are made and readings recorded with the Jewell 199 Set Analyzer inspires the confidence of customers.

The accuracy with which radio troubles are diagnosed and eliminated by the Jewell Method assures the customers' satisfaction and good will.

A Jewell 199 Set Analyzer in the hands of every service man is an invaluable foundation for profitable radio business.

Write for information regarding this "service man's friend," today. Mail the coupon.

29 YEARS MAKING GOOD INSTRUMENTS

JEWELL

199 SET ANALYZER

Jewell Electrical Instrument Company
1650 Walnut St., Chicago, Illinois

Of course we want to know all about the Jewell Method of Set Analysis. Without obligating us send your book, "Instructions for Servicing Radio Receivers."

Name

Address

A new development that can be
used by 1000 industries

BOHNALITE

62% LIGHTER THAN IRON

Bohnalite as a light alloy is new only by comparison.

As time is reckoned, iron is an old metal. On that basis, Bohnalite is a new metal.

In other words, Bohnalite has long since passed the experimental stage, having been adopted by a number of leading manufacturers over a period of years.

Developed by Chas. B. Bohn, this new light alloy is revolutionizing many an industry.

First and foremost, Bohnalite is 62% lighter than iron yet it is just as hard.

Bohnalite has high and uniform hardness.

Bohnalite has great density.

Bohnalite has a fine grained structure.

Bohnalite has exceptional strength.

Bohnalite is ductile.

Scores of leading manufacturers in a wide variety of industries have replaced iron with Bohnalite *most advantageously*.

Over 1000 industries can still use Bohnalite and do not know it.

Those who are using this new alloy did not realize what a vast improvement Bohnalite would make until they investigated. That's exactly what we are asking you to do.

If you use a heavy metal in your product, let our engineers talk to yours.

We have developed a whole series of special processes. All of these are explained and the finished products illustrated along with detailed physical properties in a new book we have just published.

This gives the complete story of Bohnalite. Write for your copy today.

BOHN ALUMINUM & BRASS CORPORATION
DETROIT, MICHIGAN

New York Cleveland Chicago Pittsburgh Philadelphia



CHAS. B. BOHN

The authority who developed Bohnalite

THE WORLD'S GREATEST AND LATEST LIGHT METAL

Most Important Newspaper in \$90,000,000 Radio Market of Greater New York

A RECENTLY COMPLETED SURVEY by The New York Times indicates \$90,000,000 was spent in the New York market in 1928 for Radio purchases. Manufacturers and dealers find the unequaled volume of high quality circulation of The New York Times in this market an unusually effective means of obtaining the attention of the public.

The net paid sale of The New York Times on weekdays is over 425,000 copies; Sundays more than 750,000.

In the last three months of 1928 The New York Times printed a greater volume of Radio advertising than any other standard size New York morning newspaper.

In Radio news interest The New York Times is unsurpassed. Many readers who have profited by its information on Radio have expressed their thanks for the sane, dependable, interesting news. Complete broadcasting programs appear in The Times' weekday edition. On Sundays an average of five full pages of Radio news is printed in the Radio section, together with a forecast of programs for the entire week.

In 1928 The New York Times led every other newspaper of the world in volume of advertising. The record figure of 30,736,530 agate lines exceeded that of any other New York newspaper by 11,000,449 and was 1,105,068 lines in excess of The Times record of 1927.

The censorship exercised over its advertising columns keeps its pages clean and free from misleading, fraudulent or otherwise objectionable announcements. Thousands of lines of advertising are excluded from The Times each month because they do not meet The Times standards.

The New York Times

THE NEW YORK TIMES
TIMES SQUARE, NEW YORK

Send me a copy of The New York Times "Radio Survey of the New York Market."

Name

Address

.....



RAPID DEVELOPMENTS in radio construction include their steel housings.

THE CONSOLE for appearance, economy, handling and reshipment.

THE CABINET for rapid supplying of a great demand at lowest first cost.

THE CHASSIS for extreme accuracy in quick assembly; strength for heavy instruments, and continued true alignment.

THE SHIPPING BOX to house bare chassis from manufacturer to jobber, dealer and consumer who choose their own furniture.

VAN DOORN experience has kept pace by close co-operation with the manufacturer and readiness to comply with exacting needs.

The
VAN DOORN
COMPANY

OFFICES
CHICAGO
NEW YORK

FACTORIES - QUINCY, ILL.



Gun Shy!

Present set owners are excellent prospects, but they're a scary lot—*gun shy*.

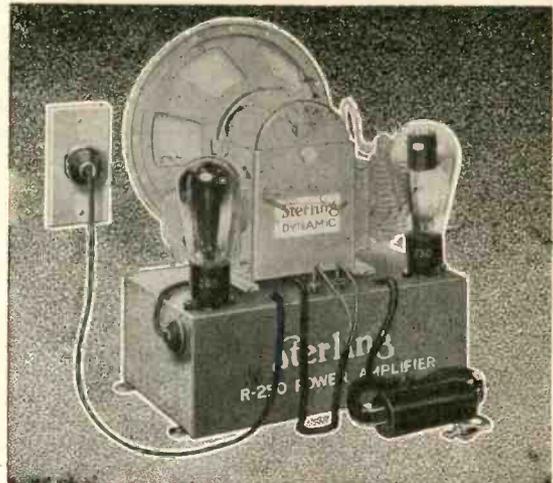
They are frightened by the constant advertising of complete sets, the buying of which involves a large expenditure and a terrific trade-in loss.

Your advertising need not scare these buyers. A most successful Ohio dealer states in all his ads that the reader's present set can be modernized by adding one or more of the new radio features. The ads pull. Set owners come to him for advice.

Once in the store, the prospect is graciously given an opportunity to hear the new sets. He often buys. Quite as often he spends his \$10, \$30 or \$50 to improve his present set, and will come back at some future time for a new radio.



Get the Prospect Into the Store!



Remedies—

Sterling offers America's Greatest Line for Modernizing Radio Sets.

SPEAKERS—The Sterling *humless* dynamic meets a vital demand of the industry. \$43, list.

The Super-Magnetic Speakers are the equal of many dynamics. Positively the best low-priced speaker. Compare!

\$38 POWER AMPLIFIER—The Sterling \$38 Dyn-Amplifier improves most radios. It adds a super-power tube, 210 or 250. Shown above with the Sterling Dynamic Chassis.

HUM ELIMINATOR—Kills the hum from any A.C. dynamic. Only \$3.50, list.

POWER UNITS—Sterling "A," "B" and "B-C" Power Units will electrify any set using D.C. tubes. Dependable, proven.

TEST EQUIPMENT—In addition to the test equipment for the home set owner, remember that the Sterling professional test equipment is priced low. It costs but little to equip completely each serviceman and the store with Sterling testers.



FREE!—Our little magazine, "The Sterling Radio Salesman," will be sent regularly to any radio salesman on request. Interesting and helpful.

Send for Complete Catalog.

THE STERLING MANUFACTURING COMPANY, Cleveland, Ohio

Sterling

23 Years of Electrical Manufacturing

McGraw-Hill Publishing Co., Inc.
JAMES H. MCGRAW,
Chairman of the Board
MALCOLM MUIR, President

Radio Retailing

The Business Magazine of the Radio Industry

EARL WHITEHORNE
Editorial Director
WILLIAM ALLEY
Managing Editor
M. E. HERRING
Publishing Director

Vol. 9

FEBRUARY, 1929

No. 2

Sell 3,000,000 SETS

This Year

LAST year the radio industry sold two and a half million sets. *This year we must sell three million.* Why shouldn't we?

There are nineteen million homes in America without any kind of radio. There are twelve million homes among them that are wired and using electricity and are ready for an A.C. set. There are obsolete battery sets in use today in four and one-third million wired homes that should be replaced with something modern and satisfying.

In other words, with all the world wanting it, there are still more than twenty-three million families in the U. S. A. that are denied the enjoyment of radio.

What a market!

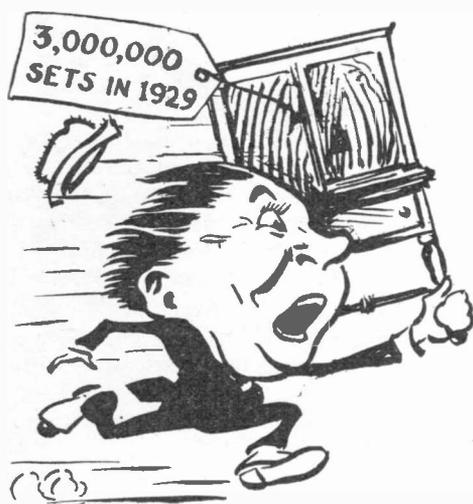
But that's not all. The value of radio to men, women and children will be greater and more appealing this year than it has ever been before. The improvement of reception and the improvement of broadcasting have made it so. People who never have wanted to own a radio are beginning to want one now. People who have been using sets of poor tone quality are eager for the better instruments available today and are only waiting until they feel able to spend the money.

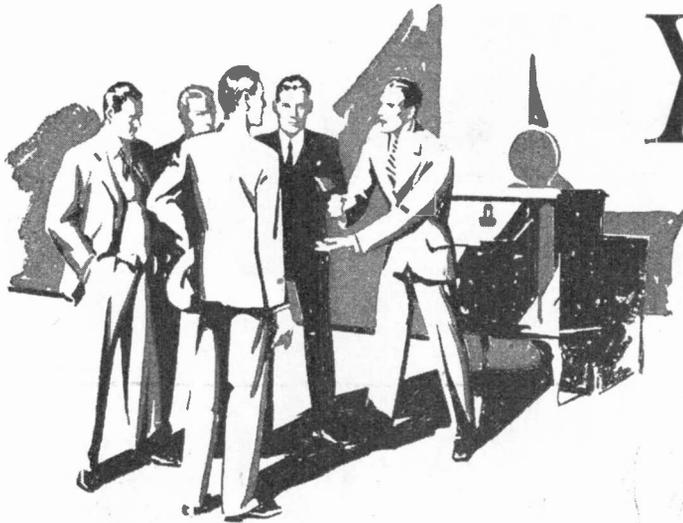
For there were many folk who, in the beginning, were prejudiced against radio. They heard the squawks of static and said—"Not for me!" But they are beginning to realize that program broadcasting has now become an artistic triumph. They have discovered that radio today means music of a quality that satisfies the soul.

And all it needs is selling!

Last year the election stimulated the natural growth of the market and made a bumper harvest. This year Smith and Hoover will not help the radio dealer. *But he can help himself!*

Three million sets! Each one of them will be sold in some dealer's town. That will mean twenty per cent more prosperity for the radio trade than in 1928. What *your* share will be depends on how *you* plan and what *you* do.





Your SALES

*How to get your share
of this year's 3,000,000 sets*

SELL 3,000,000 sets in 1929! That's a big order. But manufacturers are preparing their production schedules on that basis. And if their plans produce the twenty per cent increase that they are programming it is possible that 3,000,000 radio receivers will flow through the radio trade this year.

The tremendous manufacturing, distributing and merchandising operation involved in such a program presents the biggest sales problem that the industry has ever faced. And the dealer is the key man in the situation. For he it is who, in the end, must move the goods into the home. Therefore, on the completeness of his merchandising plans, and the skill, courage and enthusiasm with which these plans are carried out everything depends.

So the industry looks to the dealer and the dealer must look to himself. But the resources of the industry are organized to help him. Every wholesaler and every manufacturer is ready to co-operate. But first the dealer must be willing and know how to help himself. There are four fundamental things that he must do—

1. He must reach out and secure the business that can only be closed in the home. That means specialty selling.
2. He must make himself known and by popularizing the lines he sells, build up demand. That means advertising.
3. He must make it easy for people to buy. That means time payments.
4. He must face the necessity for overcoming the obsolete sets that stand in the way of many sales. That means trade-ins.

If his policy is right on each of these, his share in the sales harvest this year should be a good one.

1. SPECIALTY SELLING

THE first decision to be made is the part "specialty selling" will play in your 1929 sales program. "Specialty selling" does not necessarily mean house-to-house canvassing. It means any sales campaign carried on outside the store through salesmen on commission, whether they work house-to-house, or with a selected list of bona fide prospects.

The size of your market, your capital and the amount of time you can devote to personal supervision of the sales staff will determine the number of commission salesmen you will need. Averages for the country indicate that most stores employ at least two and often three out-

side salesmen on full time. More are added when special campaigns are planned. Four to six good men will usually be sufficient for the average store.

The most satisfactory method of payment seems to be a straight commission not to exceed 15 per cent, the salesman to pay his own expenses. Once the sales staff is set, the merchant himself should take personal direction of it. Sales staff meetings should be held every morning at which reports of the previous day are made. The current day's activities should be planned, and the men given definite names and addresses to solicit. The proprietor should see that each man's time is well planned before he leaves the store.

A sales record board should be kept, listing each salesman, the number of calls made, the number of demonstrations made, and the number of sales made. Free use should also be made of the telephone, and every salesman required to make a definite number of phone calls daily, in addition to his personal calls.



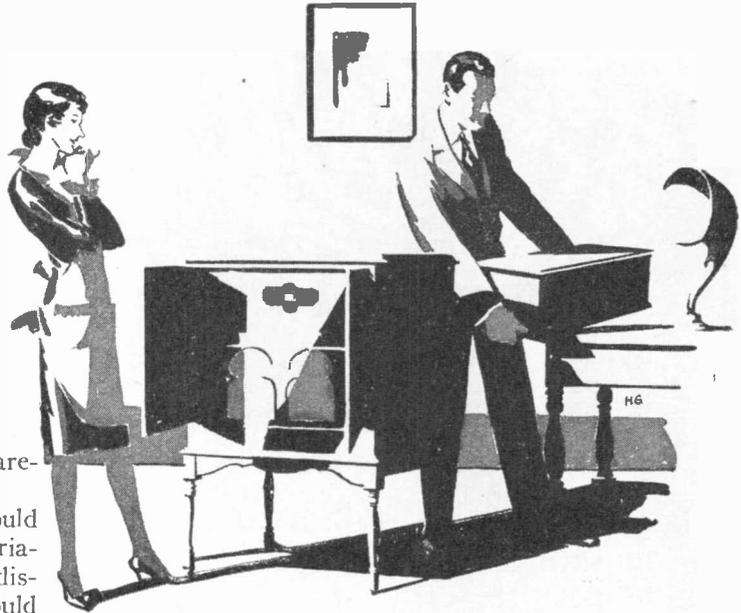
2. ADVERTISING

THE sales staff must be strongly supported by a judiciously laid out advertising program if they are to accomplish maximum results. It is not necessary to splurge. It is not necessary to spend a lot of money. But it is necessary that every dollar invested in advertising should support the store and help the salesmen.

A careful budget of proposed advertising expenditures should be made. Take five per cent of last year's total sales as a nucleus. As the season progresses, and if sales exceed last year's records, the advertising expense may be increased proportionally.

Probably the largest part of the advertising appropriation should go toward securing a mailing list, and names and addresses of live prospects. Coupon advertising in newspapers, offering a radio log or some other small useful article if the reader will fill out and mail in the coupon, has been found productive of excellent prospects. Deliberate solicitation of customers for names and addresses of "radio-less" friends is also a time-tried method. Lists of club members are often available, and the social

PROGRAM for 1929



news columns of local newspapers should also be carefully scanned.

The expenditure for direct mail solicitation should take up the largest portion of the advertising appropriation. Manufacturers' literature should be freely distributed, and personal letters to the liveliest prospects should be used as follow-ups. Check up at regular intervals to see that the proper amount of direct mail material is leaving the store.

An adequate amount of newspaper advertising should also be used to back up the efforts of your sales staff. Here again, manufacturers' helps should be taken advantage of freely.

Window displays and the arrangement of the store interior should be changed frequently during any period of intensive sales work. The windows particularly should have new points of interest at frequent intervals, and here, also, most manufacturers provide sales helps which will be found highly valuable.



3. TIME PAYMENTS

IF EVERY dealer is not already in a position to offer his customers time payment facilities, steps in this direction should be taken without further delay. Contract purchasing companies are constantly on the lookout for good dealers, and retailers who are not in a position to finance their own paper ought to consider seriously an arrangement with a finance company.

Dealers who finance their own paper should make the usual interest charge of at least six per cent on the unpaid balance. Selling a set on time, without charging interest, is an unsound practice, even though it may apparently be justified by competition. The dealer is tying up his cash capital for that period of time. He is actually loaning his customers money, and should therefore exact an adequate return on the loan just as though he were a bank or other money-lending institution.

4. TRADE-INS

TRADE-INS will undoubtedly play a larger rôle in the sales picture this year than they ever have before, whether or not you plan to increase your selling activities. The number of homes with obsolete sets clearly foreshadows that trade-ins will figure in sales transactions to a larger number than has ever been the case previously.

The first thing to decide is: How many trade-in sets can you accept without swamping your net profits under a deluge of second-hand receivers? Surveys among all classes of dealers have revealed that, if more than one new sale out of ten includes a trade-in, the dealer must watch his step very carefully. Yet the averages for the nation as a whole indicate that at least two sales out of five include trade-ins. That this high figure would spell ruination for any merchant attempting it goes without saying. The men who sell radio, then, will have to strike a middle course this year. Accept only as many as is necessary to hold the good will of your customers, and try to hit for an average not to exceed one trade-in in every five sales. Beyond that lies the danger zone.

How to figure the trade-in value of a used set—how much to allow the customer for it—is a problem which every individual dealer must solve for himself, weighing his own business and local conditions in the balance. The only safe and sure course to pursue is to make certain that the allowance for the old set does not exceed five per cent of the total selling price of the new set.

As this constitutes approximately the net profit on the new sale, the retailer has thus secured his cost-of-merchandise and selling expense, and leaves only his net profit to be made up from the resale of the old set.

With part of the dealer's net profits tied up in second-hand sets, disposition of them advantageously assumes serious proportions. The most commonly accepted practice is to let them accumulate, and then advertise them for what they are—"a big clearance sale of second-hand sets." Then, in course of time, follow up these buyers to purchase a new, up-to-date receiver.

And, for the dealer in rural districts, there are many farms not wired for electricity which offer a market for battery-operated sets. The rural market very often can also be reached on a purely price basis for the sale of A.C. trade-ins where farms are generally wired.

FURNITURE design, with its many ramifications, is a new study for the man who sells radio. This article explains some of the fine points of correct period design, and tells how to guide the customer in selecting a cabinet that will harmonize with the rest of his furniture

PERIOD

—How to

The average home-owner demands furniture—here are the types of period

NOWADAYS there are few people—women or men—who are not conscious of their homes in the sense of having deliberately designed and decorated them in accord with good taste. They are steadily being educated by magazine and newspaper articles; by department stores with their interior decorating departments and examples of smartly decorated rooms; by advertising; by store window displays. Harmonious home surroundings, with correctly matched furniture, are therefore no longer the privilege alone of the wealthy and those who can employ expensive decorators; they have been brought within reach of people of average means.

In buying anything new for the home, the purchaser desires it to harmonize with the furniture he already has. When the purchase is to be a radio he seeks the best instrument, mechanically and technically, of course, but also wants the cabinet which represents the most effective and harmonious piece of furniture for his room. It seems obvious that the heavy, impressive cabinet of formal Jacobean design would be wholly undesirable and out of place in a little informal Colonial sitting-room. Similarly, a cabinet belonging to the modern school of design would be a woeful blot on the landscape in a setting reminiscent of the delicate French tradition of, say, Louis XVI. Someone has said that if the radio is out of tune with the room, so will its tone be very much out of tune!

Taste swings one way or another in decoration as in

clothes; now this style is in vogue, now that. The man who sells radio, therefore, is faced with the necessity of keeping generally posted on what is smart in decoration and period furniture; his is also the problem of finding out what kind of a home his customer lives in, in order to recommend the most suitable cabinet. By a little judicious questioning he can learn whether the home involved is a house or an apartment, in town or country; he can then ask the direct question to discover what style of furniture dominates, and with that information, suggest the type of cabinet which will harmonize.

THERE are five types of rooms and furnishings generally found in present-day homes: 18th century, (chiefly English, and embracing Chippendale, Adam, Hepplewhite and Sheraton), early American, Spanish and Italian, French (especially the styles of Louis XIV, Louis XV, Louis XVI and the Directorate), and the so-called "modern" period. There are many varying characteristics of style within any one given period and these are probably most effectively presented in the

period rooms of art museums. There are certain distinctive details, however, which may be mentioned to help identify the five periods under consideration.

The furniture of the 18th Century England is very much in vogue at present. Broadly, the period comprises the general types known as Chippendale, Adam, Hepplewhite and Sheraton, all of which adapt themselves rather ideally to modern living conditions in town or country. There is great variety in furniture design and wide latitude of choice for the cabinet-maker. Strangely enough, earlier and generally less popular periods have so far been the ones featured in radio furniture. The Jacobean era, dating from the early 17th century, with its rather heavy oak and walnut pieces and its elaborate geometric panels



AFTER THE STYLE OF ADAM
Raised on its reeded legs, a cabinet with doors follows simple straight lines, but has exquisitely and delicately painted decoration.

DESIGN

Recognize It

that his radio set harmonize with the rest of his furniture that inspire radio cabinet design.

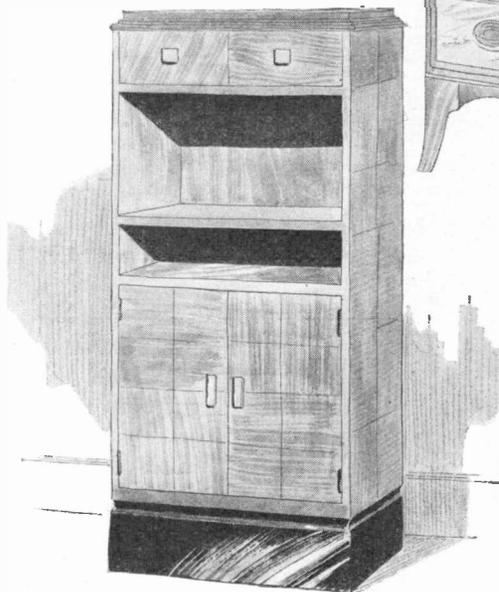
richly carved, seems so far to have appealed to the imagination of the majority of radio cabinet designers. The 18th century types, however, are far more "in fashion" everywhere.

Mahogany is the chief wood of the 18th century period, with some walnut carrying over from the directly previous Queen Anne and William and Mary eras, and a good deal of satinwood worked in, often in combination with the other woods. The silhouette of the furniture is generally rectilinear, with many swell or serpentine fronts, and carving is the most conspicuous decorative device. Inlay is also used, and some little painting. Cabriole legs (curving outward at the



HEPPLEWHITE BOOKCASE—SECRETARY TYPE

Sketched in an adaptation of the original idea suited to radio purposes, is a secretary of satinwood and mahogany. Cupboards might be arranged to simulate the drawers.



CABINET OF MODERN DESIGN

Angles and straight lines put together in architectural form have the added interest of wood grains running in diverse directions.

upper part and inward at the lower) with ball-and-claw feet are very much in evidence; bracket feet are also employed; and square feet, often tapering toward the bottom, are also noted on furniture of the 18th century.

All during this time there were chests, highboys, lowboys, cabinets and consoles which easily adapt themselves to radio design.

It is interesting to note, incidentally, that in every period from

earliest times, chests in one style or another have been extremely important and conspicuous pieces of furniture. That is fortunate, for the chest, often almost in its original design, lends itself better than most other pieces to the form of the radio instrument.

The secretary with drawers at the bottom and at the top glass doors protecting the shelves within, is very familiar, too, in the 18th century school of design. Chests of drawers in this time were sometimes made with the front of the top drawer letting down to form a desk, an arrangement nicely adapted to the radio. Corner cupboards usually had wooden doors at the bottom and glass ones at the top. Tables were oblong, as a rule, although there were plenty of exceptions, and the drop-leaf idea was used extensively. Console cabinets became important, designed usually with semi-circular or semi-oval front, mounted on short legs, the whole elaborately carved.



TAMBOUR-FRONT SECRETARY

A familiar type of Hepplewhite design, this secretary-desk, in its original form easily lends itself to radio purposes. The straight legs, inlay decoration and tambour doors sliding back to right and left, are keynotes.

EARLY American furniture continues to hold the affection of many people. From those who can afford to pay fabulous prices for genuine pieces to those who are content with the excellent reproductions now on the market at most reasonable prices, there

is a very real desire for this style of furniture. It should be reflected in radio cabinet design far more than it has been up to date.

In addition to mahogany, maple, pine, birch and some walnut were the woods used in the early days in this country. There are really two groups within this period, one a direct derivation from 18th Century English styles, just discussed, and often indistinguishable from them, and the other what may be called the farm or kitchen group. The latter, being cruder, gives precedence to



18TH CENTURY HIGHBOY
ADAPTED

To show how one of the classic 18th century types can be modified for radio furniture purposes, this highboy is sketched considerably lower than normal, but with characteristic pediment, cabriole knee, scroll design apron and brasses.

woods like pine, maple and birch, developed along the simplest possible design ideas, sometimes without embellishment of any kind. The turned leg is the rule, and the wood is finished with a natural dull gloss. In this group attention should be directed to the many cupboards built into rooms which suggest numerous ideas for radio cabinets.

Spanish and Italian modes of decoration are unquestionably important. They are familiar to everyone nowadays, however, and it seems almost unnecessary to do more than comment on them in passing. Hotel and apartment house foyers, lobbies of large moving picture

houses and other public buildings have found the heavy and elaborate dignity of these types well suited to pretentious and formal interiors. Furniture of this origin is also extensively used in private homes, and therefore is included in this list.

Oak and walnut are the featured woods, always elaborately carved and sometimes painted in addition. Chests are conspicuous pieces of furniture, resting almost directly on the floor, with only an arrangement of moldings by way of feet, or mounted on legs. Doors are used more often than drawers, a factor which makes them adaptable for radios. Italian and Spanish furniture is so distinct of its kind that it should seldom, if ever, be mixed with other periods.

THE French furniture usually selected today is that of the Louis XVI period, less ornate and far more classic than the types characteristic of the two preceding Louis. The *Directoire genre* is also a favorite with those whose taste runs to things French. Almost every known wood was used by French designers. Curves, carving and consoles were everywhere. This latter piece of furniture, the console, came into its own under the hands of the designers of this time, and can be inspiration for pieces adaptable for radio purposes. Mountings of brass and marble tops were devices resorted to, to increase the luxurious and rich quality permeating everything at this time.

The last period to be mentioned is popularly designated as the "modern" period. At first regarded as more or less of a freak which could not survive, this modern style has developed until it must be recognized as a permanent contribution to the history of furniture design.

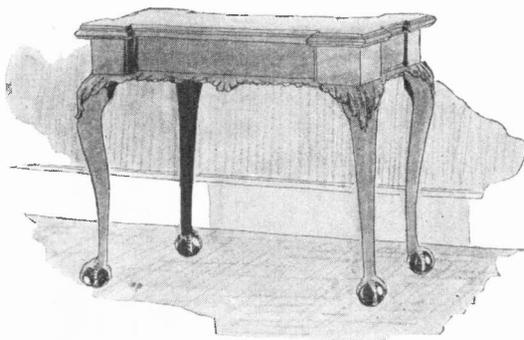
A great variety of woods is used, and it is the rule rather than the exception for several to be combined in one piece. The ingenious manipulation of different wood grains and wood colors is indeed depended upon for much of the design interest. Silhouette is simple, architectural and angular in the extreme. Most pieces are built low to the ground, some wholly without legs or feet. Handles and knobs contribute to design ideas,

as well as wood grain and tone, and so contrasting materials, other woods, ivory, leather and the like, are pressed into service. Mirrors are extensively used as constituent decoration for furniture, as are table tops, lamp stands, and similar pieces.

There is no lack of example for radio furniture correctly harmonious with current decorating fashion; with a little guidance; the customer can be satisfied not alone with a mechanically perfect radio instrument, but

also with an artistically correct and harmonious cabinet.

The appeal of a beautiful cabinet, designed perfectly to fit into the ensemble of a tastefully-decorated home, is a powerful influence in the sale of a radio set. And a knowledge of period design will be of value to the radio merchant when the sale hinges on the style of the cabinet.



A CHIPPENDALE TABLE

Of mahogany, this table, with its carved cabriole leg and ball-and-claw feet, is characteristic of its period.

RADIOLAS
RADIOTRONS
ACCESSORIES

ABSOLUTE
ELECTRICAL
REFRIGERATION

Henkel's Radio Shop

121 W. WASHINGTON ST.
Lansing, Mich.

No doubt, you have heard the story of the Innkeeper, who made out a list of the names of all the neighborhood huskies and posted them up in his window, with a heading across the top which read:

"ALL THESE I CAN LICK"

A few days later, a big strapping fellow strode in.

"Who posted that list of names?" he demanded.

"I did," said the Innkeeper.

"Well," the big fellow replied as he prepared to take off his coat, "my name is on that list and you can't lick me."

"Oh! Is that so?" said the Innkeeper. "Well, then I'll scratch your name off."

We've just put your name on our mailing list, because we think it ought to be there. But, like the Innkeeper, we may be mistaken. We'd like to have you put us right.

All we want is your simple "Yes" or "No" on the inclosed stamped postcard.

If you are interested in Electric Refrigeration or a new Radio or repairs or improvements on your old Radio, we hope you will answer "Yes" even if it's only a battery or tube needed.

But if you aren't interested and there isn't even a reasonable chance of your being interested, send back the postcard anyway. Better "No" than nothing even if it hurts.

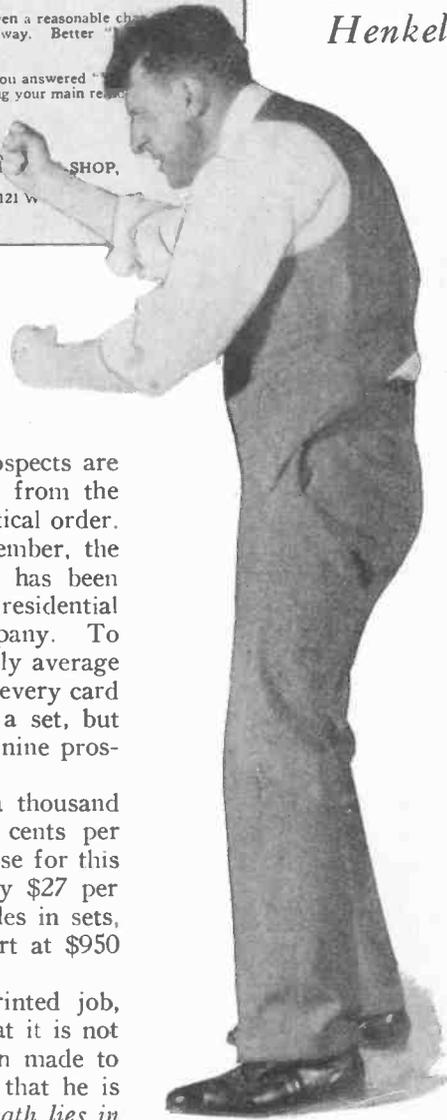
Of course it would be better for both of us if you answered "Yes". If you decide "No" perhaps you wouldn't mind stating your main reason at the bottom of the card.

We'd do as much for you.

HENKEL'S RADIO SHOP,
121 W. WASHINGTON ST.

"ALL THESE I CAN LICK"

A sales letter that is bringing 18 per cent response for Herman Henkel, radio dealer in Lansing, Michigan.



THE letter illustrated above is pulling an 18 per cent response for Henkel's Radio Shop, Lansing, Michigan — and from a rank and file mailing list.

Herman Henkel's direct-mail prospects are not hand picked. They are taken from the local telephone directory in alphabetical order. Every day since the first of September, the office girl, in her spare moments, has been addressing thirty envelopes to the residential subscribers of the telephone company. To date, Henkel has been getting a daily average of 5.4 return inquiry cards. True, every card does not represent a hot lead for a set, but nine a month do, and five of these nine prospects purchase sets.

This mailing piece costs \$4.70 a thousand to print. The postage bill is 3 cents per name. Henkel's promotional expense for this activity, therefore, is approximately \$27 per month. He estimates his added sales in sets, parts and services due to this effort at \$950 per month.

Observe that this letter is a printed job, that it carries no salutation and that it is not hand signed. No attempt has been made to deceive the recipient into thinking that he is getting a personal letter. *Its strength lies in its attention-getting humor, its naturalness, candor and disarming phraseology.* It is packed full of reader-interest.

Three of the fundamental principles of good letter-writing are as follows: have a definite message; deliver it in an interesting, clear and concise manner; and ar-

range its physical make-up so that the copy is easily read.

Henkel's letter meets these requirements fully. Its message: "Put us right on our mailing list by a simple 'Yes' or 'No' answer" makes it easy for the fellow on the other end. And the story of the nery innkeeper is so featured that it at once captures the reader's interest, because the first thing that meets the eye upon opening the letter is the bold assertion, "All These I Can Lick." Somehow, one just has to read that story. Then, when the reader gets down to the end of the letter, he is appealed to by the line, "We'd do as much for you."

FINALLY, the use of plenty of space and short paragraphs contributes greatly to the readability of the letter. Its effectiveness is indicated by the following analysis of the first hundred cards that were returned. Ninety per cent of the signers wrote some comment in the ample space provided for this purpose. Of this group, sixty per cent indicated an interest in a new set, or in service for their present one, sufficient to justify a telephone or personal follow-up.

This showing is particularly impressive because Henkel circularizes a hit-and-miss list. The advantage of so

doing however is found in the fact that this concern now reaches many prospects formerly unknown.

"Hardly a week goes by but witnesses personal visits to our store from two or more of these brand-new customers," was Mr. Henkel's concluding statement.

They STOPPED



When customers stop coming in, what shall a dealer do? This article tells how one merchant successfully solved this vital sales problem.

THE problems facing the Deluxe Radio & Equipment Company of Buffalo, New York, are the same as those that confront every retail radio shop, large and small. The two biggest puzzles, of course, are how to get the people to the store front and, having gotten them there, how to get them *inside* the shop.

William Pierce, owner and manager of the Deluxe store decided that advertising was the answer to his problems and for a start, initiated a direct-mail campaign and tied it up with his newspaper advertising.

But, the Deluxe is a small shop and its capital is limited. For a time, business boomed, but later, reasonable profits were not forthcoming. The trouble was, and Mr. Pierce knew it, that he had too great an overhead sunk in expensive, even though effective, advertising. In other words, if Mr. Pierce could secure the same volume of trade that he was getting, with some less expensive form of advertising, those desired reasonable profits would be realized.

The Deluxe store is located on Franklin Street. The transient trade, the pedestrian traffic, and the window shoppers, were going up and down Main Street, two blocks away from Franklin Street and the Deluxe shop. But Deluxe couldn't afford a Main Street location, so Pierce started out to get into his store the comparatively few people that passed by his shop. If he could be sure of getting these people into his establishment, then he could go out with more and better-grounded confidence for the rest of the city.

His first two moves were to purchase a large electric sign and to pay more attention to his window displays.

The purchase of this sign represents the only large outlay of actual cold cash of the whole successful campaign. The sign can be seen for two blocks either way on Franklin Street and is, Pierce believes, highly effective and efficient.

Working on his window displays, Pierce made cleanliness his first objective. He washes his window and oils the window floor every day. In addition to this clean-up process, he changes his displays daily. The electric sign and the immaculate and ever-changing window displays had the desired effect. People were noticing the shop, talking about it, telling their friends about it and, best of all, coming to the store front for a look at the window.

Coming IN!

So PIERCE—

Merchants
Who Have Made
Radio Pay

No. 24

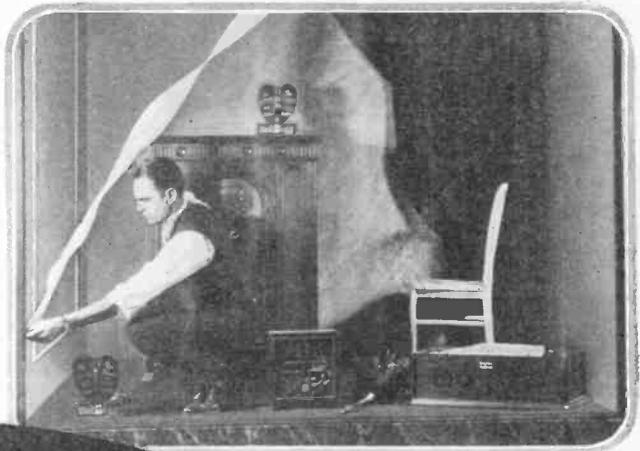
The only remaining string to be caught up was the procedure necessary to attract trade from the entire city—again, of course, without recourse to expensive advertising.

Two new and novel steps put this across. First, Pierce approached a local broadcasting station, WEBR, with a unique proposition.

He offered to do all the repair work necessary for the station in return for one hour "on the air" each week. WEBR agreed. Pierce took Sundays, from seven to eight o'clock in the evening for Deluxe hour, making his choice of time with the idea of going over the air when there was the least competition. He devoted his broadcasting time to the development of a prize contest plan which was so successful that it produced from 200 to 350 calls a week and increased his sales volume 200 per

1. *Changed Windows Daily*

2. *Put Up an Electric Sign*



3. *Broadcast Once a Week*

4. *Made Installations in Neighboring Stores*

cent in seven months. That was the first method adopted by the Deluxe shop to attract city-wide trade. The second method was just as unique.

About seven months ago, a new restaurant, known as Sprenger's Dutch Tavern, was opened around the block from the Deluxe store. It forged right to the forefront as one of the best and most unusual of Buffalo's eating places. One of the attractions of this quaint dining spot was the radio-phonograph system which had been installed by the Deluxe company and which included \$800 worth of equipment alone. It actually brought much "curiosity business" to the Dutch Tavern; sight-seers who came to be shown and remained steady customers of the restaurant.

People began to deluge Charlie Sprenger, owner and operator of the Dutch Tavern, with inquiries about the set. He referred them to the Deluxe Radio & Equipment Company at 199 Franklin Street, right around the block.

Then, at Sprenger's request that he do something about the inquiries that were taking up so much of his restaurant time, Pierce had 2,000 cards printed. These were placed on the cashier's desk in the Tavern. Four months later, 2,000 more cards had to be printed—mute testimony to their effectiveness!

Pierce figures that this radio-phonograph installation job has been worth at least \$3,500 to him in additional business.



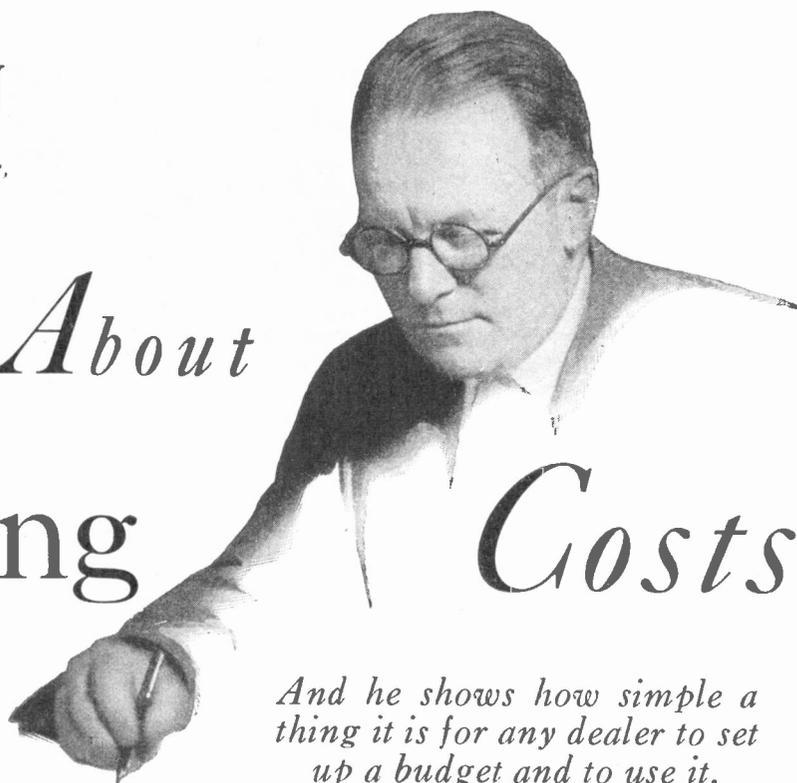
S. J. RYAN

President of Rines Brothers Company, Portland, Maine,
and Merchandising Counsellor to "Radio Retailing"

Talks About Controlling Costs

The way to control cost, he says, is by the simple operation of an ordinary budget.

And he shows how simple a thing it is for any dealer to set up a budget and to use it.



BOIL it all down and there are just four fundamental elements in the retailing business. They are—sales, expenses, inventories and profits.

The prime objective in it all, of course, is profit. But unless the other three basic factors are in balance profit will not materialize. This is so simple a truth that few merchants ever think much about it. They seldom deliberately sit down to look it in the face and analyze their own operations to see to what degree they are maintaining this balance in their business. But it is a good thing to do. It is for that reason that, last month in *Radio Retailing*, I talked about inventories. This time let's discuss expense and how to control it. Here is an ever-present problem in every store.

There are two kinds of expense. There is uncontrollable expense, which is prevalent in many forms, but after all is of an incidental or secondary character. There is controlled expense, which is responsible for practically all of the profit in retailing. It is the latter that I am going to dwell upon.

The day has long since passed when "hit and miss" methods of retailing will prove successful. In my opinion, there is absolutely only one way to assure the retailer of the profit to which he is entitled for his efforts and that is through a budgetary control of his expenses.

Probably most retailers will take issue with me on this point and contend that sales volume is the answer to profitable operation. I contend, however, that the amount of the volume is not the measure by which to judge the success of a retail enterprise, but that it is the *cost* of the volume! And this is often proved, for it is not at all an uncommon thing for a retailer to lose more money when he does a business of, let us say, two hundred thousand dollars than when he sells one hundred thousand. It is a fair rule that for every dollar of expense that you spend, you must do twenty to twenty-five times as much sales volume. And that is not always so easy to accomplish.

Merchants large and small are practically a unit in

acknowledging the necessity of expense control, especially in these days of increasingly intensive competition—and of rising costs. We frequently delude ourselves by taking it for granted in some situation that the way to solve this problem is by increasing the volume. But there is no solution in that direction unless it is a profitable volume, and that cannot be so if the expense is not controlled.

WHAT IS BEST METHOD OF CONTROL?

ALL right, then—What is the best method of controlling expense?

I believe that there is only one *best* method and that is through a budget. To my mind this is conclusively proven by the fact that not only business institutions, but states and nations have in late years adopted the budget method of expense control as the only sure way of keeping expense within bounds.

When it comes to the small retailer, I believe that the greatest difficulty in selling the idea of a "budget" is that it seems to be such a formidable word. He visualizes the necessity of bookkeepers, accountants, adding machines, and all that sort of thing. But as a matter of fact the operation of a budget is in itself the simplest kind of a process. It merely means recording your expenditures in some systematic manner. Budgetary control consists of putting down your expenses in advance and then managing your business in such a way as not to exceed these expenses.

I know from personal experience that when you conscientiously devote yourself to making out a budget you find items of expense in your operation which you can very well do without. And this is vital to profits. Also unless you can run your business at a profit you have failed as a merchant.

It is true that most merchants, even today, do not use budgetary control of expense. But the most progressive merchants do. And were I a banker considering a loan to a retailer I am very certain that the fact that he had

a firm grasp upon the control of his business expense would be a very considerable factor in my decision.

There is no reason to fear a budget. It does not require the services of an expert accountant. The merchant himself or the ordinarily bright young man or woman who takes care of his books can work it out and maintain it. And as you work out your budget of expense you will be impressed with the fact that it is quite difficult to make a profit in the retailing business. You will be impressed with the fact that the reason for this is because you are spending too much money on certain unprofitable practices and this will be followed by the natural resolution to remedy such conditions.

For retailing is a business of small margins. The element of turnover looms large because it is the repeated profit on the dollar of capital investment that counts rather than the larger percentage of profit upon the single sale. In this respect distribution differs radically from production. And this makes it all the more important that these small repeated profits be protected.

HOW TO SET UP BUDGET CONTROL

HOW can you set up a budgetary control of expense? It can be done very simply. All it requires are some ruled sheets of paper and a pen or pencil.

The costs of any business readily divide themselves into the fixed expenses such as rent, taxes, etc., and the variable expenses, such as salaries, advertising, etc. It is rarely the fixed expenses that get the merchant into difficulty. In other words, the expenses over which he has the least amount of control are the expenses which usually cost the merchant the least amount of trouble. The expenses on which he has to make decisions from day to day and month to month as to how much he is going to spend for this or that, are those that create most of the havoc.

You take a big sheet of ruled paper, or a ledger, or anything else handy that will serve the purpose. Down the left hand side use the first wide column for listing the various individual items of expense. Then across the top you rule off twenty-six columns, two for each month of the year and two for the yearly totals. One of each of these thirteen columns you will head up "planned" and the other thirteen columns you will head up "actual." In each of the twelve columns under the heading "planned" you will put down the expense which you estimate you will incur that particular month for the particular item that appears in the left hand column. At the conclusion of the month's business you will enter in the "actual" column what you have actually spent.

Naturally in making out this budget you will have to

make a conservative estimate of your sales by months for the year. You will next have to figure out what your gross margin on these estimated sales will be, because it is from the gross margin that you will have to meet your expenses. It is very good practice at the same time to estimate your inventory at retail by months in the budget. I suggest retail because all of your other operations are based on retail prices.

In arriving at the gross margin that you will receive for each month's operation, you will have to take into account your sales at retail and the cost of such sales. Now the cost of these sales for the purposes of a budget consist merely of the price you have had to pay for the merchandise, plus any other accrued expense such as incoming freight or express and less any cash discount you take advantage of. For example: you buy one hundred dollars worth of merchandise at a discount of 40 per cent plus express charges of two dollars. If this merchandise is sold during the month, the cost of the sale for budgetary purposes is sixty-two dollars, leaving you a gross margin of thirty-eight dollars to offset all your other expenses.

These expenses consist of such items as rent, newspaper advertising, other forms of advertising, taxes, interest, light, heat and power, a reserve for bad debts, furniture and fixture expenditures, office expense, travel, insurance, etc. These expenses are shown rather graphically in the illustration included in this article. Much of course depends upon the division of expense. I suggest

that you divide your expenses into as many separate items as you possibly can without getting yourself involved in a maze of bookkeeping. Selling expense, for example, should be merely the ratio of salary paid as against the sales made and should not include such items as delivery, etc. These should be entered separately so that you have an accurate gage upon what it is actually costing you to sell goods, to deliver goods, to make customer adjustments, etc. In this way you will secure a composite

BUDGET SHEET						
	JANUARY		FEBRUARY		TOTAL	
	Planned	Actual	Planned	Actual	Planned	Actual
NET RETAIL SALES						
COST OF MDSE.						
GROSS MARGIN						
OTHER INCOME						
GROSS INCOME						
Exec. Salaries						
Emp. Salaries						
Sales Commissions						
Rent						
Light, Heat, Power						
Advertising						
Telephone						
Stationery, Supplies						
Postage						
Gas, Oil, Tires						
Auto Repairs						
Garage						
Mdse. Depreciation						
Auto Depreciation						
Fixture Depreciation						
Insurance						
Taxes						
Interest on Notes to Pay						
Trav. Exp. & Entertainment						
Other Exp.						
Total						

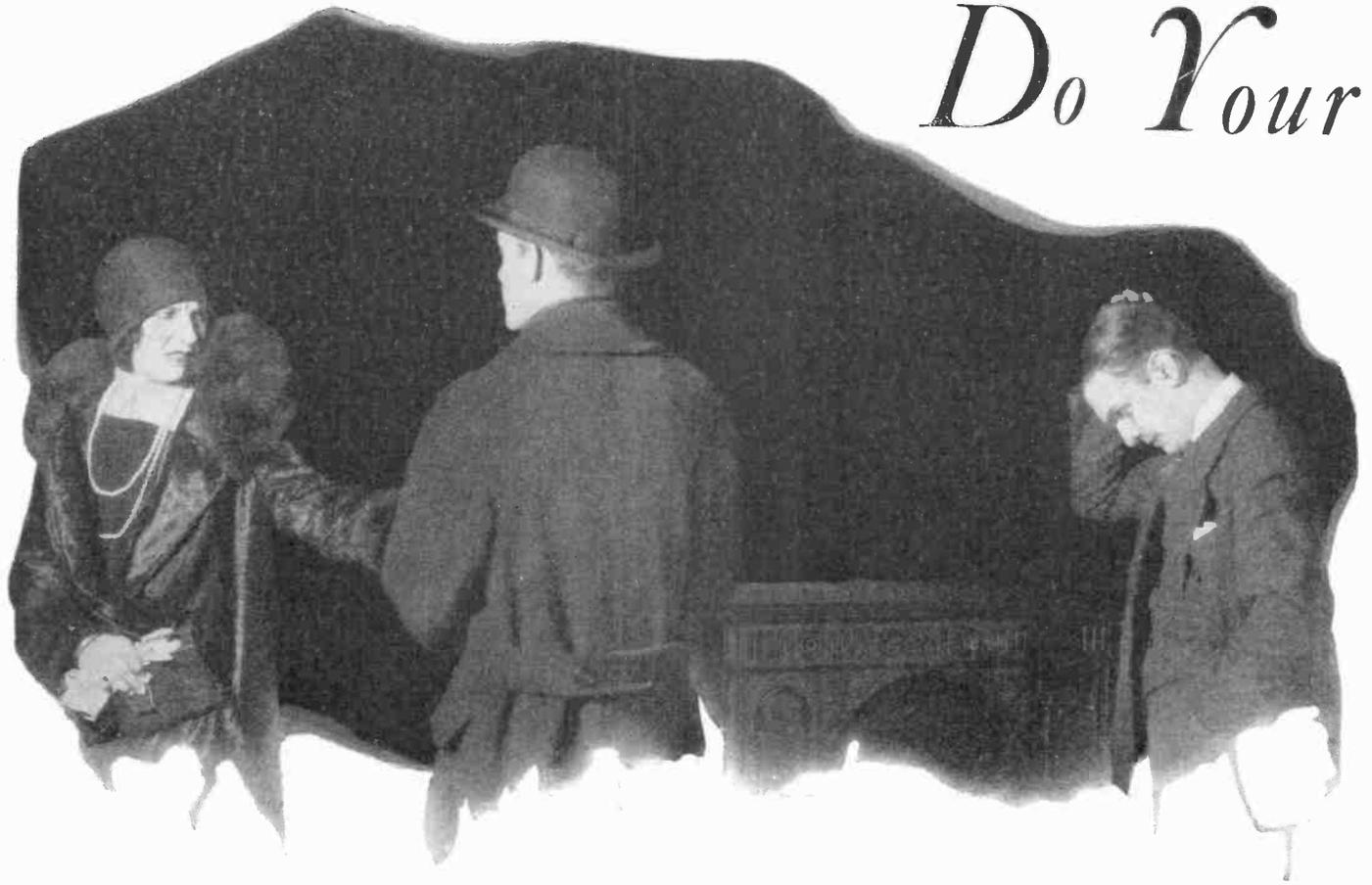
A simple and easily made expense-control sheet

picture of your operations that is not possible in any other way that I know of. It cannot help but lead to more efficient operation. Unless your fixed expenses, such as rent, etc., are altogether too high, I would suggest that you disregard them and confine your attention to the controlled expenses of which I have been talking.

From my personal experience I feel certain that after you have used a budgetary control of your expenses for a few months, you will be surprised to find many things you can do without in your business. They are apparently insignificant items here and there—but the total may well yield to you the profit which you have not

Please turn to Page 48

Do Your



MERCHANTS selling phonographs and phonograph records always follow events of musical interest and closely tie in their sales and advertising with any great singer or musician enjoying local popularity at the moment.

Radio salesmen have not always learned to take advantage of broadcast programs in the same way. When the test is extended to other members of the sales force not in the radio department, very few of them can be counted upon to know what is scheduled to be heard on the air for the coming week. The same salesman who will know all about the local concert of some famous singer will be found to be altogether ignorant of the fact that the same singer may be heard over the radio a day or two later.

When Mr. Sturdevant, head of the radio department of the Sherman, Clay chain of music stores, located from one end of the Pacific Coast to the other, determined to check up on the way radio was being sold in the various stores, he found two conditions which he thought were unsatisfactory. The first of these was the general ignorance on the part of salesmen and officials in all departments of the technical advances in the radio field and a consequent lack of sensitiveness to market trends. This was apt to be reflected in the retention of obsolete material in local stocks. The second was an almost universal lack of knowledge concerning radio broadcast programs.

Frequently, great artists or historic events were scheduled to be heard over the radio during the week, but there were few in the organization who knew even of these. When it came to the finer details, of which many worth while are always available, practically no one could give him satisfactory information.

By C. Grunsky

He set out at once to remedy these faults. The first, that of lack of up-to-date technical knowledge, was met by instituting regular sales meetings at which a course of study along just these lines was provided. The company maintains a very active research department in the technical field, which is constantly testing out every new set of importance, whether the company intends to carry it or not, in order that its respective points of strength and of weakness may be known. This information is now regularly passed on to the sales organization.

To cure the second fault, that of lack of information with regard to broadcast programs, a little 4-page bulletin of envelope-stuffer size was published entitled "Hits on the Air." About two thousand of these were published the first week and distributed to employees of the Sherman, Clay company with the request that they familiarize themselves with the contents and pass them on to the customers. Only the highlights were mentioned—programs really worth while from some literary or musical standpoint as well as football game broadcasts and political speeches of unusual general interest.

RESULTS were immediate. One clerk in the wrapping department of the San Francisco store included one of the little bulletins in a package which was taken home by a woman residing in the nearby community of Burlingame. The customer read the program, saw the name of an artist whom she knew, called up the local store of the Sherman, Clay company in her own town and asked to have a set sent out so that she might hear the program. This resulted in a cash sale.

A number of such incidents convinced the local managers of the value of the little bulletin and requests came

Salesmen Know the PROGRAMS?

These men didn't—so the Sherman, Clay Company music stores issue a weekly bulletin of radio programs. Result: 35 per cent increase in volume during 1928.

pouring in for more. At the present time, the number published varies between 25,000 and 50,000 each week.

Their use is not confined to salesmen of the radio department, but they are distributed to every salesman in the store and a supply of them is placed at strategic points for distribution to the public. Here is an example of how the plan works.

A woman purchasing a song in the sheet music department has her attention called to the fact that the artist famous for singing this song is performing over such-and-such a station on Wednesday. She is handed a program. If she appears interested but says she hasn't a radio, the conversation is continued, not

(Please turn to next page)

"Hits on the Air,"
the four-page
weekly bulletin
issued to the sales-
men of the Sher-
man and Clay
stores.

Tune in
and enjoy these
wonderful
programs

Hits on the air
Week of October 14th to 21st

October 17th—7:30 to 8:00 P. M.
DEMOCRATIC BROADCAST
over the NBC system.

October 18th—6:00 to 6:30 P. M.
REPUBLICAN BROADCAST
over the NBC system.

October 19th—7:30 to 8:00 P. M.
DEMOCRATIC BROADCAST
over the NBC system.

NBC SYSTEM PROGRAMS (National Broadcasting Company) are released through the following stations: KPO, KGO, KFI, KGW, KONO, KHQ.

SUNDAY, OCTOBER 7th

10:00 to 11:00 A. M.—KYA—
Interpretation of the Examiner Comic Strip, featuring Virginia Davis, pianist.

10:00 to 12:00 M.—KFRC—
Home Sweet Home Concert.

3:00 to 4:00 P. M.—
The NBC system presents Collette Menon, pianist, during the Sunday Afternoon Concert.

6:15 to 7:15 P. M.—
Two brilliant stars in the operatic firmament, Frances Alda, soprano, and Mario Chamlee, tenor, will be heard from New York during a transcontinental Atwater Kent Radio Hour, broadcast through the NBC system.

9:00 to 10:00 P. M.—
A program of classical music will be played by the Standard Symphony Orchestra over the NBC system.

MONDAY, OCTOBER 8th

5:00 to 6:00 P. M.—KYA—
"Who's Who Hour" featuring Little Eddy Brown, blues singer.

7:00 to 8:00 P. M.—
The NBC system will broadcast the R. C. A. Hour with Henry M. Hyde's talk on Astrology.

8:00 to 9:00 P. M.—
Rudolf Seiger's Shell Symphonists will offer compositions by Rudy Seiger during their broadcast over the NBC system.

8:00 to 10:00 P. M.—KFRC—
KFRC presents the well-known "Blue Monday Jamboree."

9:00 to 9:30 P. M.—KPO—
Cycle of Life—This episode is going to be called "Childhood Days".

TUESDAY, OCTOBER 9th

7:30 to 8:00 P. M.—KYA—
Merchants' Broadcasting program featuring Jean May.

8:00 to 8:30 P. M.—
The opera bouffe "Mascala" will be presented during the Eveready program broadcast by the NBC system.

9:00 to 10:00 P. M.—KGO—
The Pilgrims.

FOOTBALL GAME!
Stanford vs. U. C. L. A., broadcast over KPO, Saturday, October 13th, 2 o'clock.

9:00 to 10:00 P. M.—KPO—
The Kolster Hour.

WEDNESDAY, OCTOBER 10th

8:00 to 10:00 P. M.—KYA—
Broadcasting Senator Robinson's speech (Democratic Candidate for Vice-President), from the Dreamland Auditorium, San Francisco.

8:30 to 9:00 P. M.—KFRC—
Song Recital by Bob Olsen.

9:30 to 10:00 P. M.—
The NBC system presents the Midweek Concert, featuring Edna May Hamilton and Harold Dana.

THURSDAY, OCTOBER 11th

7:00 to 8:00 P. M.—
Carrie Jacobs Bond, beloved composer of songs known the world over, will be presented to radio auditors in a Los Angeles studio program broadcast by the NBC system.

8:00 to 9:30 P. M.—KPO—
Caswell Coffee Travelogue, with music—a visit to Panama.

8:30 to 9:30 P. M.—
The NBC system offers the Grand Opera Alhambra with four vocalists and the National Concert Orchestra.

11:10 to 12:10 P. M.—KFRC—
Midnight Concert by the KFRC Concert Orchestra, directed by Frank Moss, Sherman Nelson, soloist.

FRIDAY, OCTOBER 12th

6:00 to 7:00 P. M.—
Direct from New York, a Wright Revue will be broadcast through the NBC system.

9:30 to 10:00 P. M.—
Creating an atmosphere of ethereal delight, a "Mass Magic" presentation will be broadcast by the NBC system.

10:00 to 11:00 P. M.—KGO—
Western Artist Series Concert.

SATURDAY, OCTOBER 13th

7:00 to 8:00 P. M.—
Dance music, played by a 25-piece orchestra at New York, will be broadcast during the Lucky Strike Hour over the NBC system.

8:00 to 9:00 P. M.—
PRILEGI! With the radio listeners as the audience, and a complete new bill announced, the performance at the new Pilsner Theatre will be sent over the air by the NBC system.

An enjoyable hour of music presented by Sherman, Clay & Co. over KFRC every weekday between 12 and 1 P. M.

HEADQUARTERS for

Radiola
Kolster
Gilfillan
Victor
Brunswick
Columbia
Atwater-Kent

Don't fail to visit our
MOTION PICTURE
DEPARTMENT
Bell & Howell, De Vry, and Eastman
cameras and projectors
SOLD ON EASY TERMS

Sherman Clay & Co.
CALIFORNIA · OREGON · WASHINGTON

Two thousand of these program bulletins are printed every week and distributed to the employees with the request that they familiarize themselves with the information provided and to pass them on to the customers.

infrequently ending in her being referred to the radio department. The store offers \$2 to any employee turning in a prospect to whom a sale is later made. Record is on hand of the employee of one sheet music department who made \$60 in a single week by such methods. Opportunities such as this stimulate others to familiarize themselves with the programs and to take similar advantage of any tie-in which their own department offers.

In this connection, the salesman is allowed to offer a free trial of a radio set for a single night—a policy which has proved satisfactory in meeting requests to hear special programs, without encouraging the person who merely wishes the use of a radio set for nothing.

MORE important even than the increase in the number of prospects obtained in this way, is the fact that the whole selling of radio is thus taken out of the competitive price field and is placed on the same plane as the selling of any other musical instrument. Emphasis is placed on the service which the instrument can perform. There is no discussion of price and the customer is not permitted to think in terms of competitive offers in these fields. As a matter of fact, the selling of the specific instrument becomes a secondary affair—the selling of the idea comes first.

This same idea of programs is emphasized in both window displays and in advertising. This great firm allots 20 per cent to its overhead in the radio field, of which 8 per cent goes to direct-selling costs, 4 per cent to service, 3 per cent to executives' salaries, 2 per cent to general expense and 3 per cent to retail advertising. Expenditures for radio in the advertising field are pro-

portional to the importance of radio in the sales totals and come to about fifty per cent of the total for the entire business. This is spent for two types of ads—those which are institutional, keeping the name of the company in an impressive way before the public and those which emphasize the programs. Ads introducing specific instruments, of course, fit in under both these classifications.

In almost every ad, moreover, some reference is made to the program side of radio, a particular feature of timely interest being announced or a general reference made to the types of program available.

Radio programs are announced just as current concert programs are announced in the windows and frequently the whole display is centered about some prominent feature, as, for instance, the presidential acceptance speeches and the opening of the football season. Just as the company believes that its province is to sell music, rather than any one musical instrument, so also does it consider that its aim is to sell the best of the material available on the air.

As a result of this policy, the company's radio department has grown in the six years since its inauguration until now it represents some

50 per cent of the firm's business. In 1927 its business showed an increase of 35 per cent over 1926 and it is expected, according to present records, that 1928 will show at least a 35 per cent higher volume of sales over the previous year. Mr. Sturdevant credits the increase, if to any one thing, to the fact that every employee of the company has become familiar with the type of entertainment that radio has to offer and has become, in consequence, a better radio salesman. They have all learned how to talk intelligently about radio programs.

ATWATER KENT



Near Hoover's formal acceptance of the Presidential Nomination



Saturday, August 11, 3:30 p.m.—N.B.C. (Pacific Coast Network)

At least thirty million people will hear the impressive ceremony via radio over a hook up that will cover the entire continent and more of Europe. This is the first time in history that 30,000,000 persons will be able to hear a presidential candidate accept the nomination of his party and outline the issues on which he will lead his campaign.

Atwater Kent is but one of the few radio sets that will be particularly interested in the new model 40 installed in the exclusive Sherman, Clay & Co. console cabinet. This set has an A.C. operated and incorporates advanced 1928 radio features: greater volume, greater selectivity, four reproduction of the higher registers, new power pack of the most approved type, increased volume.

Combined with the famous DYNAMIC SPEAKER, this set gives remarkable realism, clarity, and brilliance of reproduction. You can follow the news right down the field—hour every hour—with perfect ease and comfort. No distortion. This is an absolutely superior set on batteries. A.C. tubes, \$164.

Sherman, Clay & Co.

Every and Radio Store, San Francisco

The BIG games are here!



A Radio Value
Obtainable only at
SHERMAN, CLAY & CO.
Atwater Kent
(Model 40)
And the famous
Dynamic Speaker
Attractive Console Cabinet
\$164
Complete

Atwater Kent, Model 40, marks a decided radio advance; greater selectivity; four reproduction of the higher registers; new power pack of the most approved type; increased volume.

Combined with the famous DYNAMIC SPEAKER, this set gives remarkable realism, clarity, and brilliance of reproduction. You can follow the news right down the field—hour every hour—with perfect ease and comfort. No distortion. This is an absolutely superior set on batteries. A.C. tubes, \$164.

Sherman, Clay & Co.

Every and Radio Store, San Francisco

The advertisements of the Sherman, Clay stores feature broadcast programs that are of timely interest.

S. J. Ryan Talks About Costs

(Continued from page 45)

succeeded in securing heretofore. Or it may substantially increase the one which you have been securing.

A budget is practical for every business, large or small. Men are apt to forget that in every small business there occurs almost every element that is present in the larger ones. The control of cost is, therefore, no less vital because the operation is not large. Our company operates stores doing volumes of five hundred thousand, one million and two million, but we use an identical budget for each one of them and the differences are negligible. If we operated stores doing one hundred thousand dollars or fifty thousand dollars, or less, we would most certainly have a budget control in every one of them.

I most emphatically believe that a store with a budgetary control will make more net profit than a store doing even

50 per cent more volume that operates under the old "hit or miss" method of expense control. And the cost of installing and operating a simple system of budget control will be most surely offset many times over by the savings effected.

And that, of course, is the reason why American business, which has always shown itself to be most readily adaptable to progressive ideas, is rapidly adopting controlled expenses as an essential part of retailing.

In the past few years we have had some excellent examples in local, state, and national government of the value of budget control of expense. This has not resulted in inefficiency by any means. The same thing is true of manufacturing and one of the prime reasons why American manufacturing has progressed so marvelously is because of the ability developed in the control of expense in production. But this has not been so apparent in the field of distribution.

Who Owns the Radio Industry?

Comments from prominent men of the industry

"Radio Is Inherently Independent"

Radio certainly has stood and will stand on its own feet as an industry. It does not seem correct to maintain that radio is either a musical device or an electrical device. Every new art must use prior art and electricity has rather been a means of further development than a cause of radio, whereas music has been simply one of the forms of entertainment and education available through the means of radio. In other words, radio is a peculiar art which has developed and has made use of electrical principles.

The question of who sells radio can be just as broad as who sells any appliance or necessity for the household. Certainly, radio has graduated from the class of a luxury into the class of a necessity and as such would find its selling channels to be almost every means of reaching the ultimate consumer.

ARTHUR MOSS, *President*,
Electrad, Inc.

New York, N. Y.

"Most Radio Manufacturers Have Grown Up with the Industry"

I want to congratulate you on the sound position which you have taken in your recent statement of policy entitled "Who Owns the Radio Industry?"

One might naturally expect a publication of the McGraw-Hill Publishing Company, who have been so closely associated with the electrical industry for many years, to be so affected by this relationship as to be prejudiced on this important view of industry relationship and to fail to see the true position in the industrial field that radio occupies. This, however, is not the case.

In the first place, are the manufacturers of radio equipment, members of the electrical industry? In order to get a close approximation of this I have just tabulated the members of the Radio Manufacturers Association which, with a very few exceptions, covers all of the worth-while radio manufacturers in the United States, and I find that approximately 85 per cent of the present manufacturers either have grown up in this new industry without prior relationship with the electrical industry, or have come over into this new industry without previous experience in electrical manufacture. From the manufacturers' viewpoint then, the facts do not indicate that the manufacturers of radio equipment, except for a small percentage, have been or are related by experience with the electrical industry.

Your editorial outlines the facts from the distributors' angle and these facts speak for themselves. Here it is made evident that the electrical industry does not dominate the field.

Where else must we turn, therefore, for further light on this subject? Naturally to the opinion of the American public. Can there be any doubt that the broadcast

listeners in the millions of homes in this country, receiving information, entertainment and descriptions of national affairs even as they are happening, consider the industry which has created this marvelous development of modern science anything but a separate, distinct entity of industrial development?

The radio industry has taken its position in the public mind alongside of that other industry close to its heart—the automobile industry. It has been recognized by the Congress of the United States in the creation of a special commission dealing with these problems and will continue to stand on its own feet in working toward a final development, the importance and magnitude of which few of us at this time now understand or appreciate.

C. C. COLBY, *President*,
Samson Electric Company.

Canton, Mass.

"Should Co-Operate with Other Industries"

Radio is an industry of itself and is very capable of justifying the expansion and increasing sale to the consumer.

In considering it as an industry of itself, I do not believe that we should lose sight of the fact that the music, electrical, automotive, hardware and furniture industries have contributed materially to the present day popularity of radio. Having helped radio to its present enviable position, we should continue to work together as in the past for mutual progress, and should not overlook the assistance received from these other industries in our future plans.

One of the most concrete examples of this co-operative spirit is expressed in the action of the music trades, who have arranged to hold their trade show at the Drake Hotel in Chicago during the same week that the RMA trade show is to be held at the Stevens. This will give the music and radio dealers an opportunity to cover both lines at the same time, and should be of substantial assistance in a definite way to both industries.

LESLIE F. MUTER, *President*,
Leslie F. Muter Co.

Chicago, Ill.

"Radio and Phonographs Are Separate Industries"

I agree most heartily that the radio industry is big enough to stand on its own feet.

I believe the same statement can also be made, possibly a little more emphatically, with regard to the phonograph industry as is evidenced by the history of the industry over the last forty years in practically all countries of the world.

Therefore, I cannot entirely agree with the statement contained in your article reading "The day will come when radio in the home will provide not only broadcast entertainment and music reproduced from records as at present, but also talking moving pictures and television. And it will all be radio." I really don't think that it will "all be radio." I believe that when music

is reproduced from records it will be phonograph, and talking moving pictures will be partly phonograph and partly moving pictures.

In any event, there is plenty of room for all. And I think you will agree with me that the radio industry, the phonograph industry and the motion picture industry will all be greater and still standing on their own feet ten years from now.

H. C. COX, *President*,
Columbia Phonograph Co.

New York, N. Y.

"Radio's Future Is Boundless"

For six years the establishment of a distinct radio industry in the interests of the public, as well as the interests of all branches of the industry, has been the mainspring of the RMA. Of course, there is a strong element of interest and affiliation with the great electrical industry. Also, there are tied in with radio, the music, furniture, and other industries. Anyhow, that there is a radio industry is certainly beyond all dispute. The public has settled that and the public is always right.

The public, because radio touches and enriches its life in so many ways every hour, every day, has established finally and positively our ambition and conviction that there is a radio industry whose future is boundless.

BOND P. GEDDES,
Executive Vice-President,

New York, N. Y. Radio Mfrs. Assn.

"Consumer Has the Final Word"

Those of us who have been associated with the radio industry since the times before the war well realize that it is strictly an industry in itself, and in the final analysis, any artificial attempt to bring it under the control of any other industry will fail. Your statement that "only the American people can control the distribution of radio" sums up the whole matter in a single easily-understood phrase. It is always the consumer who has the final word.

H. B. RICHMOND,
General Radio Co.

Cambridge, Mass.

"Will Stand on Its Own Feet"

I think you are on sure ground. With television in the offing, the radio industry ought to stand on its own feet for many years to come.

HERBERT METZ, *Sales Manager*,
New York, N. Y. Graybar Electric Co.

"The Answer Is Simple"

In my opinion the answer is very simple. The radio industry is owned by the radio industry.

HERBERT H. FROST, *Vice-President*,
New York, N. Y. Kolster Radio Corp.

Local movie theaters are demanding better music at lower cost — How Kipp of Kansas sells them "synchronized music."



The cue sheet indicates what the records are and when played.

A New \$10,000,000 for Phonograph and

amplification features, for small-theater use. By January 1, 1929, he had equipped eighty-three amusement places with these "Electrographs." As the average price per installation was \$440, gross sales from this "sideline" totaled \$36,520 for 1928.

Stated briefly, Kipp's "Electrograph," like similar devices, consists of a suitable table or desk on which two electrically-driven phonograph turntables are mounted with their electric reproducing units. Speed controls, a volume rheostat, a double-pole change-over switch, the proper amplification assembly and two racks for records complete the ensemble.

Two turntables make possible the smooth and continuous operation of the one or more speakers used in conjunction with this device. While one record is playing, the attendant is selecting the next number from the cue sheet and record rack or is placing it on the other turntable. Switching from any point on one record to the proper place on the other is accomplished by means of the change-over switch. This action takes place so quickly as scarcely to be noticed by the audience. The tonal quality of a properly designed installation of this nature has received many compliments from theater patrons and owners alike, according to Mr. Taylor.

INSTALLING this type of instrument is a simple matter. The control unit is generally placed in the orchestra pit and the volume speaker behind the screen. If the hall is a large one additional reproducers are located in the balcony.

Four salesmen now devote the major portion of their time contacting live prospects for modern musical equip-

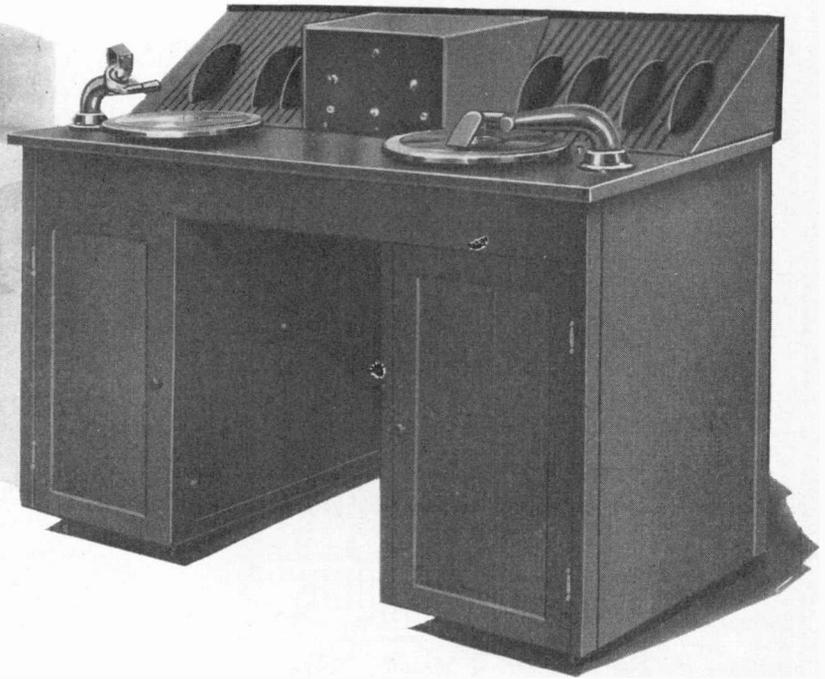
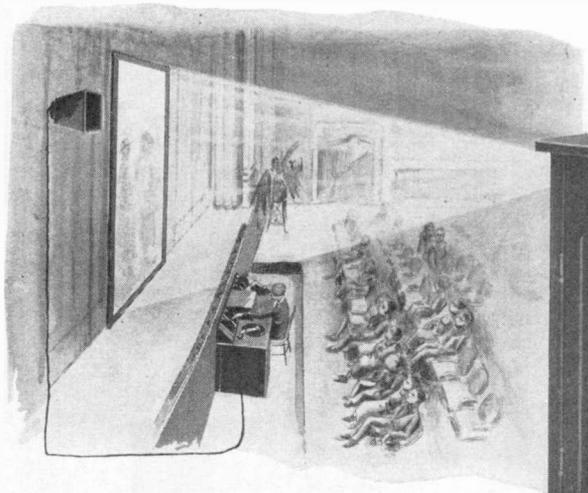
SMALL indeed is the town that cannot boast of at least one motion picture theater. According to recent compilations, there are 20,500 cinema "palaces" in the United States today. Not less than 17,500 of these are forced to rely on the uncertain talent of local pianists, organists, or three-piece orchestras for the musical element of their programs. This "talent" is limited in its ability to supply an adequate musical background for the film theme; it is unreliable and costly.

For theater managers faced with this problem the advent of the multi-turntable electric phonograph has proved a real godsend and many theater owners appreciate this opportunity to provide better music for their public at less cost.

This situation has created an opportunity for the progressive radio merchant, especially if he be an experienced phonograph and record dealer. The case of the Kipp Music Store, Manhattan, Kansas, is an outstanding example.

Last April, radio manager Jerry Taylor devised a duo-drive combination radio-phonograph device,* with special

*Although the Kipp Music Store designed and assembled its own apparatus, these devices are also obtainable in the open market.



Kipp's "Electrograph" for synchronized-movie use consists of a desk on which are mounted two electrically-driven turntables, together with reproducing units, amplification assembly, speed controls, changeover switch and record rack.

Market

Amplifier Equipment

ment in the smaller theaters—and in many of the larger ones. These men have been writing from two to three orders a week. They are paid a straight commission of 15 per cent plus a reasonable allowance for traveling expenses.

So pronounced has been the interest in Kipp's "Electrograph" that these four men have been kept busy covering definite leads in Kansas and surrounding states. Forty per cent of these inquiries come to Mr. Taylor as the result of the word-of-mouth advertising of theater owners. The balance is attributed to the salesman's initiative and to the interest created by two inexpensive mailing pieces.

The sales talk consists mainly in explaining the character and economic value to the theater of the "Electrograph," and in demonstrating its realistic tonal qualities and simplicity of operation. Ten months' terms are granted if requested.

The salesman estimates the monthly operating cost, for a two-picture-per-week house in the average small town, as follows:

1. Record-cuing service, nine films	\$9.00
2. New records	20.00
3. Monthly payment on machine	32.50
4. Operator	45.00
5. Upkeep and postage	2.50
	<hr/>
	\$109.00
6. Estimated cost of musical talent for same period	\$140.00
7. Saving—plus better musical programs	21.00

It is explained that this proposition begins to pay for

itself from the first day it is adopted and that, within a year, items two and three will have disappeared.

The theater owner's initial library of 25 records costs him \$25. Kipp agrees to "cue" pictures for one dollar each. A salaried employee, specially trained—in Kipp's case a woman with a musical education—takes each cue sheet as it is received by mail from the theater, and notes on it the catalog number of each selection suggested by the producer. These cue sheets are then returned to the theater, accompanied by all needed records which are not already in the theater's library.

As this employee of Kipp's has a complete list of the records owned by each theater, she checks the records already owned with those needed by each new cue sheet, and thus not only avoids duplication of records but is in a position to add quite a few records every week to each theater's library, resulting, naturally, in additional sales of records. This feature of Kipp's business is now grossing over \$100 a week in the sale of records.

Two factors related to the playing of phonograph records for profit are involved in this proposition: possible entanglements with the copyright laws, and, in the larger cities, the musicians' union. The first factor is met by the payment of a moderate annual "license" fee to the American Society of Authors, Composers and Publishers, New York City, or to the individual holding the copyright to the selection which it is proposed to play. There is now under discussion the question of the practicability of running the special "talkie" records, used in connection with the synchronized sound and action films, on the duo devices. As the license rights as well as the electrical and mechanical feasibility of this idea are, at this writing, in a nebulous state this interesting possibility for the smaller theaters will be discussed in a later issue.

To date Taylor has received no reports from his customers, most of whom are in towns of 12,000 or less, relative to interference from the labor unions. As a matter of fact, most of the musical talent employed by the 500-seat houses does not belong to the union.

It was stated that other uses for a duo-turntable installation are rapidly developing. Funeral parlors, the better restaurants, lodge halls and dance resorts have special need for reproduced music which can be played without interruption.

HOOVER
and
CURTIS
In Your Own Home
with a
BLANK SET
Hear the
Inauguration
Ceremonies
in a
Coast-to-Coast
Broadcast
March 4th

Above —
Copy for
card at top
of window.
Copy for
card in fore-
front is left
to dealer's
discretion. It
should be his
own per-
sonal sales
message.

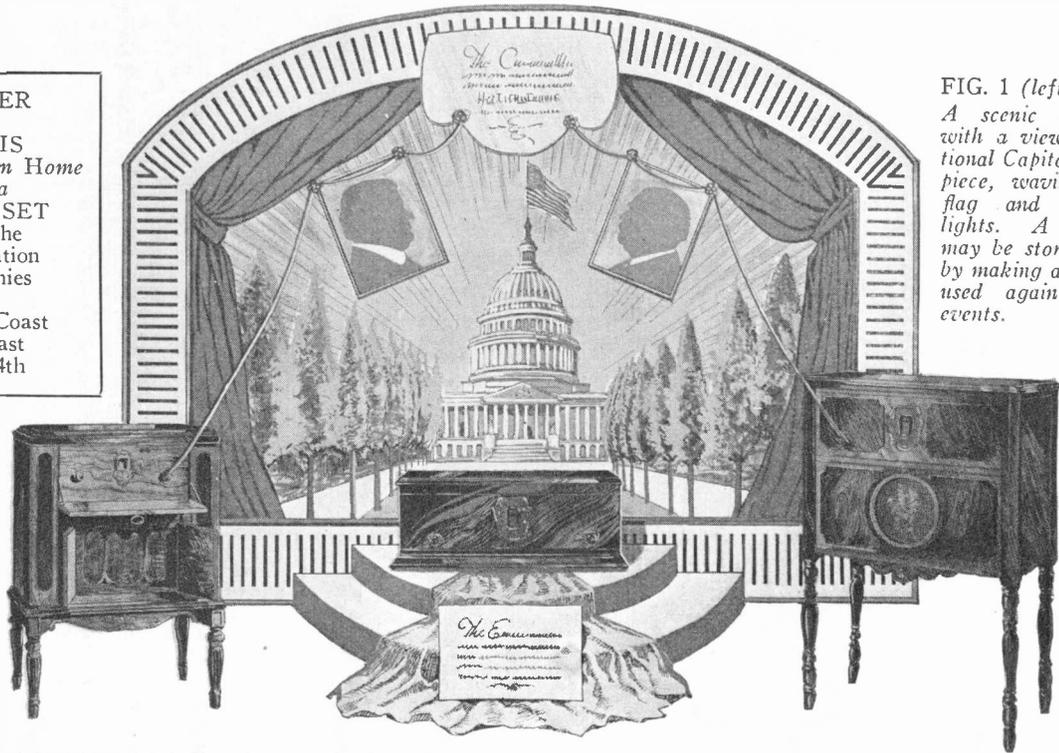


FIG. 1 (left)—
A scenic shadow box,
with a view of the Na-
tional Capitol as a center-
piece, waving American
flag and vari-colored
lights. A display that
may be stored away and,
by making a few changes,
used again for future
events.

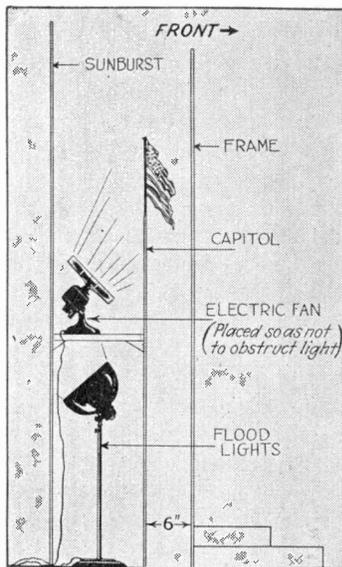


FIG. 2
Cross-section showing layers,
location of lights and fan.
Lamps should be grouped at
each end, with reflectors to
throw light where wanted. Or,
a floodlight at each, as shown.

Exploit the INAUGURATION

HOW to Build ACTION WINDOWS—No. 1

Starting a series of "how to" articles
that will give you practical help with
your windows—the first ties in
with the inauguration of President
Hoover next month.

THE most outstanding broadcast event planned during the next few weeks is the inauguration of President-elect Hoover at Washington, D. C., on March 4. It will be broadcast by an exceptionally large nation-wide hook-up of stations.

How can dealers best tie up with the radio interest that will unquestionably be aroused by this event? An attractive action window display is one answer, and how to build and display such a window is explained in this article. This is the first in a series of monthly articles which will tell in simple language and illustrations the practical procedure necessary to create at least one effective window every month.

This series is being prepared exclusively for *Radio Retailing* by I. L. Cochrane, prominent display authority. Mr. Cochrane has also agreed to answer any questions concerning window displays which readers of *Radio Retailing* desire answered. There will be no charge for this service. Just address I. L. Cochrane in care of *Radio Retailing*, 36th Street and Tenth Avenue, New York City.

This month's window, tying in with the Hoover inauguration, consists of a shadow-box, a simple impression of the Capitol as a

background, photos of President Hoover and Vice-President Curtis, and the usual radio equipment. Two inexpensive lettered signs, an electric fan and an American flag are also required. Much of the material needed for this window can be held and used for many future windows, with a few slight changes.

FIGURE No. 1 illustrates a complete shadow-box, which can be readily made by any display-builder or good sign painter. The semi-circular steps are in shades of blue, and draped with velour or other material in colors to harmonize. The shadow-box itself is built in three layers, as shown in Figure No. 2. The front layer is framed and beaverboard-covered, cut out to form a proscenium with a gold field and black stripes. The second layer, set six inches back, is a simple cut-out of the National Capitol and foreground, posterized so as to call for only a small amount of brush work. Drapes, as shown, are hung immediately behind the proscenium layer, and a small silk American flag is placed over the Capitol dome—a concealed fan will keep the flag in motion.

The foreground of trees and walk on the second layer might

be in shades of green and brown; while tones of soft blue and gray on a white field are suggested for the Capitol building. The third layer, set nine inches back of the second layer, is merely a plain surface of beaver or cardboard, nailed to a suitable frame; and orange rays on a yellow field will make a suitable color combination.

The waving flag is one item of *action*. Further *action* will be secured by placing, on narrow shelves between the second layers, two rows of lamp sockets, one row at each outer edge—the number of these depending upon the size of the display. Two or three of the lamps should hold continuously-burning white 50 to 100-watt lamps. The other set of sockets to hold red, white and blue lamps, set in fast flasher sockets. Another combination might consist of red, amber and blue lamps in flasher sockets, added to a set of continuously-burning white ones. Thus the flood lighting on the sky-piece is being continually changed. It doesn't matter whether all or only part of the colored lights are on at one time; the effect will be pleasing whatever colors are used.

Photographs of Hoover and Curtis should be mounted on beaverboard, edges in a neutral tint, and fastened to the sky-piece on a concealed block of wood to project these photographs two or three inches forward. The wording of the top card is only suggested; any merchant may have something more to his liking. The bottom card should be lettered to carry the merchant's personal message; and is, therefore, left blank in the illustration.

Depending upon the depth of the window, consoles and

table sets may be placed at the sides and slightly forward of the semi-circular steps, as suggested in Figure No. 1. A puffed gray velour floor covering will add further effect; but other materials and other colors, when in harmony, will answer.

This display is flexible and good for other future displays. By removing the center layer and photographs, another event such as baseball, football, Thanksgiving, Christmas, and almost anything may be featured, at a later date, by substituting a suitable center layer—a baseball diamond, a college "bowl," a Puritan New England Thanksgiving scene or Kris Kringle.

This display is flexible from another standpoint: it may be simplified by discarding both the gold and black proscenium and sky-piece. In that event flood lighting should be turned on the Capitol scene, by lamps concealed behind the front drapes; and a background of dark drapes, or other material, placed about nine inches back of the Capitol scene, instead of the orange and yellow sky-piece. Photographs and secondary cards are placed on top of cabinets or on floor. Narrow red, white and blue ribbons, running from Hoover and Curtis photographs to radio cabinets, will be a helpful tie-up.

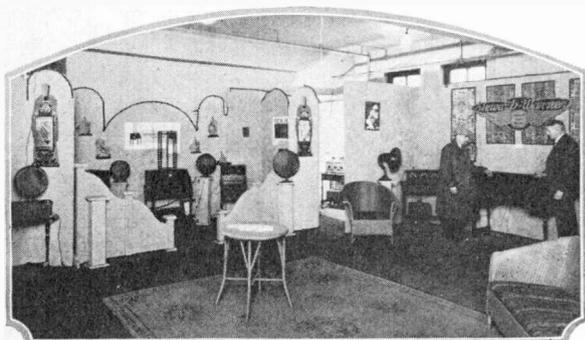
Naturally every window dresser will think of variations and additions not given; the idea is basic and has many possibilities.

It is also recommended that nails be not driven all the way in when fastening the cross-braces that hold the uprights in positions. This will permit easy dismantling if parts are to be retained for future use.

Some Selling

IDEAS

Portable Partitions Give Semi-privacy



The use of portable partitions enables the Warner Hardware Company, of Minneapolis, Minn., appropriately to arrange its displays and to provide semi-privacy for demonstrations.

THE Warner Hardware Company, Minneapolis, Minn., solves the question of how to keep the customer's attention on the subject at hand by means of portable partitions. These inexpensive, yet decorative, panels of varying designs break up the monotony of a large display room. They make it easy to group sets by make or by price range and they create a feeling of semi-privacy for both clerk and customer.

It is a simple matter for this hardware concern to vary the appearance of its radio department by rearranging the assembly plan of these portable units. There are three other booths of similar character not shown in the illustration. The entire equipment, including the speaker stands, cost \$85 to construct and mottle-tint.

Parking Privileges for Stores in Downtown Locations

THE downtown store in the large city frequently suffers on account of the scarcity of parking space and rules which require moving on within a period too short actually to complete a sale.

The May Company of Los Angeles observed that an undue

number of sales were lost owing to the fact that the possessor of an automobile had to leave in order to change the position of his car. More often than not, he did not return after such an interval. As a result, the company has made an arrangement with an adjacent garage, by which cars can be stored free of charge, providing the customer actually makes a purchase of a given amount in the May Company's store.

The method is for the department head in the department making the sale to stamp and O.K. the check, which is then honored, without payment, by the garage.

Of course, a special arrangement with the garage permits the storage of the cars at a wholesale rate.

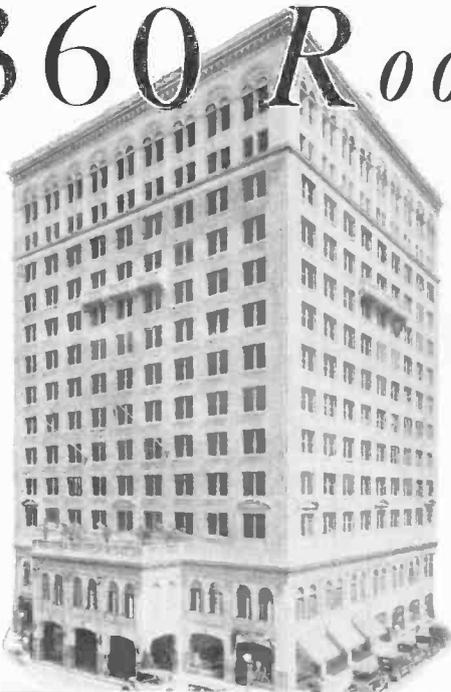
Impresses Passers-by with Sidewalk Stock



The Sawkins Music House, Alma, Michigan, piles up its incoming stock outside the store and visibly demonstrates to passers-by the universal demand for radio. The number of sets shown and the obvious implication that there is no more room in the store create a wholesome impression.

360 Rooms — and

RADIO *in*



Most of the wiring was done when the hotel was built and the wires are carried in metal conduit. All have their termination at the main board located in an out-of-the-way corner on the mezzanine floor. Here the wires going to the sleeping rooms are arranged into groups with a double-pole, single-throw, switch and volume control in each circuit. Thus if trouble should occur in one direction, it may be isolated until the trouble is cleared up. The volume controls are necessary so that the system may be balanced at any time. Another important feature in this direction is that the same type and make of reproducers are used throughout, thus assuring equal impedances in every branch circuit.

The wiring was carried out in accordance with standard 110-volt practice, number 14 rubber-covered wire being used throughout. Leads are brought to standard outlet boxes. Face plates with radio jacks are used.

At eleven o'clock each morning, the radio operator comes on duty and as there is no broadcasting available, guests are entertained with the latest



THE Hotel George Washington, in Jacksonville, Florida, was probably one of the first to realize the possibilities of radio and to install a radio system as an integral part of the service offered to its guests. The radio system was put in over two years ago when the hotel was built. It has been added to from time to time until today it is the last word in radio as adapted for hotel use.

There are three hundred and sixty guest rooms with reproducers, besides the reproducers located around the lobby, in the dining rooms, barber shop, wash rooms, drug store and on the mezzanine floor. Placing reproducers throughout the building in this way makes it possible to give adequate service without the use of objectionable volume at any one point.



Illustrated is the main dining-room, end of lobby leading to it and one of the bedrooms. In each case the unobtrusive location of the reproducer is shown.

The Hotel Washington, Jacksonville, Florida, is completely wired for "radio-in-every-room." It provides radio programs, pages guests, announces meetings and reproduces phonograph records—all through its radio installation.

Every ROOM

By
Henry W.
Baukat

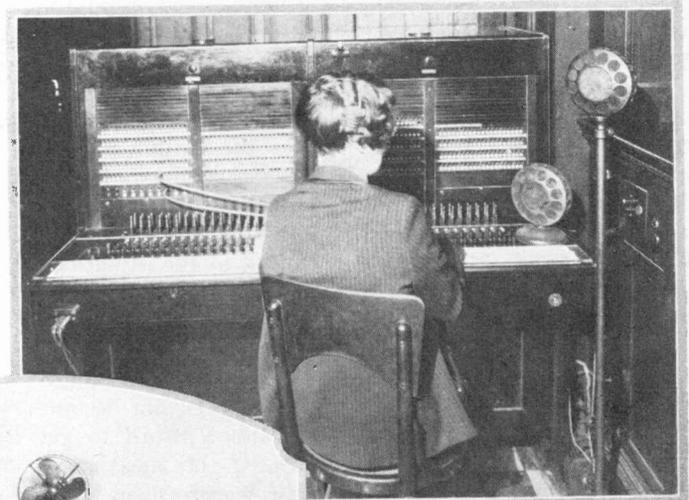
phonograph records. These are played on an electric phonograph with pick-up. The radio operator also has a microphone with which he announces the records. The records are had each day or so from a local music dealer. At the beginning and end of the program of phonograph music, the operator gives the name and address of the dealer from whom the records were borrowed. In checking up the music dealer it was found that this inexpensive co-operation on his part had resulted in a marked increase in record sales.

At 12.30 p.m. the local radio station, WJAX, goes on the air and from then until 11 p.m. radio programs are put on the hotel system. Although many programs of dance music are picked up by WJAX from the hotel itself, it has been found better practice to pick up all radio programs from the air rather than by a wire connection. Due to the nearness of the station a loop is used for this purpose. A short-wave set is also used to aid in getting clear reception of northern stations. In fact, any station operating between 15 to 3,000 meters can be received.

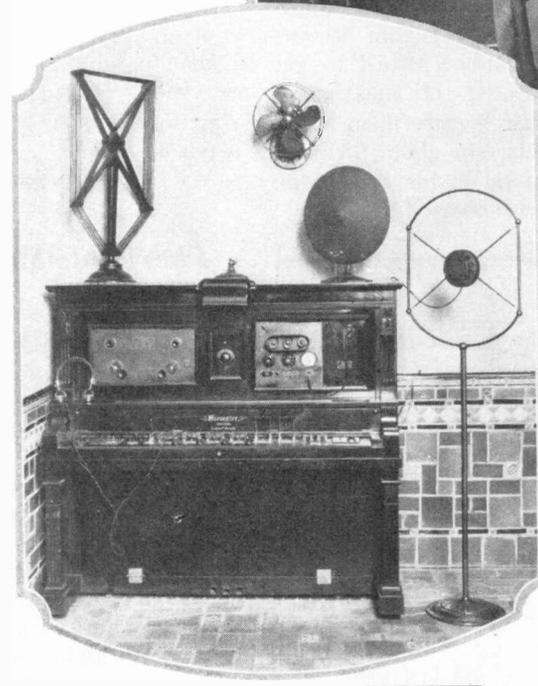
When a guest goes to his or her room for the first time, the bell boy turns on the reproducer. Should the program not be desired it can be turned off by means of a small toggle switch on the reproducer. It has been found, however, that very few are turned off. In the morning, when the maid makes up the room it is part of her work to see that reproducers are all turned on.

By means of the microphone at the amplifier and control board, the operator, at intervals, announces any special news items or events that may be of interest to the guests. This system has been found especially valuable, when conventions are being held in the hotel, for announcing the room numbers where meetings will be held. Every part of the hotel can thus be reached in an instant.

DOWN at the main desk, where the telephone operators are located, is another microphone and push-button switch with a signal light. Should there be a call or a telegram for any guest, the operator at once pushes

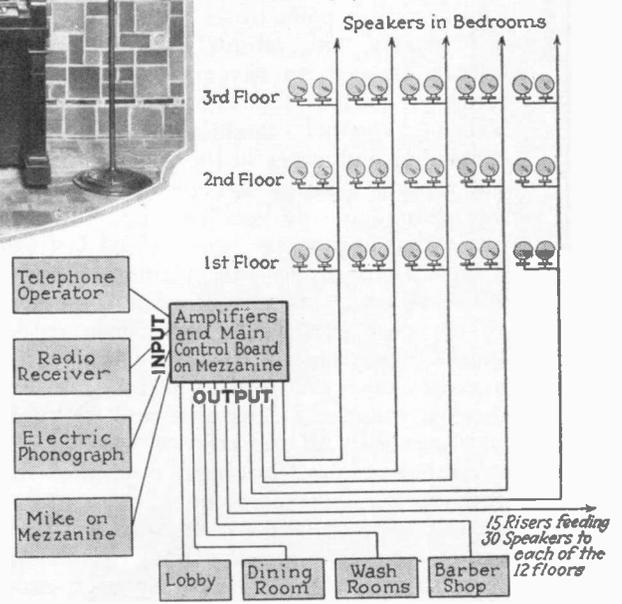


Above—Telephone operator with microphones for paging. Control switch is located on wall at extreme right.



Left—Receiving set, amplifiers, and distribution board located on the mezzanine.

Below—Schematic layout of entire radio amplifier system.



the switch button, which through the use of relays, puts her microphone on the input of the entire system, cuts
(Please turn to page 67)

Radio Retailing

A McGraw-Hill Publication

FEBRUARY, 1929

Vol. 9, No. 2

The Public Buys

What Are We Selling?

WHAT are we selling? Certainly not tubes and transformers, nor furniture, nor service, nor even A.C. operation. The best answer is—what is the public seeking when it buys?

Just as the automobile industry is selling transportation; just as the electrical appliance industry is selling relief from home drudgery; just as the motion picture industry is selling mass entertainment, so the radio industry is selling—not circuits or tubes or furniture, but a great service of music and entertainment in the home. For here is a free service that brings to the American people the most delightful entertainment that the world has ever known.

It is broadcasting that makes our market. The improvement of broadcasting has been the most vital influence in our success. The radio dealer must not become blasé about these programs. He cannot afford to get used to them and take them for granted. He must know them. He must sell them. He must feature them in his advertising. He must become enthusiastic about them, so that his enthusiasm will be passed on to his customers. And naturally it will be reflected in increased sales.

High Business Activity Continues

By ROBERT M. DAVIS, *Statistics Editor*,
McGraw-Hill Publishing Company, Inc.

ALL indices point to the fact that with the holiday lull definitely past, industrial operations seem to have resumed their rate recorded during the latter half of 1928. Varying weather conditions have exerted contending influences in the distribution field, but reports indicate that general trade since the opening of the year has been somewhat better than during the same period last year.

Operations in the steel plants and rolling mills are being maintained on a plane about 18 per cent over 1928, and cotton receipts are 42.8 per cent over 1928. Other current increases over 1928 are to be found in bank check payments 12.2 per cent, and bank loans and discounts 5.8 per cent.

Authorities on business conditions now feel that the present momentum in business activity will continue for the next five or six months and that in some lines of manufacture earnings during 1929 may even exceed those recorded during 1928.

The Federated Convention—"Get Aboard!"

THREE years ago this month a handful of radio dealers met in Minneapolis, Minn., and there laid the foundation on which was erected the Federated Radio Trades Association. Harold J. Wrape, of St. Louis, was elected president and has held that office, with signal success, ever since.

On the eighteenth of this month this nationally recognized dealer-wholesaler radio industry organization meets again in Buffalo. The president of the Radio Manufacturers' Association and the president of the National Association of Broadcasters will address it. Its wholesalers' division, organized at the last trade show, now numbers a worthwhile majority of influential jobbers.

What has this to do with the independent, or isolated, dealer and distributor? Simply this—get aboard! Place yourself in a position to feel the pulse of a growing and a changing industry. Expose yourself to its organized activities. Participate in its deliberations. Speak where your opinion can be translated into action. Or, at least listen and learn.

We're going—see you at the Statler.

* * *

The Trade Show Expands—A Suggestion for Distributors

THE annual RMA trade show at Chicago has grown to such proportions that three hotels have been found necessary to house the 1929 exhibition in June. The amazing growth of the trade show, both in point of attendance and in the space required for exhibits, is significant of the position which radio has gained in the American industrial picture.

With the attendance last year in excess of 21,000 and greater trade interest anticipated this year, the 1929 trade show will undoubtedly be the largest exposition ever held by a single industry.

And, to make the trade show bigger and better than ever, and to give it greater significance, the Music Industries Chamber of Commerce convention will occupy a fourth hotel during the same week—another tribute to the importance and leadership of the radio industry.

The value of the show has proved to be so great that many distributors are actively urging their dealers to attend that they may study radio merchandise.

The influence upon the dealer of this experience should certainly be helpful. It teaches him values. It impresses him with the scope of his opportunity. It would be well if distributors more generally would offer free trips to the show as the prizes in sales contests to be conducted this spring.

Not only would this be an effective sales stimulant in the duller months, but the interest aroused in the show would make an effective contribution to its success.

ENTERTAINMENT!

What Radio Needs from Congress

AT no time in the history of radio has more ill-advised and dangerous legislation been offered to Congress than is being considered in Washington at this time.

Congress is attempting to legislate on administrative details which should rightfully be left to the administrative body. Such matters as distribution of wavelengths and power, period of time for which licenses shall be issued, and whether licenses should be issued or denied to certain types of applicants, are details of routine administration which certainly are not subject to legislative action.

In spite of sensible and constructive recommendations by the National Association of Broadcasters, the Radio Manufacturers' Association and the National Electrical Manufacturers' Association, many Senators and Congressmen continue to consider radio legislation that is directly contrary to the best interests of the listening public and of the radio industry.

Radio Retailing stands squarely in support of the well-defined platform of the radio industry. It embodies the following points:

1. Revision of the Davis-Dill "equalization" amendment to provide for a more satisfactory distribution of wavelengths and power throughout the country as a whole rather than equality as between zones and states.
2. No attempt by Congress to limit the power of broadcasting stations.
3. No interference with the development and expansion of chain programs.
4. Vesting of radio control in some permanent Governmental authority.
5. Appointment to the radio authority of radio men rather than politicians.
6. Legislation prohibiting the rebroadcasting of radio programs for profit.
7. Issuance of broadcasting licenses for one year, rather than for the 90-day period now in force.
8. Reduction in number of stations through refusing licenses to stations not rendering useful and satisfactory public service.

Any radio legislation or procedure of the Radio Commission contrary to these principles may result in serious harm to radio—even more than has already been caused by ill-advised laws and unwise acts of the Commission.

All radio men who have the welfare of their industry at heart should write immediately to their Senators and Congressmen urging that the above principles be kept in mind by our legislative Fathers in Washington.

* * *

Home Talking Movies—an Opportunity

THERE recently has been placed on the market, for home use, a motion picture projector synchronized with a phonograph record turntable and electric pick-up. Special films and records for this dual purpose device are provided by the manufacturer.

To complete the sound reproduction cycle it is necessary to connect the electric pick-up to the audio end of a radio receiver. This circumstance—and this is sig-

nificant—links closely to the home market for talking movies the experience and facilities of the men who sell radio. Such men are the logical ones to promote this instrument of home entertainment that is so closely allied with radio.

Here, then, is yet another opportunity for the alert retail members of our industry to broaden the scope of their activities during 1929.

* * *

Do You Know Your Local Market?

LAST month, *Radio Retailing* published the results of its annual statistical survey of the radio market. These statistics are gathered on a nation-wide scale because the information which they provide furnishes a broad national foundation on which the radio industry can build and grow.

Similar knowledge of your local market should be obtained by every dealer. Have you ever analyzed the saturation and sales possibilities of your own community? Ask yourself these questions:

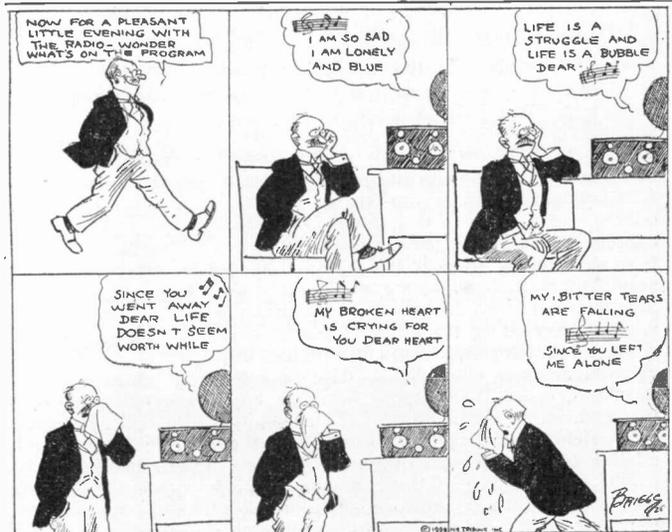
1. Do you know how many families in your district have sets?
2. Do you know how many of these sets are obsolete?
3. When new families move into the district, do you find out whether they own a radio?
4. How many of these radio owners know you; know your business; know your address?

If you don't know the answers—find out.

In other words, have you ever made a local survey? If it is worth while making a national survey, how much more valuable it is to make a local one—right on the spot where the actual sales are made.

It is to your own interest to *know* your local market.

How to Start the Evening Wrong : : : : : By BRIGGS



Copyright, N. Y. Herald-Tribune

Practical Service Methods

Improved B-Power Circuit for Use with Raytheon BH

EVER since the Raytheon gaseous rectifier tube was first placed on the market in 1925, a great deal of research work has been carried on aimed not only at improvements in the tube itself, but also in the associated circuits. As a result, the improved Raytheon BH 125-milliamperere rectifier has now replaced the original 85-milliamperere or B rectifier. Two new circuit changes have also been recently developed, which are of considerable importance in reducing the size and manufacturing costs of Raytheon-equipped power units, both for A.C. set use and as separate B-power units.

The first of the circuit improvements deals with the use of the buffer condensers. The function of these devices is to absorb any periodic disturbance that might be set up by the break-down of the gas in the rectifier tube itself. In the original Raytheon circuit, two high-voltage 0.1 mfd. condensers, connected across the transformer secondaries, are employed for this purpose. It has been found, however, that by employing two .02 mfd. condensers between the two anodes and the single cathode terminals, it is possible to obtain superior performance.

This improved performance with smaller capacities results from the placing of the condensers at a more advantageous place in the circuit, namely, as close as possible to the electrodes of the tube, within which the disturbance is set up, and also by the operation of the buffer condensers at a higher voltage than when in their former location.

In addition, there has been added an r.f. choke in the cathode lead, comprising an air-core affair of 100 turns of No. 34 D.C.C. wire, wound 1 inch in diameter, for the purpose of keeping any radio-frequency disturbances out of the filter circuit. In commercial application, the two small buffers and the r.f. choke may be mounted directly on the tube socket itself so as to provide extremely short leads. In fact, much of the effectiveness of the new arrangement depends upon the use of short, direct connections. A marked saving in condenser cost is a further advantage of this new buffer condenser arrangement.

However, the greatest gain in the new B-power circuit is in the matter of the filter choke coils. In the customary type of filter chokes, a large air gap is provided so as to prevent D.C. saturation. As a result, it is necessary to employ a large amount of both copper and iron in order to obtain sufficient inductance. It has been found possible to place the two choke coils on the same core, so that their D.C. flux cancels out and thus prevents core saturation without the use of an air gap. As a result of this flux-bucking choke, a saving of from 15 to 25 per cent is obtained, without decreasing the effectiveness of the chokes. A further, though somewhat incidental advantage of the single-core construction, other than saving in labor and material, is the elimination of the necessity for shielding or careful placing of the chokes, relative to each other.

The performance of the B-power circuit can be still further improved by "tuning" the filter circuit for minimum ripple, which is accomplished by so varying the values

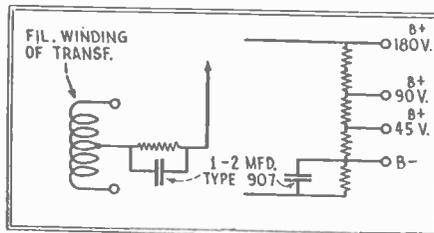
Conducted by
HENRY W. BAUKAT
Technical Editor

of the capacities with relation to the choke coils, that the maximum hum suppression is obtained.

The details of the improved Raytheon B-power circuit are described at length in Technical Bulletin, Vol. 1, No. 4, and will be sent to anyone addressing the Raytheon Manufacturing Company, Cambridge, Mass.

By-Passing the Grid Bias Resistance

In most instances where a resistance is employed for the purpose of obtaining C bias or C voltage, no by-passing condenser is employed. This is an important oversight, since audio frequency currents must pass through this part of the tube circuit, with the resistance offering serious opposition to their flow because of straight resistance and, in the case of wire-wound resistors, the inductance or choke-coil effect as well. In fact, there is an appreciable loss of volume and tone quality in the absence of a by-pass condenser.



The engineering staff of the Dubilier Condenser Corporation has made a study of by-pass condensers for grid bias resistances, which forms the basis for the present suggestion. In the accompanying diagram will be noted two typical grid biasing schemes, with by-pass condensers properly applied. Because of the low voltage drop in such resistance circuits—generally not more than 80 volts—a low-voltage condenser of 1 or 2 mfd. may be employed with satisfactory results. There will be a marked improvement in volume and tone when a by-pass condenser is shunted across any grid bias resistance.

Watch the Outlet Plug

In operating an A.C. receiver it is important that the line plug be firm and tight so that there is a good contact. Sometimes the two prongs so commonly used in house lighting outlets become slightly bent or loose. This may cause an intermittent or noisy contact which will affect radio reception.

Book Explains Antenna

F. A. D. Andrea has prepared a book, for free distribution, which explains in non-technical language the whys and wherefores of the antenna and ground system. It also gives details as to different kinds of antennas. This should be a handy thing for the service man to have around to give his customers. Let the customer read for himself and save your time.

Shielded Lead-In Cure for Interference

Many bad cases of radio interference are of local origin but cannot be cured by the ordinary prescribed methods. Maybe the elevator motors in an apartment house are the offenders. Or again, it might be some electrical machine being used for medical purposes.

Sometimes the judicious use of condensers and choke coils solves the problem. When you find yourself stuck on a problem of this nature try the following method. It is not guaranteed always to work but the chances are that it will.

Shield the lead-in. Use either a lead-covered wire or an insulated wire of the ordinary Number 14 rubber-covered lead-in type and surround it with some sort of a metal covering. In some cases, this will affect the reception so that the length of the antenna may have to be increased somewhat in order to obtain sufficient signal intensity.

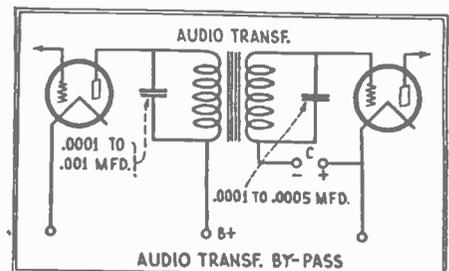
If the interference is of such a nature that it occurs only during the daytime, a single-pole, double-pole switch may be used so that the shielding can be disconnected from the ground and used as additional antenna pick-up. In this case, put the shield to the center pole, the ground to one side and the antenna to the other.

Tuning the Audio Transformers

There may be a universally ideal amplifier or loud-speaker, because all ears and musical tastes do not run alike. Some prefer an accentuated sharpness or crisp reproduction; others prefer a mellow, deep rendition. Others—and they are rare—strive for a happy medium. Fortunately, however, it is possible with the aid of small, inexpensive mica condensers, to obtain almost any musical quality from the usual radio set.

Transformer coupling will usually give sharp, crisp reproduction. If that kind of reproduction is desirable, then the transformer-coupled amplifier should be left alone. Slight modification of B and C voltages may result in accentuating the sharp, crisp effect even more, if desired.

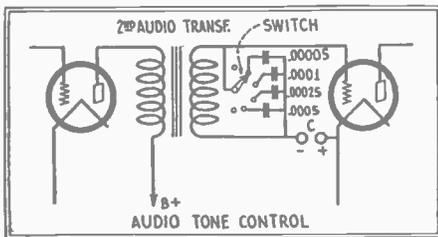
If mellow, deep, "bass note" reproduction is desired, this may be achieved by the simple expedient of by-passing more or less of the higher frequencies. In one of the accompanying sketches we show by-pass



condensers for the primary and the secondary of an audio transformer, for removing as much of the higher frequencies as may be desired. The values in microfarads are indicated.

When it is preferable to adjust the

sharpness or mellowness of radio rendition in accordance with the subject matter of the program, such as crisp reproduction for speech and mellow reproduction for orchestral selections, the arrangement shown in our second sketch may be fol-



lowed. This comprises a collection of condensers arranged in steps of capacity and shunted across the secondary of the second audio transformer.

Interference from Street-Car Ground Leaks

A bad rail bond connection in a street-car system can create radio interference enough to make even the most seasoned trouble-shooter cuss. This type of interference is sometimes very hard to locate. In addition, it is always made worse due to the fact that it has become customary to use the water pipe as a ground. The reason for this is that the water pipes are laid underground straight to the street. The field created by the leaky track bond is around the water main. And so the interference is picked up by the pipes and carried directly to the radio set.

Where it is suspected that the trolley system is responsible for the interference, the use of a separate ground has been found to lessen if not to eliminate the trouble. Drive a pipe in the ground at some distance from the point where the water pipes are located. The street-car company will also thank you to notify it so that it can investigate and repair the power leak.

Precise Regeneration Essential in Short-Wave Work

Regeneration appears to be the main foundation of short-wave reception. No matter how much radio-frequency amplification precedes the detector and how much audio amplification follows, the main factor in bringing up signals to proper sound level is regeneration. Furthermore, the precision with which regeneration can be controlled determines, to a large degree, the success encountered in tuning in really long-distance signals.

For the reception of American short-wave broadcasters and code transmitters, the usual regeneration control is quite satisfactory. However, the weak signals from overseas require precise tuning and regeneration control. The step-by-step resistance devices usually fail to provide the precise, razor-sharp adjustment which brings the detector right up to the peak of regeneration, without spilling over into oscillation, in the case of radio telephone signals. Marvelous sensitivity is attained when the detector is on the very verge of oscillation, and it is this feature which makes the difference between the reception of signals from around the world, and the reception of just the "local" broadcasters.

In gaining the necessary sensitivity and precise adjustment, most short-wave radio enthusiasts are employing stepless resistance for the control of regeneration.

A Handy Conversion Table

Kc.	Meters	Kc.	Meters
1500.....	199.9	1000.....	299.8
1490.....	201.2	990.....	302.8
1480.....	202.6	980.....	305.9
1470.....	204.0	970.....	309.1
1460.....	205.4	960.....	312.3
1450.....	206.8	950.....	315.6
1440.....	208.2	940.....	319.0
1430.....	209.7	930.....	322.4
1420.....	211.1	920.....	325.9
1410.....	212.6	910.....	329.5
1400.....	214.2	900.....	333.1
1390.....	215.7	890.....	336.9
1380.....	217.3	880.....	340.7
1370.....	218.8	870.....	344.6
1360.....	220.4	860.....	348.6
1350.....	222.1	850.....	352.7
1340.....	223.7	840.....	356.9
1330.....	225.4	830.....	361.2
1320.....	227.1	820.....	365.6
1310.....	228.9	810.....	370.2
1300.....	230.6	800.....	374.8
1290.....	232.4	790.....	379.5
1280.....	234.2	780.....	384.4
1270.....	236.1	770.....	389.4
1260.....	238.0	760.....	394.5
1250.....	239.9	750.....	399.8
1240.....	241.8	740.....	405.2
1230.....	243.8	730.....	410.7
1220.....	245.8	720.....	416.4
1210.....	247.8	710.....	422.3
1200.....	249.9	700.....	428.3
1190.....	252.0	690.....	434.5
1180.....	254.1	680.....	440.9
1170.....	256.3	670.....	447.5
1160.....	258.5	660.....	454.3
1150.....	260.7	650.....	461.3
1140.....	263.0	640.....	468.5
1130.....	265.3	630.....	475.9
1120.....	267.7	620.....	483.6
1110.....	270.1	610.....	491.5
1100.....	272.6	600.....	499.7
1090.....	275.1	590.....	508.2
1080.....	277.6	580.....	516.9
1070.....	280.2	570.....	526.0
1060.....	282.8	560.....	535.4
1050.....	285.5	550.....	545.1
1040.....	288.3	540.....	555.2
1030.....	291.1	530.....	565.7
1020.....	293.9	520.....	576.6
1010.....	269.9	510.....	587.9
		500.....	599.6

Soldering Flux

Powdered rosin in alcohol is a very good soldering flux. The alcohol being a good solvent tends to clean the metal. The rosin acts as a binder. Care should be taken to keep the rosin paste in a semi-fluid condition by adding alcohol.

Detector Overloading Frequent Cause of Distortion

One of the most frequent causes of distortion in broadcast reception—in fact, probably the most common cause these days—is an overloaded detector tube. In the desire to secure greater volume, the radio enthusiast is apt to pile on as much plate voltage as possible on the detector, resulting in an overloaded tube and distortion.

The usual detector tube works best at 67½ volts maximum, although good volume is obtained at 45 volts. Twenty-two and a half volts are generally too low with the usual 201-A or "hard" tube. Occasionally, a tube is found that works well at 22½ volts and appears to be an exceptional detector. This is due to the fact that the tube is not evacuated as thoroughly as the usual run of 201-A tubes, and is therefore a "soft" tube, or one best adapted for detection.

For maximum volume and sensitivity, together with good tone quality, the detector plate voltage can be adjusted over a wide range. This can be done by inserting a suitable variable resistance, such as the volume control clarostat, shunted by a ½ mfd. condenser, in the plate lead to the detector. Also, the grid leak should be adjusted for best results, since this has much to do with volume and clarity of tone. For this purpose the radio enthusiast should either have a collection of different grid leaks on hand, or a satisfactory adjustable high resistance such as the grid leak clarostat. These recommendations, of course, are meant only for those desiring utmost performance.

Inquiries Regarding Service Are Welcomed

The editor of this department welcomes letters from service men at all times. If you have any problem relating to service, do not hesitate to write in and ask our help in solving it. Address your letter to Editor, Service Department.

A Complete and Comprehensive Service Form

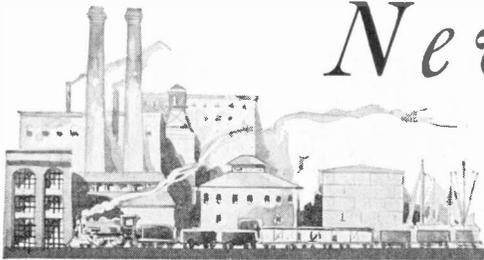
RADIO SERVICE ORDER S No 1142

RADIO EQUIPMENT COMPANY
The Great Clock - Non-Brand Service Phone 1-1535

15 Arcade Bldg. New York, N. Y.

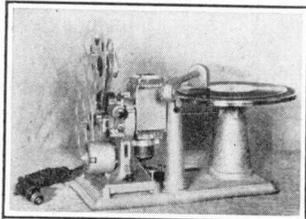
Name: _____ Title: _____
Address: _____
Make of Set: _____ Serial: _____ Model: _____
Trouble Reported: _____
Repaired by: _____ Time: _____

TYPE	FAMILY	TIME AND MATERIALS USED	REMARKS	TOTAL
1. I. F. TRANSFORMER	100 WHEATON A. S. I.			
2. I. F. COIL	100 WHEATON A. S. I.			
3. DETECTOR	100 WHEATON A. S. I.			
4. TUNING	100 WHEATON A. S. I.			
5. VOLUME	100 WHEATON A. S. I.			
6. MIDDLE WAVE	100 WHEATON A. S. I.			
7. I. F. TRANSFORMER	100 WHEATON A. S. I.			
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175. I. F. TRANSFORMER	1			



New Products for

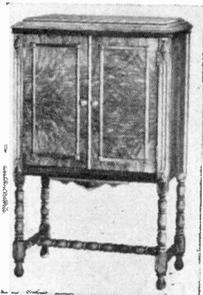
This editorial section is prepared purely as a news service, to keep readers of "Radio Retailing" informed of new products.



Talking Movie Machine for Home Use

A compact and easily operated outfit to bring talking movies into the home is being made by the DeVry Corporation, 1103 Center Street, Chicago. It consists of a 16 mm. projector mounted upon a base with a phonograph turntable, the two being connected by a shaft which makes them synchronous in operation. The sound is carried from the phonograph record directly to the radio or to an independent speaker by means of an electric pick-up device. It operates any electrically reproduced phonograph record.

The intended retail price is \$230. One film and a synchronized record are priced at \$10. A carrying case is \$20 extra.—*Radio Retailing*, February, 1929.



Nine-Tube Set

Model 8 radio cabinet with a nine-tube neutrodyne set has been brought out by the Bush & Lane Piano Company, Holland, Mich. It is 40½ in. high by 15 in. deep by 25½ in. wide. The intended retail price is \$194.50, less tubes.—*Radio Retailing*, February, 1929.

Electric Phonograph Motor

A variable speed motor of the induction type has been introduced by the Prime Manufacturing Company, 653 Clinton Street, Milwaukee, Wis. It has two bearings, speed control and the gears are completely enclosed. It comes complete with turntable, speed regulator and switch, for operation on 110 volt A.C. 50-60 cycle current.—*Radio Retailing*, February, 1929.

Six-Tube A.C. Shield-Grid Set

The "K" series just announced by the Federal Radio Corporation, Buffalo, N. Y., uses the new 222 A.C. shield grid tube and push-pull amplification. Besides the 222 tube, there are three 227's, two 171-A's and a rectifier tube.

The table model is made of brown mahogany and lists at \$127.50 for 60 cycle operation, and at \$137.50 for 25 cycle operation. The walnut console model is \$197.50 for 60 cycle operation and \$207.50 for 25 cycle operation. With dynamic speaker \$30 extra.—*Radio Retailing*, February, 1929.

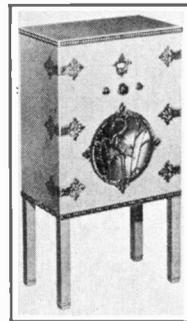


D.C. Radiolas

The Radio Corporation, New York City, announces Radiola 18 DC and Radiola 51 DC to operate on 110 volts D.C. Both models use five UX-112A's in the radio frequency, detector and first audio amplifying sockets. A UX-171A is used as a second audio amplifier. The intended retail price of the 18 DC is \$110, less tubes and of the 51 DC, \$190, less tubes.—*Radio Retailing*, February, 1929.

Six-Tube Receiver

An all-electric neutrodyne receiver with six tubes, three stages of t.r.f., detector and two audio stages, together with a 171A power tube, has been announced by the Apex Division of the U. S. Radio and Television Corporation, 1410 W. 59th Street, Chicago. It has the single dial illuminated control, and is encased in a walnut finish metal cabinet. For 50-60 or 25-33 cycle, 110 volt or 220 volt operation, the intended retail price is \$85. Model 36 for D.C. operation is \$60. The new magnetic type speaker for use especially with these sets is \$25.—*Radio Retailing*, February, 1929.



A.C. Receivers

The 1929 line of the Crosley Radio Corporation, Cincinnati, Ohio, includes the following sets:

The new Jewelbox, a seven tube receiver, utilizing the 227 type tube throughout, except in the push-pull output stage in which two 171-A's are employed. There are four tuned circuits, the grid circuit of the first radio frequency stage being tuned in addition to the other three circuits. The detector stage is non-regenerative and makes use of "plate rectification" instead of "grid" rectification. A new type of volume control is also used. The metal cabinet has a white gold finish. The intended retail price, without tubes, is \$105.

The Showchest in Chinese Chippendale design, illustrated, is presented in three colors: Mandarin red with wrought metal work, Nanking green with gold metal work, and Manchu black with white gold metal work. It is an eight tube all-electric Neutrodyne receiver. The intended retail price, with Dynacone speaker, but without tubes, is \$114.

The Gembox, which is also presented in the Chinese Chippendale cabinet, is a six tube Neutrodyne receiver. The intended retail price with Dynacone speaker, but without tubes, is \$99, less tubes.—*Radio Retailing*, February, 1929.

A.C. Receivers

An A.C. radio set, with eight tubes, including rectifier, and an improved electro-dynamic speaker, is the feature of the 1929 line of radio sets announced by the Philadelphia Storage Battery Company, Philadelphia, Pa.

In basic principle, the set has not changed since last year, but push-pull amplification, with its extra power tube, has been added, and changes made in the dynamic speaker. A range control, which grounds the grid of the first radio frequency tube and feeds two cascaded tuned circuits into the second radio frequency transformer and tube, provides a highly selective system of reduced amplification. For distant stations the range control provides a vernier condenser that, with the first tube cut back into the circuit automatically, makes extra sharp tuning possible, according to the manufacturer.

The detector tube socket is floating, to eliminate microphonic noises. A 4-gang condenser is used and a hum adjuster provided.

The intended retail price of this set, in a Louis XIV cabinet, is \$157, without tubes. Its companions are a highboy model, which lists at \$275, without tubes, and a lowboy priced at \$215. Mechanically and electrically, all three are the same.—*Radio Retailing*, February, 1929.

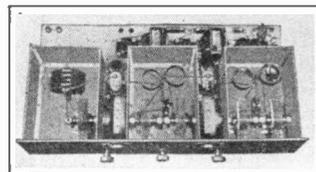


Drum Dial, Condenser and Protector Switch

An illuminated drum dial with only one side open and a bracket furnished with a pilot light assembled for mounting to the sub-base or front panel, is the latest product of Precise Products, Inc., 254 Mill Street, Rochester, N. Y. The pilot light remains in one position at all times.

Dual, triple and four gang condensers of the bathtub type are also available.

This company is making a protector switch, No. 1600-D, which may be adjusted as low as 2 amperes and when used in connection with power outfits will cut off the current if a short circuit or overload develops.—*Radio Retailing*, February, 1929.

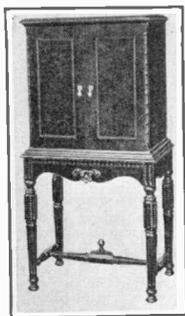


Set Kit

A five tube stage-shielded receiver built on a solid steel chassis can be made from the Master HI-Q 29 circuit recently announced by Hammarlund-Roberts, Inc., 1182 Broadway, New York City. The features of the circuit are the use of the new screen grid tube and the band-pass filter, which effects flat top tuning, according to the manufacturer. The intended retail price without cabinet, is \$99.50; for A.C. operation, without cabinet, \$151.80.—*Radio Retailing*, February, 1929.

Dealers to SELL

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



A.C. Receivers

A table model and two console style radio receivers are now being made by the Jesse French & Sons Piano Company, New Castle, Ind.

The "Seville," a table model has an eight tube chassis, employing five 226's, one 227, two 171-A's and one 280 rectifier. It is completely shielded and incorporates push-pull amplification. The intended retail price, less tubes, is \$140.

The "Barcelona," illustrated, has the same chassis. The cabinet is made of figured walnut with a hand-rubbed finish. Price, \$265, with built-in magnetic speaker but less tubes.

The "Seville," a console, is also enclosed in a figured walnut cabinet. The set is the standard French eight tube chassis. The list price is \$195, with magnetic speaker but less tubes.—*Radio Retailing*, February, 1929.



Cabinets

The line of the Radio-Art Corporation, 22 West 19th Street, New York City, now includes three new models.

Model 475 is a Tudor highboy in walnut with hand carved burl panel. It is 53 in. high by 28 in. long by 18 in. wide and lists at \$99.

Model 77 is also a Tudor highboy in walnut with carved front. The dimensions are 55 in. high by 32 in. long by 18 in. wide. The intended retail price is \$155.

Model 16, illustrated is a highboy with burl walnut panel. It stands 54½ in. high by 28 in. long by 18 in. wide and retails for \$75.—*Radio Retailing*, February, 1929.

A.C. and D.C. Receivers

Four A.C. and one D.C. radio receivers are included in this year's line made by F. A. D. Andrea, Inc., Long Island City, N. Y.

Model 16, illustrated, employs five 227 tubes, two 171's and one '80, used in three stages of t.r.f. amplification, detector, one stage audio frequency amplification and a stage of push-pull power amplification. Jacks are provided to accommodate an electric pick-up. It is encased in a metal cabinet. The intended retail price for 50-60, 90-130 volt A.C. or 25-49 cycle 90-130 volt A.C. is \$110, less tubes.



Model 17 differs from the 16 only in cabinet and escutcheon plate, being housed in a dark burl walnut cabinet. Available only for 50-60 cycle, 90-130 volt A.C. Price, \$135, less tubes.

Model 32 is a console of the highboy type with built-in dynamic speaker. The cabinet is of burl walnut. The chassis is the same as the 16. For 50-60 or 25-49 cycle, 90-130 volt A.C. operation, the intended retail price is \$225, less tubes.

Model 18 is a D.C. set using 112-A's in three stages of radio frequency amplification, and in one stage of audio frequency amplification and two 171A's in a final stage of push-pull audio amplification. A 200-A is used as a detector. The cabinet is the same as model 16. It is designed for use on 90-130 volt D.C. and retails for \$120.—*Radio Retailing*, February, 1929.

Power Amplifier

Two types of power amplifiers can be built up from the No. 952 foundation kit made by the Gray & Danielson Mfg. Co., 260 First Street, San Francisco, Calif. This kit includes a pressed steel chassis, fully drilled, upon which all component parts of the amplifier are mounted by the builder. It also contains the necessary small parts.

One model incorporates both the first and second audio tubes and the first and second audio transformers and is intended for use primarily with a phonograph pick-up not employed with a receiver.

The other incorporates the power tube and second audio transformer only, but includes a voltage divider. It will supply plate and grid-bias voltages for any type of receiver and provision is made for a 374 voltage regulator tube so that the voltages delivered to the set will be maintained constant.—*Radio Retailing*, February, 1929.



Seven-Tube A.C. Receivers

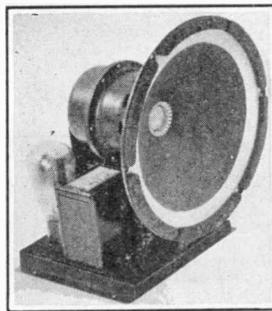
The Grigsby-Grunow Company, 5801 Dickens Avenue, Chicago, is presenting two new styles for the 1929 season. Console model 71 uses two 171-A's, in push-pull amplification, four 226's, one 227 and one 280. The dynamic speaker is built in and the cabinet is made of two tone burl walnut. The intended retail price is \$137.50.

Model 72, illustrated, is enclosed in a console cabinet with a diamond striped butt walnut center panel and marquetry. It utilizes the same tubes as Model 71. The intended retail price is \$167.50.—*Radio Retailing*, February, 1929.

Dynamic Speaker Unit

The new dynamic speaker unit announced by Silver-Marshall, Inc., 346 W. Jackson Boulevard, Chicago, uses high voltage and low current field winding, power to which is supplied by a rectifier employing a 280 tube. This tube operates in connection with a full wave transformer having a five-volt filament winding and two 150 volt secondaries, to deliver 120 volts D.C. to the speaker field. While this speaker unit is suitable for home operation it is especially adaptable to public address work.

The 850 A.C. dynamic unit for operation on 105-120 volt, 50-60 volt A.C. is \$58.50. Type 851 for use on 90-120 volt D.C. is \$48.50.—*Radio Retailing*, February, 1929.



A.C. Receivers

Five new models are now ready for the trade, according to the announcement by the Atwater Kent Manufacturing Company, Philadelphia, Pa.

Model 46 has seven A.C. tubes, one rectifier and a double power tube stage. The corners of the cabinet are paneled. The intended retail price, without tubes, is \$83.

Model 45 is a seven tube r.f. receiver with one rectifier, in a black cabinet. It lists at \$94, without tubes.

Model 56 is a compact all-in-one combination, with A-K magnetic speaker. It uses six A.C. tubes and one rectifier. It may be had in a black or dark green finish metal cabinet. Price, less tubes, \$97.



Model 57 is also an all-in-one set with magnetic speaker. The cabinet is approximately the same as model 56 but stands a little higher. Six A.C. tubes and one rectifier are used. The intended retail price is \$105, less tubes.

Model 53, illustrated, has the A-K electro dynamic speaker. It utilizes seven A.C. tubes and one rectifier. The intended retail price, without tubes, is \$117.

Two new speakers are also available. They are models F2 and F2C, both electro-dynamics, listing at \$34 and \$27, respectively.—*Radio Retailing*, February, 1929.

A.C. Receivers

The Chas. Freshman Company, Inc., 240 West 40th Street, New York, announces an improved "Q" receiver and a reduction in price. The new sets have an additional variable condenser with the result that the input and the output of the screen grid tube, and the input into the detector tube are tuned. A special form of coupler between the antenna and the radio frequency amplifier circuit has also been added. The sensitivity is increased by having regeneration in the screen-grid tube, as well as in the detector, automatically controlled by a condenser which is adjusted at the factory. Table model Q-15 is \$69, less tubes; console model Q-16 is now \$99, less tubes; and console model QD-16 is now \$129, less tubes.—*Radio Retailing*, February, 1929.



Cabinets

Two radio cabinets, both console models, have been added to the line of the Excello Products Corporation, 4820 West 16th Street, Cicero, Ill.

Model R53, illustrated, is made entirely of walnut with sliding doors of matched butt walnut veneer. It will accommodate a receiver up to 24 in. long. It is 50 in. high, 18½ in. deep and 30 in. long. The intended retail price is \$80.

Model R55 is made with five ply top, front, and side panels, with sliding doors of matched butt walnut. It is 42 in. high by 16 in. deep and 27 in. long, and accommodates a set up to 24 in. long. The intended retail price is \$50.—*Radio Retailing*, February, 1929.



Speaker Demonstration Switch

The "Speakerelay" for demonstrating from one to four speakers in succession is being made by the Fisch Radio Company, 1283 Hoe Avenue, Bronx, N. Y. It is especially adapted for store use as it is possible to demonstrate four separate speakers by simply turning the switch, changing from one to the other as desired. A model is also made for home use to operate a speaker in another room. They are enclosed in clock shape Bakelite cases which stand about three inches high. The price of the four-way relay is \$2.50, and of the two-way relay, \$2.—*Radio Retailing*, February, 1929.

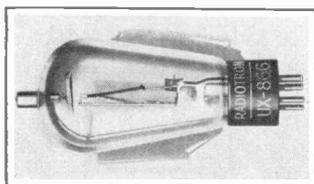
Seven Tube Receiver

Console model 36 is the latest development by the Browning-Drake Corporation, 110 Brookline Street, Cambridge, Mass. The set uses eight tubes, including rectifier in line and straight resistance coupled audio amplification. The power equipment is an integral part of the chassis, which is all aluminum. The intended retail price with Airchrome speaker, is \$175; with dynamic speaker, \$195.—*Radio Retailing*, February, 1929.

Rectifier Tube

Radio amateurs will be interested in the announcement by the Radio Corporation of America, New York City, of a new rectifier Radiotron with a low and constant voltage drop. It is called the UX-866, and is of the hot-cathode, mercury vapor type.

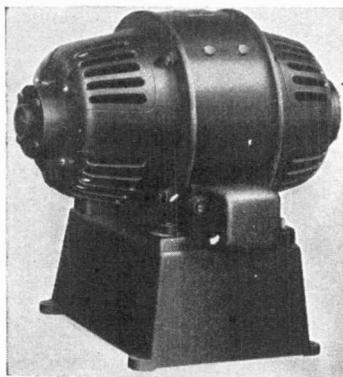
It is especially suited for supplying the transmitter with stable rectified plate voltage in half or full wave circuit connections. The characteristics are as follows: filament volts, 2.5; filament amperes, 5.0; max. peak inverse volts, 5,000; max. peak plate amperes, 0.6; and approximate tube voltage drop in volts, 15. The intended retail price is \$12.50.—*Radio Retailing*, February, 1929.



Transformer and Demonstrating Base

The No. 905 compensating audio transformer of the Gray & Danielson Mfg. Company, 260 First Street, San Francisco, Calif., is intended to replace the first audio transformer of the set. It is of the resonant-primary type and amplifies the lower audio frequencies to a greater degree than it does the middle and high frequencies, according to the manufacturer. It is small enough to fit into practically any receiver, being 2 in. by 2½ in. by 3¼ in.

The 1905 demonstration base is of steel, enameled black and so designed to permit quick substitution of the above transformer for the first-stage transformer in the receiver by the turn of a switch. It is equipped with a 905 transformer, socket adaptors for both A.C. and D.C. tubes, change-over switch, terminal jacks and necessary bypass condensers, and is completely wired.—*Radio Retailing*, February, 1929.



Rotary Converter

The Janette Manufacturing Company, 556 West Monroe St., Chicago, has introduced a rotary converter to transform D.C. to A.C. It will operate from four to six A.C. sets simultaneously, and is of rugged construction. This converter is made with an iron frame, large commutator, adjustable brush holders and Timken roller bearings.—*Radio Retailing*, February, 1929.



Interference Eliminators

Several types of interference eliminators are being made by the Dongan Electric Manufacturing Company, 2987 Franklin Street, Detroit, Mich.

D-207, illustrated, has a total condenser capacity of 8 mfd. and retails for \$7.50. D-215 has a 4 mfd. total condenser capacity and lists at \$5. Both are mounted in steel cases equipped with conduit fittings.

Four types of filter condensers are available with working voltages of 400, 600, 800 and 1,000 volts D. C. The prices range from \$1.50 to \$7.

A B-power unit condenser block is also made for use with either the Raytheon BH or Q. R. S. gaseous type tube or the 280 rectifier tube. It contains condenser units of 2-2-4-4-1-1 mfd. sections having a working voltage of 400 volts D.C. Price, \$12. A buffer condenser for use with Raytheon or Q. R. S. rectifier tubes is \$1.75.

Two power amplifier condenser units are manufactured. D-600 is designed for use with 281, 210 or 250 tubes and has a working voltage of 1,000 volts. Price, \$16.50. D-307 contains condensers of 4-2-1-1 mfd. sections with a working voltage of 400 volts for use in connection with D-600. Price, \$10.—*Radio Retailing*, February, 1929.

A.C. Receiver

The A.C. receiver made by the Lueckingham Radio Corporation, 440 W. Superior Street, Chicago, may be had in chassis form, as a table model or in any one of six console cabinets.

It is a six tube set with four stages of tuned radio frequency. The chassis has a 7 in. by 18 in. panel and it retails at \$27.50. The table model retails for \$62.50, less tubes. The consoles which are equipped with Utah power motor speakers, range in price from \$79 to \$124.50, less tubes. They may also be had with the Utah dynamic speaker at \$30 extra.—*Radio Retailing*, February, 1929.

Tubes

The Raytheon Manufacturing Company, Cambridge, Mass., has added the following tubes to its line:

X-112-A, an amplifier and detector. The filament draws 0.25 amps. at 5.0 volts and takes a maximum plate voltage of 180 volts. Price, \$2.75.

X-281, a half-wave rectifier, drawing 1.25 amps. at 7.5 volts. Maximum plate voltage, 700 volts A.C. and .085 amperes D.C. Price, \$7.50.

X-210, an amplifier and oscillator, drawing 1.25 amps. at 7.5 volts. Maximum plate voltage, 450 volts. Price, \$9.

X-250, a power amplifier, drawing 1.25 amps. at 7.5 volts with a plate voltage of 450 volts. Price, \$11.50.

And the new "S" tube, a 5,000 volt rectifier for small and large broadcasting stations.—*Radio Retailing*, February, 1929.

Speaker Switch

A switch, which puts the separate dynamic speaker under the control of the radio receiver switch, has been announced by the Thermatrol Manufacturing Company, 52 Willow St., Springfield, Mass. The instrument is compact, being built in the form of a control box which plugs directly into the wall outlet and having on its face outlets for plugging in the current supply for both the set and speaker. By thus putting it in the A.C. supply line ahead of the set, the circuit to the speaker is automatically put under control of the set switch. The separate circuit which is needed for the speaker is automatically taken care of by the unit. The intended retail price is \$2.50.—*Radio Retailing*, February, 1929.

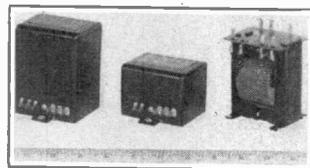


Transformers and Chokes

Several new transformers are included in the line made by Silver-Marshall, Inc., 846 W. Jackson Boulevard, Chicago.

The 257, a push-pull input transformer, has a transformation ratio of 1.8:1. Price, \$7. Type 258 is a companion push-pull output choke, \$5. Type 227 is an interstage push-pull input transformer, \$8. Types 228 and 248 are Universal output chokes, \$8 and \$7 each respectively.

Type 229, a dynamic speaker output transformer, is \$8. Type 334, a power transformer, is \$7. Type 335, a power transformer, is \$15. Type 333 is a dual filter choke and lists at \$6. Type 260U is a replacement type 3:1 audio transformer. Price, \$2.25.—*Radio Retailing*, February, 1929.



A.C. Receivers

The 1929 line of portable sets made by the Trav-ler Manufacturing Corporation, 3401 N. Halsted Avenue, Chicago, includes the Standard at a list price of \$57.50, the DeLuxe at \$75 and the Aristocrat at \$100. The Standard is the same size as last year but has a new case of brown mocha tan. The other two models are new and incorporate a number of features not usually found in portable receivers. There have also been a number of changes in the chassis.—*Radio Retailing*, February, 1929.

S. L. F. Tuning

discussed by
radio
engineers

THE question as to the advisability of designing circuits to receive stations in even tens of kilocycle separations has been provocative of much controversial opinion by the leading engineers of the industry.

It is apparently agreed that the new allocations of the Radio Commission make it desirable that circuits and dials be designed to give visual as well as actual "even separation." But whether this is desirable from a practical manufacturing standpoint seems to be questionable.

What leading engineers think is contained in the letters published below:

Compromise Seems Best on Account of Cost

It should first be noted that there is no relation whatsoever between the selectivity of a receiver and the use of straight-line-frequency condensers or any other sort of condensers (of small loss) in such a receiver. The selectivity of a receiver does not depend upon the type of condenser scale which may be selected by the manufacturer.

The only effect of straight-line-frequency condensers is to make tuning more convenient at one end of the tuning scale. It is difficult to decide whether there is any obligation to do this because there are a number of obligations which the radio manufacturer owes the public, some of which are mutually inconsistent.

For example, it is an obligation of the radio manufacturer to give the public inexpensive and reliable sets. Straight-line-frequency condensers are generally more costly and not so reliable in gang condenser assemblies as certain other types. They overhang so far from the center support that slight changes in the plate positions throw the condenser capacities into incorrect relations with each other.

It becomes necessary, therefore, to balance the obligation of reliability and low cost against the obligation of a conveniently open tuning scale over all portions of the frequency band. In some instances a compromise seems most in the interest of the purchaser and manufacturer alike.

ALFRED N. GOLDSMITH,
Vice-Pres.-Chief Broadcast Engr.
Radio Corp. of America.

New York.

Sees No Advantage in S-L-F

In the first place, I can see no virtue in using S.L.F. except the possible advantage of a tuning dial that looks symmetrical; as far as station operation is concerned, it really doesn't make much difference. Of course the big objection from the manufacturer's standpoint is that the straight-line-frequency condensers are considerably more difficult, both to manufacture and to maintain in alignment after manufacturing, especially in a four or five gang condenser.

H. E. KRANZ, Chief Engineer
Grigsby-Grunow Co.

Chicago, Ill.

Compromises

We do not approve of straight-line-frequency condensers due to the fact that this type of condenser causes what might be termed "apparent lack of selectivity." It has the effect of congesting the good higher wavelength stations which causes the consumer to object. The same reasoning holds true of straight-line capacity which causes the lower wavelength stations to be congested or grouped at one point of the dial; consequently we have taken the mean of these two extremes and use what might be termed "a modified straight-line wavelength." Therefore, we cannot calibrate our dials with equal divisions for either wavelength or kilocycles. Some of our customers have requested that our dials show numbers from 0 to 100 and kilocycles. Others insist that we furnish dials showing wavelength and kilocycles and one large distributor in New York has requested that we furnish degrees, wavelength and kilocycles.

A. A. WOODS, Chief Engineer,
All-American Mohawk Corp.
Chicago, Ill.

Are Mechanically Impractical

There are very good mechanical reasons why it is impractical, except at very high cost, to use a true straight-line-frequency condenser for tuning. This, however, does not preclude the use of frequency calibrations on dials. With the usual drum type of dial, as well as most of the disc type dials, only a small portion of the dial is visible at a time, so that it makes very little difference whether the line calibrations on the dial are spaced equally throughout the range or not. The condenser should, of course, be an approach to the straight-line frequency design in order not to crowd the calibrations too much at one end.

I have recently written to Mr. H. B. Richmond, of the Engineering Division of the Radio Manufacturers' Association, suggesting that he start a movement among the radio receiver manufacturers to bring about the universal use of kilocycles rather than wavelengths in station lists and on receiver dials. My suggestion was that the manufacturers use the figures 55 to 150 on dials rather than the larger kilocycle figures ending in ciphers. These figures could be called channel numbers, and from them, the kilocycle figures could also be obtained by adding a cipher.

Due chiefly to the efforts of the Radio Commission, the public has become familiar with the term "kilocycle," and the use of wavelength figures in meters is on the decline. I believe the time is ripe for the manufacturers, publishers, and all others interested, to go out and strongly support the Radio Commission in its worthy efforts to eliminate the use of wavelength figures, and bring about the universal use of the term kilocycle, together with the suggested channel numbers that are derived directly from the kilocycle figures.

WALTER E. HOLLAND, Chief Engineer,
Philadelphia Storage Battery Company.
Philadelphia, Pa.

"Uniform Selectivity Over the Scale Is Desirable"

We believe there are reasons why the use of straight-line-frequency should not become standard. First, because uniform selectivity over the scale is more desirable than a uniform angular variation, and secondly, assuming the same quality of manufacture, any additional gain would not be worth the cost necessary to secure it.

On our more expensive models, we show on the scale both wavelengths and frequencies. On our lower price models, we show on the scale only frequencies. The scale of our condenser plates is neither straight-line-wavelength or straight-line-frequency, but is designed with the idea of nearly uniform selectivity and better mechanical design than is possible with any form of true straight-frequency plates with which we are familiar.

J. C. TULLY,
President,
Bremer-Tully Mfg. Co.
Chicago, Ill.

"Modification of S-L-F Would Be More Efficient"

There is no definite reason why straight-line-frequency condensers could not become standard for tuning radio receivers other than the physical difficulty of securing a true straight-frequency line without making the condenser unnecessarily bulky. At the present time, we are using a condenser which has an approximately straight-frequency line, but it crowds the higher frequencies in the neighborhood of 1,500 kilocycles more than a true straight-frequency condenser would do. This enables us to compact the condenser considerably and the slight change is not apparently detrimental to tuning.

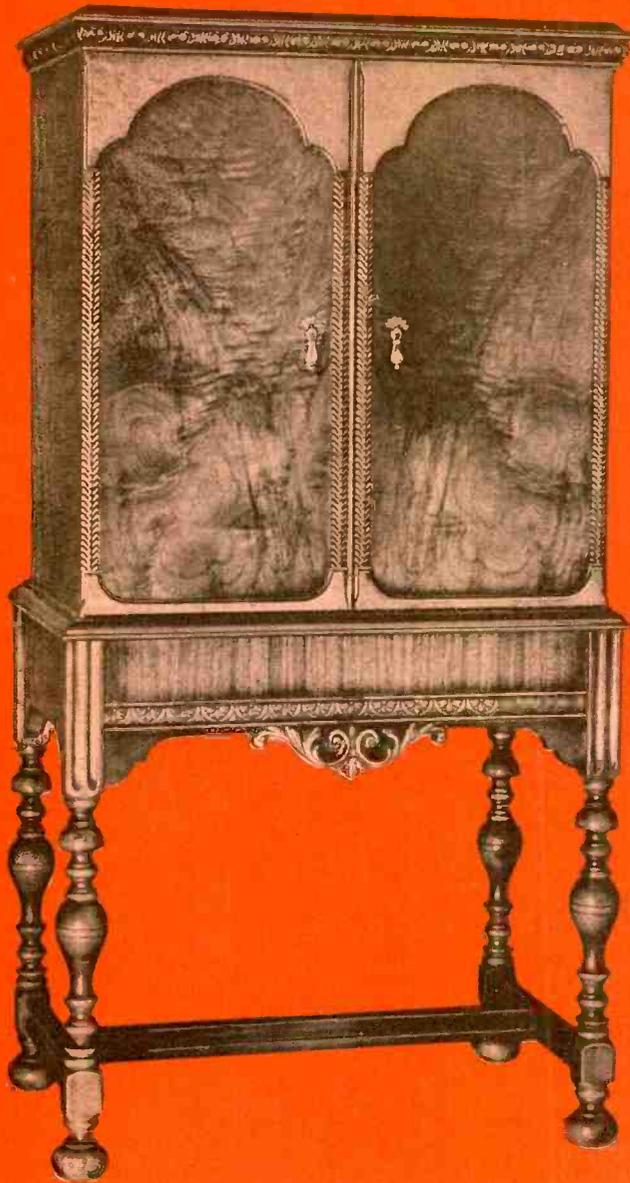
Our dial is divided in wavelengths on one side and frequencies on the opposite side. Neither one of these spacings is uniform. The objection to a dial calibrated exactly in frequencies is the psychological effect upon the customer. We have had cases in which a station will wander from its assigned frequency, thus the receiver would not bring in the station at the point on the dial for which it was calibrated. The calibration at the factory of a dial which will tune accurately to each frequency is very difficult.

We employ a dial which can be easily shifted, but we find that very frequently the customer complains if the dial is not exactly on the frequency of a station. Our present tendency is to calibrate the dial arbitrarily from zero to 100 with a frequency calibration of 50 kilocycles on the opposite side of the dial—making these frequency calibrations sufficiently wide, say 3/16 of an inch so that if the station wanders from its assigned frequency on the dial the customer will not consider the set defective.

DUDLEY C. FOSTER,
Chief Engineer, Case Electric Corporation,
United States Radio &
Television Corporation.

Marion, Ind.

RCA Radiola 41



meets the popular demand for a high quality cabinet Radiola—with the incomparable RCA Electro-Dynamic Speaker—and at a moderate price.

RCA RADIOLA 41—Cabinet receiver (tuned-radio-frequency) with RCA Electro-Dynamic Speaker. A.C. electric operation from house current. Walnut finish \$215 (less Radiotrons)



This sign marks the leading dealer in every community

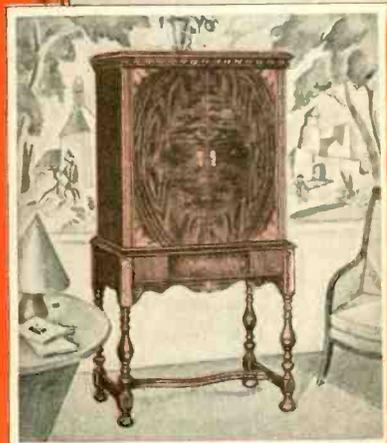
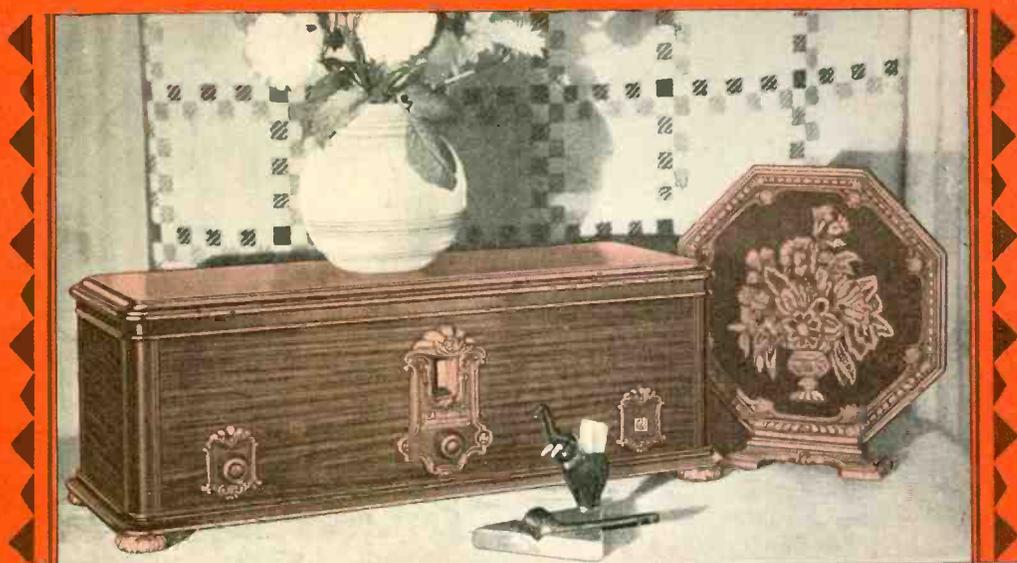
RADIO CORPORATION OF AMERICA
NEW YORK CHICAGO ATLANTA
DALLAS SAN FRANCISCO

RCA RADIOLA

MADE BY THE MAKERS OF THE RADIOTRON

RCA Super-Heterodynes

In a class by themselves—the supreme achievement of the radio art

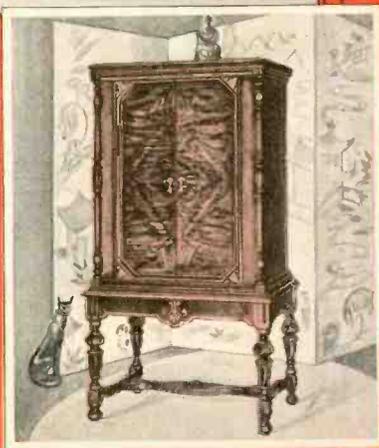


RCA RADIOLA 62—Cabinet model of new RCA Super-Heterodyne with Electro-Dynamic Speaker. A.C. house-current operation. Beautiful cabinet of walnut veneer with maple inlays. \$375 (less Radiotrons)

RCA RADIOLA 60 Table model of the incomparable RCA Super-Heterodyne. Finest receiver of its type ever designed. Super-selective. Super-sensitive. A.C. house-current operation. \$147 (less Radiotrons)



This sign marks the leading dealer in every community

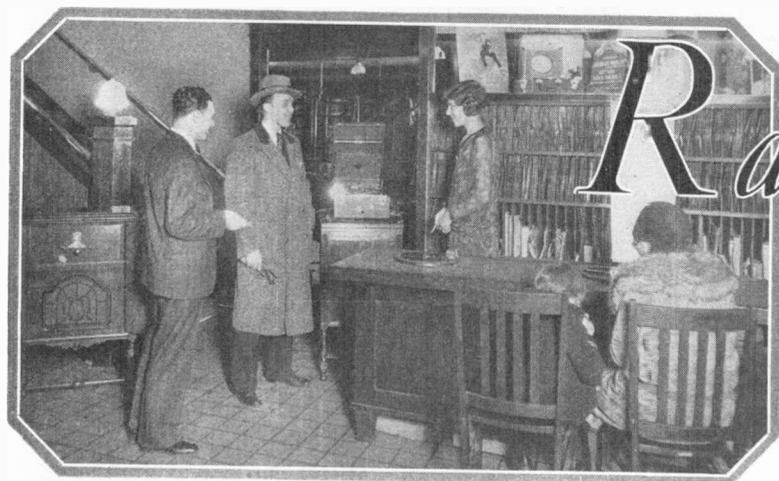


RCA RADIOLA 64—De luxe cabinet model of RCA Super-Heterodyne with improved Electro-Dynamic Speaker of hitherto unachieved range and realism. Automatic volume control. \$550 (less Radiotrons)

RCA RADIOLA

MADE BY THE MAKERS OF THE RADIOTRON

Tying PORTABLE PHONOGRAPHS RECORDS and ELECTRICAL PICK-UPS to the



Radio Sale

How the Mace-Ryer Company of Missouri sells phonograph equipment to 20 per cent of its radio customers.

“EVERY purchaser of a modern radio set is a potential prospect for all or part of the following musical equipment: a portable phonograph—or a turntable and electric motor; an electrical pick-up; and phonograph records. One in every five customers can be persuaded to buy some of these additional items. The radio business and the phonograph business, in other words, have been discovered to be blood relations.”

These convictions are voiced by Cecil C. Jones, manager of the Mace-Ryer Company, Kansas City, Missouri. They are based on a recent experiment in which this concern opened a portable phonograph and record department adjacent to its radio display.

On the assumption that there is a distinct place in the average home for recorded music electrically reproduced, provided the equipment is functionally balanced, an effort is made by the radio salesman to interest the set-buyer in a phonograph auxiliary service. This subject is generally broached after the set order has been closed, although many times the possibilities of available phonograph music is used by the salesman as an additional reason for buying a radio receiver from his firm, “where you may be assured that our sets and electrical pick-up devices have been specially selected for each other.” If sufficient interest is manifested, the customer is introduced to the young lady in charge of the phonograph counter.

TO FACILITATE her part in the transaction a portable phonograph, with electric pick-up attachment, is connected to a console. The two best talking points in favor of a portable for this work are its low first cost

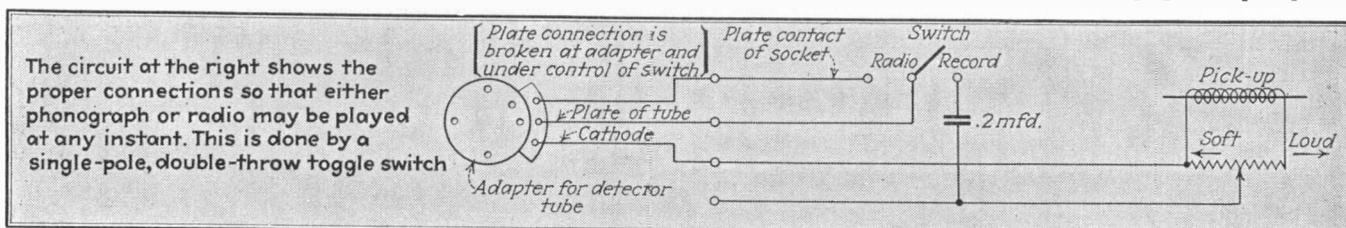
and all-around adaptability. It sells for \$25 with mechanical tone arm for summer use. The electrical pick-up attachment (the best obtainable is recommended), also costs the consumer twenty-five dollars.

Many people, however, do not care for a portable phonograph and in this case, if they already have an old-type mechanical phonograph, there is another excellent proposition to be recommended. Electric motors with turntables are available, in chassis form, for around \$40. By simply taking out the old spring motor and replacing it with the electrical chassis, the old phonograph can very easily be transformed into a modern type. This method preserves the usefulness of the storage capacity of the phonograph cabinet for records. For those who have no old mechanical phonograph and do not desire a portable mechanical phonograph there is a complete electrical unit, encased and with an electric pick-up which may be had for anywhere from \$40 to \$75.

ALTHOUGH this department has been in operation only since last September, Mr. Jones sells a portable phonograph to one out of every twelve set-buyers. One in ten purchases an electrical pick-up. He estimates that one in five buy from two to five records.

Gross radio sales for the last three months of 1928 exceeded \$150,000. It is estimated that not less than a total of \$10,000 in radio and phonograph business has been placed on the books of this concern during that period which otherwise would have been lost were it not for the mutual helpfulness and co-ordination of the radio and phonograph departments.

“Every radio purchaser is a music equipment prospect.”



These specifications are a part of "Radio Retailing's" editorial service. Representation is entirely free of charge. Additions and corrections are always welcomed in order that our records may be at all times complete.

Specifications of

Electric Pick-Ups, Motors and Turntables

Electric Phonograph Pick-Ups

Name and Address of Manufacturer	Trade Name	List Price	List Price Includes		
			Adapters	Volume Control	Balance Arm
Alden Mfg. Co., Brocton, Mass.	Na-Ald	\$5.00	Yes	No	No
Allen-Haugh Mfg. Co., 14th & Clark Sts., Racine, Wis. *Nickel plated. †Gold plated	Phono-Link	{ 7.50* 8.50† }	Yes	Yes	No
Amplion Corp. of America, 133 W. 21st St., N. Y. C.	Revelophone	13.50	Yes	Yes	Yes
Audak Co., 565-5th Ave., N. Y. C.	Audak	15.00	Yes	Yes	No
Best Mfg. Co., 1200 Grove St., Irvington, N. J.	Best	14.50	Yes	Yes	Yes
Brooklyn Metal Stamping Co., 718 Atlantic Ave., Brooklyn, N. Y.	Via-Rad	10.00	Yes	Yes	\$1.50 extra
Buckingham Radio Corp., 440 W. Superior St., Chicago, Ill.	Buckingham	10.00-19.00	Yes	Yes	Yes
Carryola Co., Milwaukee, Wis.	Carryola	7.50	Yes	Yes	No
Crosley Radio Corp., Cincinnati, O.	Merola	15.00	Yes	Yes	Yes
Electrical Research Labs., 2500 Cottage Grove Ave., Chicago, Ill.	Erla	19.50-24.50	Yes	Yes	Yes
Gordon Co., L. S. 1800 Montrose Ave., Chicago, Ill.	{ Gordon B2 Gordon B4 }	{ 11.50 12.50 }	{ Yes Yes }	{ Yes Yes }	{ No Yes }
Nathanial Baldwin, Inc., 3474 S. 23rd St., E., Salt Lake City, Utah.	Baldwin	10.00	For Columbia Phono.	\$5 extra	\$5 extra
Pacent Electric Co., 91 7th Ave., New York, N. Y.	Phonovox	10.50-13.50	Yes	Yes	No
Signal Electric Mfg. Co., Menominee, Mich.	Signal	13.00	Yes	Yes	Yes
Stromberg-Carlson Tel. Mfg. Co., Rochester, N. Y.	Stromberg	25.00	Yes	Yes	Yes
United Air Cleaner Co., 9702 Cottage Grove Ave., Chicago, Ill.	United	16.50	Yes	Yes	Yes
Utah Radio Products Co., 1615 S. Michigan Ave., Chicago, Ill.	Utah		Yes	Yes	Yes
Webster Electric Co., Racine, Wis.	Webster	12.50-17.50	Yes	Yes	No

Electric Phonograph Motors and Turntables

Name and Address of Manufacturer	Model No.	List Price	Type of Motor	Turntable Included	Operating Voltage	Operating Frequency	Speed Control on Motor	Approx. Cubic Space Needed for Mounting	Approx. Weight, Pounds
Allen-Haugh Mfg. Co., Racine, Wis.	A-H	\$20.00	Synchronous	Yes	110	60	No	48 cu.in.	4
Bodine Electric Co., 2270 W. Ohio St., Chicago, Ill.	RC-10	37.50	Induction	Yes	110	60	Yes	206 cu.in.	11
General Electric Co., 1635 Broadway, Fort Wayne, Ind.			Information not obtainable.						
Gordon Co., L. S. 1800 Montrose Ave., Chicago, Ill.	U. B. I. B. I. B.	35.00 35.00 35.00	Universal Induction Induction	Yes Yes Yes	110 and 220 110 and 220 110 and 220	25-60 42-50-60 42-50-60	Yes Yes Yes	250 cu.in. 250 cu.in. 250 cu.in.	9 9 9
Kendrick & Davis Co., Lebanon, N. H.	KPD	25.00	Universal	Yes	110		Yes	84 cu.in.	5
Pacent Electric Co., 91 7th Ave., New York, N. Y.	136	35.00	Induction	Yes	110	60	Yes	147 cu.in.	9½
Prime Mfg. Co., 653 Clinton St., Milwaukee, Wis.				Yes	110	60	Yes		
Rotor Corp. of America, Dayton, Ohio	B	25.00	Synchronous	Yes	110	60	No	21 cu.in.	2½
Signal Electric Co., Menominee, Mich.	44	40.00	Induction	Yes	110	60	Yes	1,108 cu.in.	8½
United Air Cleaner Co. 9705 Cottage Grove Ave., Chicago, Ill.	I	28.00	Induction	Yes	110	60	Yes	243 cu.in.	7

360 Rooms Wired—Continued from page 55

out whatever program may be on at the time, and also signals the radio operator that the telephone operator is talking on the system.

Close study has proven this system much more satisfactory, quicker and quieter than that of having a bell boy search for the guest. Not only that, but no matter where the person is in the hotel, he gets the call almost as soon as it comes in, and the volume of the reproducers is always at a level that is just right.

Mr. Kloepfel, the owner and manager of the hotel, was asked why the amplifier and receiver are kept in an old upright piano. He replied, "Inasmuch as the entire installation, which, by the way, was put in by a local contractor, cost about \$10,000 I did not feel like spending any more money for a regular switchboard. The

piano being an old relic of mine, we decided to take the works out and use it." A novel idea, and satisfactory.

ALTOGETHER there are about 400 radio outlets used in the entire system. The hotel has twelve floors with thirty rooms to a floor. The conduits are run up in fifteen risers, each riser feeding two reproducers to a floor. This means that one riser supplies twenty-four reproducers. All output connections are in parallel and four power amplifiers are connected in parallel also to give the necessary amplification.

In view of the tropical storms which visit this section of the country every now and then, a short-wave sending station operating under an amateur call is going to be installed so that at no time need the guests be cut off from communication with the rest of the world. This gives the hotel a complete radio service.



THIS MONTH

in the Radio Industry

1929 Trade Show Will Take in Three Hotels

Many matters of importance to the radio trade were decided at the last meeting of the Board of Directors of the Radio Manufacturers' Association, held January 11 and 12 at Briarcliff Lodge, N. Y.

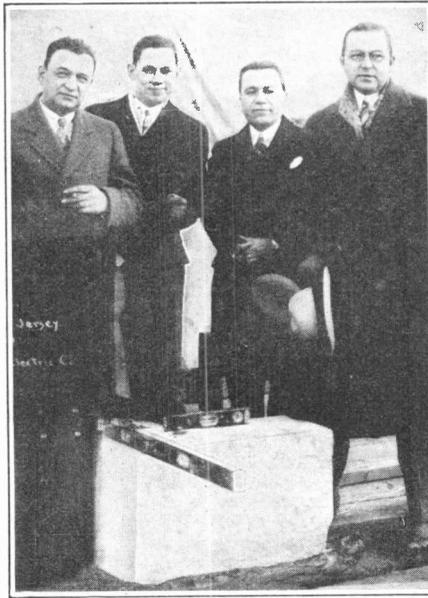
The third RMA Trade Show, it was decided, will be held the week of June 3rd at Chicago. While headquarters will remain at the Hotel Stevens, it has also been found necessary to have exhibits at the Blackstone and the Congress. Exhibits of the leading manufacturers will be divided among the three hotels. Added importance is being attached to the show this year because of the fact that the Music Industries Chamber of Commerce will have its annual convention during the same week at the Drake Hotel in Chicago. The various meetings will be arranged so as to avoid conflict.

U. J. Herrmann and G. Clayton Irwin, Jr., will again conduct the show for the RMA, and contracts for the 1929 and 1930 consumer shows in New York and Chicago were also signed, to be conducted under the sponsorship of the RMA, and under the management of Herrmann and Irwin. The New York show will be held the week of September 23 at Madison Square Garden, and the Chicago show the week of October 21 at the Colosseum.

That the RMA will sponsor a weekly broadcasting program was also announced at the meeting. These programs will be paid for by individual RMA members, but will be known as the RMA series. They will go over the NBC and Columbia chains. The first was sponsored by the Sylvania Products Company and was broadcast February 6.

Definite recommendations regarding radio legislation were also formulated. These included the deletion of stations not serving the public interest, permission for stations on cleared channels to use higher power, requiring stations to adhere strictly to their frequencies, permanent revoking of the Radio Commission's order No. 43 limiting the duplication of chain programs within 300 miles, issuance of broadcasting licenses for more than 90 days, modification of "equalization" law so that broadcasting facilities can be divided in the public interest rather than arbitrarily by zones, preventing rebroadcasting of radio programs without consent of stations, provision in the law that new applicants for broadcasting licenses must have public hearing before license is granted, and appointment of five commissioners from the nation as a whole rather than one from each zone.

New members of the Board of Directors were elected as follows: Joseph L. Ray, of the Radio Corporation of America, two years; B. J. Grigsby, of the Grigsby-Grunow Company, one year, and Allen G. Messick, of the United States Radio and Television Corp., one year.



G. H. Perryman Lays Cornerstone

George Perryman wielded the trowel with the dexterity of an experienced mason at the laying of the cornerstone of the new tube plant of the Perryman Electric Company in North Bergen, N. J. Left to right, are: Ben Ogush, secretary; George Perryman, treasurer; B. S. Katz, president; and H. B. Foster, vice-president.

Howard Radio Co. Linked With Piano Company

Substantial stockholdings and directorships in the Howard Radio Company, Chicago, have been secured by John H. Parnham and James L. Barron, president and vice-president, respectively, of the Everett Piano Company, South Haven, Mich.

For some time, the Howard Company has been considering moving its plant to a city near Chicago. It will now have at its disposal the cabinet factory of the piano company in South Haven. Of the ten acres of floor space, five and one-half will be turned over to the manufacture of Howard receivers and phonograph combinations.

CHARLES BROADWELL POPENOE, treasurer of the National Broadcasting Company, died on January 10, in the Miami Valley Hospital, Dayton, Ohio, after a brief siege of pleurisy and lobar pneumonia.

A pioneer in broadcasting, Mr. Popenoe was the manager of the second broadcasting station in the United States, established in 1921 by the Westinghouse Electric and Manufacturing Company. When the National Broadcasting Company was formed in 1926, he became treasurer.

1928 Sales in Northwest Gain 20% Over 1927

Approximately 7,500 persons in the Northwest are engaged in the sale and distribution of radio apparatus, according to a survey just completed by the Northwest Radio Trade Association.

During the past year, 190,855 sets were sold in this territory, with an average retail value of \$121.91. The total retail value of the sets sold was \$23,279,158; of the table speakers, \$3,094,111; and of the consoles with built-in speakers, \$1,715,766. Radio tubes worth \$6,514,850 and \$1,820,075 worth of batteries were sold. The total retail value of all radio equipment sold in this territory during the past year is \$37,932,130.

Two Commissioners Resign

Two resignations from the Federal Radio Commission were given to President Coolidge last month. O. H. Caldwell, one of the original members of the Commission, has resigned, to become effective February 23, and Sam Pickard, representing the Fourth Zone, left the commission February 1 to become vice-president of the Columbia Broadcasting System. Both resignations were accepted by the President.

At this writing it is not known whether Congress will renew the life of the Commission as an independent body or whether radio control will revert to the Department of Commerce, with the Commission as a part-time, appellate body. If no legislation is passed by both Houses at this present session, the Radio Commission will cease to function as an independent authority on February 23.

New Steinite Factories

With the acquisition of a complete furniture factory at Auburn, Ind., and the construction of a large plant in Fort Wayne, Ind., the production facilities of the Steinite Radio Company, Chicago, will be tripled.

The Auburn factory will be devoted to the manufacture of radio cabinets and will be known as factory 5. The new plant in Fort Wayne will occupy 15 acres and employ 2,000 persons. Construction will be started at once and it is expected it will be in operation by May 1, 1929. Both sets and cabinets will be made there.

Music Slogan Prize Awarded

The slogan, "The richest child is poor without musical training," was unanimously awarded the \$1,000 prize in the national music slogan contest conducted by the Music Industries Chamber of Commerce. Mrs. Linnie Lewis Wilson of Hamilton, Mont., is the creator of the slogan, which was picked from approximately 120,000 entries.

Federated Plans for Convention This Month at Buffalo

All radio dealers and wholesalers, whether members or not,
urged to attend—Pertinent addresses by radio leaders

The combined forces of every live radio dealer and jobber in Buffalo and Rochester, N. Y., will be on hand to welcome the wholesale and retail branches of the industry February 18 and 19 at the Statler Hotel, Buffalo. Special railroad rates, pertinent addresses by top-notchers in radio, an opportunity for self-progress, wonderful entertainment; these are but a few of the reasons for attending the 1929 convention of the Federated Radio Trades Association, and its allied associations, according to President Wrape.

"You don't have to belong to be welcome," he emphasizes. "You owe it to yourself and to the industry to be there."

WHOLESALEERS HAVE MADE GIANT STRIDES

One of the outstanding features this year will be the opportunity afforded wholesalers and dealers to discuss, formally and informally, their co-related problems. Because the Radio Wholesalers' Association now numbers over 125 of the most influential radio jobbers in the country it is in a position, it is felt, to exert a definite and constructive influence in the industry. Its objective is to encourage better trade relations and practices.

As will be noted from the accompanying list of "highlight" events many matters of vital importance are scheduled for discussion.

President Harold J. Wrape expects a registration in excess of 500 making this the greatest gathering Federated has yet enjoyed.

It will be the first Federated convention at which there will be individual sectional meetings of the various divisions of the radio trade. The association will provide for nearly a day and a half of individual meetings to the devotion of individual problems.

The Manufacturers' Representatives Section, which is composed of over 50 of the leading manufacturers' representatives, will further complete their plans for the organization and will meet to discuss their joint problems. This section is headed by George Riebeth of the French Battery Company.

The Radio Retailers' Association, a national organization of radio dealers, headed by Julian Sampson of St. Louis, Mo., will further complete their organization and will place committees in operation to increase the value of the association to the radio dealers. Prominent radio retailers will address their separate meetings on radio selling and merchandising. Information will be given the visiting dealers as to how they may better conduct their enterprise to make it more profitable. Prominent retailers from coast to coast have signified their intention of being at this meeting and will do everything possible to increase the prestige of the retailer and to further organize the association.

The Radio Wholesalers' Association, with Peter Sampson of the Sampson Electric Company, president, will hold its own individual meeting at which time several prominent members of the radio industry will address the meeting on wholesaler problems. Committee reports will be made showing the activities of the association during the past year. Recommendations will be made concerning merchandising of radio apparatus.

Special consideration will be given to

the committees on the following subjects:

1. Dealer Deferred Payment Plan. This committee, headed by James Aitken of the Aitken Radio Corporation, Toledo, Ohio, has made an exhausted study of finance plan now in operation for dealer sales. They will have a complete report and finance plan ready for adoption by members of the association.

2. Report of Insurance Committee. Mr. Litt, of the Harry Alter Company, Chicago, chairman of this committee, is now working on arrangements with insurance organizations to provide a suitable connection for members of the Radio Wholesalers' Association to secure better insurance. This committee's report will be met with considerable enthusiasm on the part of the members.

3. Report of Credit and Collection Committee, by Mr. Levy of Sampson Electric Co., will be given with a view in mind to provide credit and collection service for members of the association. At the present time this important subject is being investigated very thoroughly by a committee composed of credit managers of various firm members of the Board of Directors.

Other business will be given considerable thought and many policies determined upon. A meeting of the Federated Radio Trade Association, composed of all four groups, will be addressed by President Harold J. Wrape, who will review the activities of the organization since the past convention

and will present the plans for the further operation of the association. Elmer C. Metzger, president of the Buffalo Radio Trade Association, will welcome the guests to Buffalo.

HIGH-LIGHT EVENTS OF THE FEDERATED CONVENTION

Monday, February 18

Address by President Harold J. Wrape
"Federated and the Manufacturer" by Herbert H. Frost, president RMA
"The Broadcasting Situation" by William Hedges, president of the NAB

Talks by Bond Geddes and M. F. Flanagan, high executives with the RMA, and L. S. Baker, executive director of the NAB

"Some Legal Aspects of Radio"—Judge John W. Van Allen

"Federal Radio Legislation"—Hon. Frank D. Scott

Committee Reports

Sectional meeting of the Wholesalers' Association: Co-operation; Finance; Dealer Relations; Traffic; Tubes; Sets; Furniture; Trends; Dealer Deferred Payment Plan; Mutual Insurance; Credits and Collections

Election of officers

Tuesday, February 19

"The Future of Local Associations" by Michael Ert, president, Association Section

"The Radio Retailers' Association" by Julian Sampson

"Plans for the Manufacturers' Representatives Section" by George Riebeth

Report of Radio Shows Committee

Election of Directors

Election of Officers.

Prominent Members of the Federated Directors



N. Y. Electrical Credit Association Elects Officers

At the organization meeting of the new board of directors of the New York Electrical Credit Association, the following officers were elected: President, J. H. Lecour, Mitchell-Rand Manufacturing Company; vice-president, E. R. Mellen, Weston Electrical Instrument Corporation; secretary, W. J. Kreger, New York City.

The new board, in addition to the above officers, includes L. R. Edwards, Harvey Hubbell, Inc.; R. F. Downing, E. B. Latham Company; T. A. Dougherty, Alpha Electric Company, and R. M. Rice, Manning-Bowman & Company.

Talking Machine and Radio Men Plan Annual Dance

The annual dinner-dance of Talking Machine and Radio Men, Inc., at the Hotel Commodore, New York, on Monday evening, April 1, will see a departure from the association's usual plan of broadcasting its program. Arrangements are being made by a special committee composed of Byron R. Forster, chairman; Maurice Landay, of the Greater City Distributing Company; Arthur A. Trostler, of the Freed-Eisemann Radio Corporation, and E. W. Guttenberger, of the Columbia Phonograph Company, in co-operation with forty-one members.

Music Association Initiates New Service for Members

Amplifying the promotional work of the National Association of Music Merchants, a Membership Service Department is to be inaugurated shortly. The new department will provide various kinds of service for members, and certain legal aid will be attempted. Attention will also be given to selling helps.

One of the first movements will be the furnishing of decalcomania transfers for show windows. They will be circular in shape and carry the words "Member 1929, National Association of Music Merchants," as well as a short message telling of the purpose of the association.

Travers Heads Magnavox

The election of F. B. Travers as president and of R. A. O'Connor and E. S. Pridham as vice-presidents of the Magnavox Company, Oakland, Calif., marks

the completion of management changes first inaugurated some months ago. Mr. Travers joined the company in 1917 when the Sonora Phonograph Company, of California, with which he was connected, became a part of the Magnavox Company. Mr. O'Connor before joining the company was in the export business and Mr. Pridham was one of the founders of the Commercial Wireless Development Company which was absorbed by Magnavox in 1917.

NEMA Drafts Bill on Re-Broadcasting

A bill designed to clarify Section 28 of the Radio Act, with respect to the re-broadcasting and re-transmitting or recording of a broadcast program without the specific authority of the originating station, has been formulated by Louis B. F. Raycroft, vice-president of the National Electrical Manufacturers Association, in charge of the Radio Division.

The bill has been introduced into the House by Representative George P. Darrow and a similar one introduced into the Senate by Senator James E. Watson. The bill is aimed particularly at telephone companies which receive the programs and send them out over their wires at a fixed charge and at other companies who have made and sold talking machine records of the broadcasts.

Pay Tribute to Dr. DeForest at Banquet

Men prominent in the affairs of government, finance, industry and science attended the banquet held on January 24, at the Biltmore Hotel, New York, in honor of Dr. Lee DeForest. Originally intended as a climax to a three-day sales conference held at the DeForest plant in Jersey City, N. J., the affair attracted many outsiders. A program of entertainment rounded out the evening's activities.

Among those present were James Gar-side, president of DeForest, Anthony J. Drexel Biddle, Jr., Walter P. Chrysler, William K. Vanderbilt, Jr., Hon. James J. Walker, Mayor of New York City, and Hon. Grover A. Whalen, Police Commissioner.

THE UTAH RADIO PRODUCTS COMPANY, Chicago, has been licensed by the German inventor, Hans Vogt, to manufacture the new bi-laterally operated condenser speaker in the United States.

Personnel Changes

ANDREW WELLS ROBERTSON has been unanimously elected chairman of the board of directors of the Westinghouse Electric and Manufacturing Company. He will give up his position as president of the Philadelphia Company to devote his entire time to his new duties.

G. F. DISTER has joined E. Edlmann & Company, Chicago, as vice-president. For the past twenty-five years, he has been president and general manager of the Gemco Manufacturing Company, Milwaukee.

HENRY BEDINGER RUST, president of the Koppers Company, has been elected a director of Westinghouse.

ROBERT HERTZBERG has resigned his position as managing editor of "Radio News," to join the Pilot Electric Manufacturing Company, in the capacity of technical and editorial consultant.

R. H. CUNNINGHAM is the latest addition to Fada's research engineering staff. He is an electrical researching consulting engineer with more than fifty patents to his credit.

FRED W. PIPER is now assistant sales manager of the Temple Corporation. He was formerly with the United Radio Corporation and the Amplion Corporation.

GEORGE E. WESTERLUND has assumed his new duties as head of the purchasing department of the Polymet Manufacturing Corporation. He was formerly purchasing agent of Freshman.

NORMAN F. DAW has joined the DeForest staff as assistant sales manager, and H. A. Hutchins, Jr., has been appointed New York district sales manager.

E. A. DAVENPORT is now sales manager of the United Research Laboratories, Chicago.

W. J. ASCHENBRENNER has resigned as secretary of the Pacific Radio Trades Association, San Francisco, to join Fred H. Thompson, Majestic distributor.

R. H. CANNING has been made Pacific Coast supervisor for the Federal Radio Corporation. He joined the company five years ago as territorial salesman, later being promoted to special representative.

CHARLES A. CRAIG, who has been in charge of the sales promotion department of Sonora, has been made metropolitan field sales manager.

A. W. RHINOW, who has been a member of the Kolster merchandising division for three years, is now assistant sales manager.

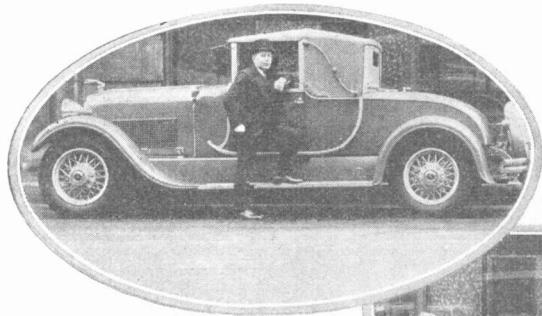
C. E. HUFFMAN is now with the Jenkins Television Corporation as chief engineer, coming from the Westinghouse organization.

W. T. TABER, formerly chief engineer of Daven, has joined the engineering staff of the Stevens Manufacturing Corporation. He will be in charge of speaker and transformer research, and engineering.

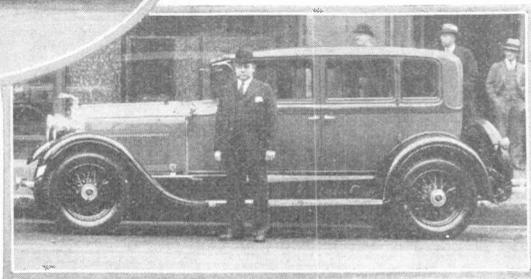
New York Association to Hold Show

Arrangements have been completed for a Spring Style Show, in conjunction with the first annual banquet and dance of the Radio Retailers Association, to be held in the Pennsylvania Hotel, New York, on Sunday evening, March 17, at 6:30 p.m.

It is expected that more than 500 radio retail dealers from the metropolitan district and surrounding territory will attend. Manufacturers have been invited to display their lines. Irving E. Cohen, secretary of the association, is in charge of the affair.



W. C. Perkins, president of the United States Radio and Television Company, Chicago, above, and A. G. Messick, chairman of the board, right, were recently presented with their choice of a 1929 Lincoln car in appreciation of their efforts in behalf of the organization.



W. C. Perkins and A. G. Messick Presented with Lincoln Cars

News of Jobbers and Distributors

Majestic Distributors Hold Radio Style Show

A vast throng of metropolitan New York radio dealers gathered at the Hotel Pennsylvania on January 9, to see the 1929 line of Majestic sets.

The evening began with a banquet to the 2,000 guests, who included representatives of the Grigsby-Grunow Company and a number of leading figures in the radio industry. Following this was the display of receivers on a specially constructed stage. After the style show, three hours of professional entertainment was provided.

Among the speakers were Herbert Young, sales manager of the Grigsby-Grunow Company; James J. Davin, sales promotion manager; E. H. McCarthy, metropolitan divisional sales manager; Bond P. Geddes, vice-president of the RMA, and James J. Walker, Mayor of the City of New York.

The K. W. Radio Company, the Sterling Radio and Electric Company, the North Ward Radio Company, and the Speciality Service Company, distributors of Majestic sets, all combined in sponsoring the event. Leonard C. Welling of the K. W. company was chairman.

Dealer Meetings Called by Many Majestic Jobbers

Two playlets and plenty of professional entertainment characterized the first annual Majestic dealer convention held by the Harry Alter Company, Chicago, at the Hotel Stevens. The business meeting opened with a skit by the Alter Troubadours, entitled, "What, No Rumors?" and concluded with the presentation of the 1929 line. E. St. Elmo Lewis, an authority on business, was the main speaker.

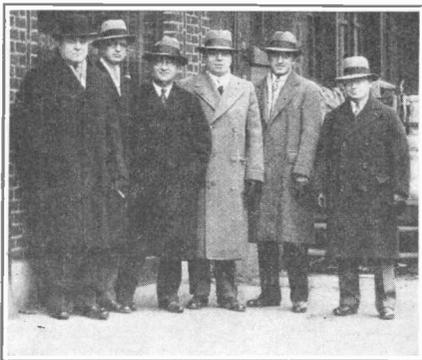
Nearly 300 Majestic retailers from Texas met at the Adolphus Hotel in Dallas, as the guests of the Radio Equipment Company. The speakers included W. L. Cohn and Linwood Griffin of the Radio Equipment Company, H. C. Jackman, factory representative, and J. D. Sims of the General Outdoor Advertising Company.

Majestic retailers from Ohio, Indiana and Kentucky, to the number of 300, attended the Majestic dealer meeting and banquet given by the Julius J. Bantlin Company, Cincinnati, Ohio. Ralph Foss of the Grigsby-Grunow Company gave an interesting talk on "Franchises and How to Keep Them," and L. Rummell, president of the Bantlin Company, welcomed the guests.

Majestic dealers from all parts of the Northwest recently gathered at the Nicollet Hotel, Minneapolis, for the first annual convention sponsored by the Roycraft Company. The business meeting was devoted to a discussion of the merchandising and sales plans.

The United Electric Supply Company, Salt Lake City, Utah, recently held its first annual Majestic convention at the Newhouse Hotel in Salt Lake City. Approximately 200 dealers from Utah, Idaho and Wyoming were present.

The most enthusiastic dealer meeting ever held by the G. Norman Baughman Company, Tampa, Fla., Majestic distributor, was called at the Hillsboro Hotel in Tampa recently. Several talks were



Chicago Bound

Irving Meyer; Leo A. Meyer; Herbert Fink, president; Anthony Mirabella; Emanuel London and Bernard L. Reichman, vice-president, all of the North Ward Radio Company, Newark, N. J., just before they started for a meeting at the Majestic factory in Chicago.

delivered covering outdoor advertising, service, and financing. Luncheon was served at noon, following which the meeting was continued.

Eugene R. Farny Addresses All-American Jobbers

Emphasizing the necessity on the part of both manufacturer and distributor of helping retail dealers in the solution of their merchandising problems, Eugene R. Farny, the newly elected president of the All-American Mohawk Corporation, addressed the seventy-odd wholesalers from all parts of the country, who recently assembled in Chicago. The occasion was the mid-year conference held at the Congress Hotel.

Otto N. Frankfort, vice-president in charge of sales, outlined plans for merchandising the new models, and announced that the advertising for the coming year would be nationalized. The three new Lyric models, which will be placed on the market shortly, were demonstrated.

Tell A-K Jobbers of 1929 Plans

Owing to the wide range of topics to be discussed, the one-day meeting of Atwater Kent distributors from all sections of the country, became a two-day convention. The plans for merchandising and advertising the new electric dynamic set were discussed. A. Atwater Kent, president, announced that a new merchandising plan had been worked out with the Pooley and Red Lion companies. He also said that arrangements had been made with the Hartman Corporation, Chicago, for cabinets and that other cabinet manufacturers would shortly be ready to supply the needs of the distributors.

THE WEBER DISTRIBUTING COMPANY, INC., New York, has elected the following officers for 1929: Jack Weber, president and treasurer, and Max Press, vice-president and secretary.

S. A. HODGES has joined the C. C. White Electric Company, Dallas, Tex., Zenith distributor.

Representative Committee is Named by Crosley Jobbers

In order that the distributors may have a more active part in the setting of merchandising policies and plans and, at the same time, not be required to leave their business affairs to meet in Cincinnati, the Crosley distributors have selected a committee of eight, of their number to represent them at stated meetings with the president and other Crosley officials at the home office.

The committee includes: Jack Waddell, Wetmore-Savage Company, Boston; Howard Shartle, Cleveland Talking Machine Company, Cleveland; Robert Coleman, George C. Beckwith Company, Minneapolis; Robert Himmell, Hudson-Ross, Inc., Chicago; Charles Carper, Nebraska-Buick Company, Lincoln; Lester Mingins, Twentieth Century Radio Corporation, New York; and Al Ravenscroft, Kierulff and Ravenscroft, Los Angeles. The eighth member, from the southwestern part of the United States, will be named at a later date.

Steinite Meeting Draws 200 Jobbers

Wholesalers from all over the country came to Chicago the week of January 7, for the convention held by the Steinite Radio Company. The convention opened with a luncheon at the Stevens Hotel. At the following luncheons and dinners addresses were made by Jay Abelson, Leslie F. Muter, Lester Abelson, A. Crossley, Fred Stein and others. The distributors presented Oscar Getz with a platinum and diamond watch and gave Leslie F. Muter a set of silver.

Peerless Begins Weekly Meetings

The 180 jobbers who have made the most outstanding success during the past year in merchandising the Peerless line made by the United Reproducers, Inc., are to be brought to the factory at Rochester, N. Y., for a series of weekly sales conferences. Ten wholesalers will be invited each Monday morning.

THE WILMINGTON ELECTRICAL SPECIALTY Co., INC., Wilmington, Del., has remodeled and enlarged its showrooms. The total display space now available is about 1,300 square feet. Willard S. Wilson is president of the company, George C. Tunis, vice-president, and E. S. Wilson, secretary-treasurer.

THE ELECTRIC SUPPLY COMPANY, Oakland, Calif., recently entered the mail-order field. The services of H. L. Williams, formerly advertising manager for Silver-Marshall, Inc., have been secured in order to take care of the rapid growth of this department. A new catalog showing the complete line has just been issued.

THE STANDARD BATTERY AND ELECTRIC COMPANY, Waterloo, Iowa, has sold its storage battery business and remodeled the building so that it will have fifty per cent more space. John G. Esser has been made sales manager and W. J. Decker has been promoted to assistant general manager.

HARVEY SLATER is now with William Davis Hawk, radio distributor of Kingston, N. Y., in the sales department.



The ORCHESTRADIANS

The Largest Dance Orchestra on the Air

HERE THEY ARE—the largest radio dance orchestra ever assembled for *regular* broadcasting programs. Already they've had the enthusiastic approval of newspapers and "fans" everywhere. They're playing to send new business to Freshman and Freed-Eisemann dealers.

Here are the facts: Every Tuesday at 10.30 P. M., Eastern Standard Time . . . coast to coast hook-up over WJZ and Associated N.B.C. Stations . . . millions of families will be listening in . . . lots of newspaper publicity . . . "tie-in" advertising on radio pages . . . Freshman Division sponsors the program one week; Freed-Eisemann Division the next . . . both programs help ALL our dealers to more prospects, more sales, more profits!

... Hook Up With This Feature ...

Be sure to put up the attractive posters we've sent you—both in window and store. And be sure to insert the call-letters of the nearest station of the WJZ hook-up. (If you haven't received your posters yet, write immediately.)

CHAS. FRESHMAN CO., INC.
NEW YORK, N. Y.

Branch Offices: Chicago, San Francisco, Los Angeles, Kansas City

FREED-EISEMANN RADIO CORPORATION
Brooklyn, N. Y.



Watch this page for further announcements of our comprehensive plans for 1929.



RAYMOND HUBBELL

He wrote the beautiful Freshman-Freed-Eisemann Waltz especially for us! Ask your customers to listen in—you can be proud of your "musical trade-mark."

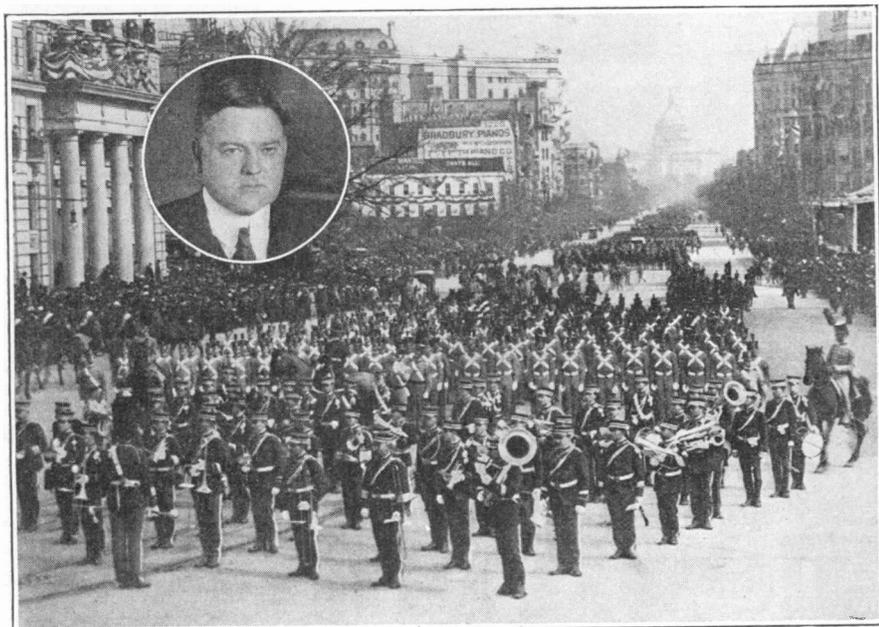
Mr. Hubbell is famous for "Poor Butterfly," seven Ziegfeld Follies, six New York Hippodrome shows and many other Broadway successes, including this year's sensation—"Three Cheers."



FRESHMAN
YOUR ULTIMATE RADIO

WHAT'S ON *the* Radio?

Coming Broadcasting Features That Will Help You Sell



Pennsylvania Avenue, Washington, D. C., from which the inauguration ceremonies will be broadcast on March 4.

Hoover Inauguration Broadcast to Last Four Hours

THE biggest radio broadcast feature of the year undoubtedly will be the inauguration of President Hoover and of Vice-President Curtis on Monday, March 4, at Washington, D. C. The chain broadcasting companies are planning to report the inauguration from the start of the official ceremonies to the end of the parade, and the entire event will go over at least two networks stretching from coast to coast. Many radio dealers are preparing to make the most of this quadrennial event.

The National Broadcasting Company will provide vivid descriptions over its affiliated stations throughout the nation. Twenty announcers from various cities will be stationed at microphones placed all along the route of the parade and also at the Capitol and the White House. The presidential inauguration program will displace all other programs for that time.

The Columbia Broadcasting System will broadcast the ceremonies over a chain of forty-seven stations from coast to coast and will be on the air for over four hours. It will include the administration of the oath to the Vice-President at 11:30 a.m., the inauguration of the President at noon, and the parade. The parade will be described, from start to finish, by one announcer.

The inaugural committee is arranging to have at least two pre-inaugural radio programs to stimulate the interest of the public. These will be of one hour's duration, with the U. S. Army Band playing for a period of forty-five minutes, with fifteen

minutes for the speaker. On Tuesday, February 12, the speaker will be Lt. Col. U. S. Grant, chairman of the inaugural committee. Assistant Postmaster-General W. I. Glover will talk on Thursday, February 14. These two programs will be broadcast over the Columbia system.

The interest of the general public in the inauguration will be further heightened by the newspapers and the radio merchant will find a ready response to whatever efforts he may make to take advantage of the widespread interest in this occasion. He can prepare for it by familiarizing himself with the details of the broadcasting; by preparing appropriate window displays, and by direct-mail and newspaper advertising.

Paul Whiteman Now On the Air

On February 5, Paul Whiteman and his orchestra started their series of nine weekly concerts over a Columbia chain of 43 stations, headed by WABC. This program is being sponsored by the P. Lorillard Company for its Old Gold cigarettes. The company has contracted with the Columbia system for weekly broadcasting time over a period of two years and is spending a total of \$1,500,000 for this purpose.

The Old Gold-Paul Whiteman Hour is on Tuesday nights, from 9 to 10 o'clock E.S.T. E.S.T.

Sophie Breslau and Lawrence Tibbett on A-K Hour

Sophie Breslau, the famous operatic contralto and Nicolai Orloff, pianist, will broadcast over the WEAJ chain during the Atwater Kent Hour on Sunday, February 17, at 9:15 p.m., E.S.T.

On February 24, Lawrence Tibbett, baritone, will be presented, with Harold Nason at the piano. Joseph Pasternak will conduct the orchestra during both broadcasts.

Galaxy of Opera Stars for De Forest Programs

The 'Columbia Broadcasting System announces a very interesting and attractive series of programs during the next few months for the De Forest Hour on Sunday nights at ten o'clock. A number of famous stars of the opera and concert stage have been engaged by the De Forest company for this series and their worldwide reputations will be sure to command a great deal of interest. The programs are:

March 3—Féodor Chaliapin, basso.

March 17—Alma Gluck, operatic soprano.

March 31—Mary Garden, soprano.

April 14—Charles Hackett, tenor, and Rudolph Ganz, pianist.

April 28—Frances Alda, operatic soprano.

May 12—Richard Bonelli, baritone and Richard Crooks, tenor.

May 26—Russian Symphonic Choir.

Sport Champions to Go On the Air

Champions of all branches of the sporting world will be featured in Ted Husing's new Saturday night program, "Sport-o-graphs" which will be broadcast over WABC between 7:05 and 7:45 o'clock, E.S.T.

Ted Husing is nationally known for his sports announcing over the stations of the Columbia Broadcasting System. The forty-minute period has been divided so that eight minutes will be given over to the guest champion of the evening. The remaining time will be sub-divided into sixteen two-minute discourses on as many different sports.

Washington's Birthday Program

The Washington's Birthday exercises at Alexandria, Virginia, under the direction of William Towner Page will be broadcast over the WJZ chain of stations on Friday, February 22, at 2 o'clock, E.S.T. Bushnell Hart, the Harvard historian, will speak on "Washington, the Gentleman."

Lucrezia Bori and Frances Alda to Be Heard

The General Motors program for Monday, February 11, provides for the appearance before the microphone of Lucrezia Bori, Metropolitan Opera House soprano. The accompanying orchestra will be directed by Eugene Goossens, well-known English composer and conductor.

Patrick Conway's Band will be presented on February 18, featuring Joe Green as marimba soloist.

On March 4, Frances Alda will broadcast, supported by an orchestra directed by Gennaro Papi, also of the Metropolitan. The General Motors program is broadcast at 9:30 p.m., over the WEAf network of stations.

Freshman-Freed Eisemann to Feature Howard Phillips

The Freshman-Freed Eisemann program for Tuesday, February 12, will feature Howard Phillips as soloist. He is well known as a singer of popular songs and will offer "Moon of My Delight" from "Chee Chee" and "Anything Your Heart Desires" from "Just a Minute." This program goes on at 10:30 p.m., E.S.T., over the WJZ network.

Fanny Brice and Wendall Hall to Broadcast

On Sunday night, February 17, at 9 o'clock E.S.T., the Majestic Hour program broadcast over the Columbia chain, will present Fanny Brice, the famous stage star who is now in the limelight in the feature role of the talking movie "My Man."

Wendall Hall, the "Aint Gonna Rain No More" ukelele player, will broadcast during the Majestic Hour on February 24. On March 17, Walter Kelly, known on the stage as "the Virginia judge," will be featured by Majestic.

Curtis Institute of Music on Columbia Chain

The musical programs of the Curtis Institute of Music, Philadelphia, are now being broadcast on alternate Tuesday nights at 10 o'clock E.S.T., from WABC and a Columbia network of 42 stations. The broadcasts started January 15.

Solo, symphony and chamber music programs will be presented by this well-known musical organization. The orchestra is conducted by Dr. Artur Rodzinsky. Josef Hofman, world-famous pianist, is the director of the Institute.

On Tuesday, February 12, and February 19, at 7:30 p.m., E.S.T., the *American Bar Association* will broadcast the last two of its series of legal talks which it has been putting on the air over the N.B.C. chain. The talks are of thirty minutes' duration and deal with the everyday legal problems that confront the average American citizen.

A series of "Paul Bunyan Sketches" is being broadcast over stations of the ABC Pacific Coast network every Thursday evening between 9:30 and 10 p.m., P.S.T. They are being presented by well-known actors, members of the *Seattle Repertory Players*.

Features of the Air

The Interwoven Pair, *Billy Jones and Ernie Hare*, who formerly were known to radio fans as the Happiness Boys, now broadcast on Saturdays at 8:30 p.m., E.S.T., over twenty stations connected with WJZ.

The Radio Manufacturers Association started its broadcasting program on Wednesday evening, February 6. Officials of both the National Broadcasting Company and the Columbia system are co-operating to make the new RMA programs a substantial and attractive air feature.

The Maine Memorial exercises at Fort Meyer, Virginia, will be broadcast from the WEAf network on Friday, February 15, from 2:30 to 3:30 p.m., E.S.T.

The *Sunkist Sevcnaders* are now on the NBC chain headed by WEAf. This program is sponsored by the California Fruit Exchange and is broadcast every Wednesday night at 8 p.m., E.S.T.

The *Pure Oil Band*, under the leadership of *Edwin Franko Goldman*, will go on the air on Saturday evenings at 8 o'clock, E.S.T., through WEAf and associated stations.

Frank Crumit, the well-known vaudeville headliner, will be featured in the *La Palina Smoker* of Sunday, February 13, which is broadcast at 8:30 p.m., over the Columbia chain.

The National Grand Opera for Monday, February 11, will be "The Secret of Suzanne" by E. Wolf-Ferrari. It goes on at 10:30 p.m., over the NBC chain headed by WEAf.

There are two new programs being broadcast by the NBC which originate on the Pacific Coast. The *Pacific Vagabonds* go on at 4 o'clock, E.S.T., over the WEAf chain, and the *Pacific Little Symphony* broadcasts on Fridays at 4 o'clock, E.S.T., over the WJZ network.

The sixty-piece *Armco Band* will play at WLW on Thursday, February 14, at 10 p.m.



A Majestic Feature

Fanny Brice, internationally known for her rendering of the song "My Man," and her portrayal of the leading character in the talking movie of the same name, will be featured in the Majestic program of February 17. The Majestic Hour goes on at 9 p.m., Eastern Standard Time, Sundays, over the Columbia system.

General Electric Hour on Saturday Nights

A new symphony orchestra is broadcasting over a coast-to-coast network of the National Broadcasting Company on Saturday evenings from 9 to 10 o'clock, E.S.T., under the sponsorship of the General Electric Company. This program was inaugurated on February 9, when Walter Damrosch conducted the orchestra; on February 23, Nicolai Sokoloff will lead the symphony. It is planned that a number of other world-famous conductors will lead the orchestra in the course of the series. Forty-two stations, headed by WEAf, will be used to broadcast this program.

The famous *American Salon Orchestra*, which broadcasts over the American Broadcasting Company system on the Pacific Coast, will be heard for the first time through a national network on the night of February 14. The program in the South, Middle West and East will come via the stations of the Columbia Broadcasting System. This orchestra of solo artists will play in the main studios of the ABC system at Station KJR in Seattle. Francesco Longo will direct.

Beginning Monday, February 11, Thomas A. Edison, Inc., is sponsoring a half-hour, weekly, program over the WJZ network. The opening program will start at 8:30 p.m., and last one hour, after which they will begin at 9 p.m., E.S.T.

Arthur Pryor and his military band of 41 pieces is now broadcasting on Sunday evenings at 10 o'clock E.S.T., over a chain of nineteen stations headed by WABC. This program is presented by the De Forest Radio Company.

"At the Baldwin" is the title of a new program, sponsored by the Baldwin Piano Company, to be presented regularly on Sunday nights at 7:30 p.m., E.S.T., over the WJZ network. *Cyrene Van Gordon*, contralto of the Chicago Civic Opera, *Walter Gieseking* and *Richard Buhlig*, pianists will be introduced on coming programs. *The Baldwin Singers*, a male quartet, will be featured regularly.

The *Mobile Oil Orchestra*, under the direction of Maurice G. Packh, is now broadcasting on Wednesday evenings at 8 p.m., E.S.T., over the WJZ chain.

The Radio-Keith-Orpheum Hour is now on a coast-to-coast WEAf network of 39 stations. This program presents feature vaudeville artists from cities all over the country. It goes on at 11 p.m., E.S.T., on Tuesday evenings.

The CeCo Manufacturing Company, Providence, R. I., has renewed its contract with the Columbia Broadcasting system whereby the *CeCo Couriers* broadcast every Monday night at 8:30 p.m., E.S.T.

"The first public health forum on the air" has been started over the WJZ network on Friday evenings at 7:15 o'clock. The program, which is sponsored by E. R. Squibb and Sons will present some of the foremost health authorities in the country.

Station WBBM broadcasts a night club program every midnight, except Thursday, central standard time. On Saturday, February 16, at 9 p.m., "Plantation Tunes" will be presented.

On Thursday, February 14, at 1:30 p.m., WLW will broadcast "As You Like It" as part of the School of the Air program under the direction of the Ohio State Department of Education. "She Stoops to Conquer" will be broadcast on Thursday, February 28, also at 1:30 p.m.

Timetable of Principal Chain Broadcasting Programs

Use this chart in tuning in for demonstrations—A timetable of evening programs will be published next month

DAY	CHAIN	6:45 A.M.	8:00	9:00	10:00	10:30	11:00	12:00 M	1:00 P.M.	1:30	2:00	3:00	3:30	4:00	4:30	5:00
SUNDAY	NBC WEAF							12:30 Sylvester (Cont.)	Sylvester (Cont.)	Peerless Reproducers				Dr. S. Parkes Cadman	Cadman (Cont.)	5:30-Twilight Voices
	NBC WJZ			Children's Hour					National Artists Hr.	National Artists (Con.)	Roxy Concert	People's Conference	Conference (Cont.)		McKinney Musicians	5:30-Dr. H. E. Fosdick
	COLUMBIA											Symphonic Hour	Symphonic Hour (Cont.)	Cathedral Hour	Cathedral Hour (Cont.)	5:30-Rev. Barnhouse
	NBC PACIFIC									Peerless Reproducers	Sunday Concert	Concert (Cont.)	Anglo-Persians	Radio Drama		
MONDAY	NBC WEAF	Tower Health Exercises	8:30 Cheerio	U. S. Band			11:15-Radio Household	12:45-Palais D'Orch.	Palais D'Or (Cont.)	Palais D'Or (Cont.)				U. S. Marine Band	Band (Cont.)	5:30-Jolly Bill and Jane
	NBC WJZ	7:30-Rise and Shine			Dr. Royal S. Copeland	Bluebirds	Bluebirds (Cont.)									
	COLUMBIA					Woman's Magazine	Magazine (Cont.)									
	NBC PACIFIC					10:45-Wilson's Food Club	Magazine (Cont.)									
TUESDAY	NBC WEAF	Tower Health Exercises	8:30 Cheerio			10:45-Wilson's Food Club	11:15-Radio Household	12:45-Hotel Penn. Orch.	Palais D'Or (Cont.)	Palais D'Or (Cont.)						5:30-Jolly Bill and Jane
	NBC WJZ	7:30-Rise and Shine			Dr. Royal S. Copeland	Bluebirds	Forecast School							U. S. Marine Band	Auction Bridge	
	COLUMBIA				Ida Bailey Allen	Jewell Hour	Forecast School									5:30-Aeolian Recital
	NBC PACIFIC					Woman's Magazine	11:45-Felschman Household									
WEDNESDAY	NBC WEAF	Tower Health Exercises	8:30 Cheerio			National Home Hour	11:15-Radio Household	12:45-Palais D'Orch.	Palais D'Or (Cont.)	Palais D'Or (Cont.)						5:30-Jolly Bill and Jane
	NBC WJZ	7:30-Rise and Shine			Dr. Royal S. Copeland	Bluebirds	Forecast School									
	COLUMBIA				Ida Bailey Allen	Woman's Magazine	Magazine (Cont.)									
	NBC PACIFIC					Woman's Magazine	11:30-Standard School									
THURSDAY	NBC WEAF	Tower Health Exercises	8:30 Cheerio	U. S. Marine Band			11:15-Radio Household	12:45-Hotel Penn. Orch.	Palais D'Or (Cont.)	Palais D'Or (Cont.)						5:30-Jolly Bill and Jane
	NBC WJZ	7:30-Rise and Shine			Dr. Royal S. Copeland	Bluebirds	Forecast School									
	COLUMBIA				Ida Bailey Allen	Rit Program	Magazine (Cont.)									
	NBC PACIFIC					Woman's Magazine	11:30-Standard School									
FRIDAY	NBC WEAF	Tower Health Exercises	8:30 Cheerio			National Home Hour	11:15-Radio Household	12:45-Hotel Penn. Orch.	Palais D'Or (Cont.)	Palais D'Or (Cont.)						5:30-Jolly Bill and Jane
	NBC WJZ	7:30-Rise and Shine			The Choristers	Choristers (Cont.)	RCA Educational Hour									
	COLUMBIA				Ida Bailey Allen	Woman's Magazine	Magazine (Cont.)									
	NBC PACIFIC					Woman's Magazine	11:30-Standard School									
SATURDAY	NBC WEAF	Tower Health Exercises	8:30 Cheerio	9:30-U. S. Army Band			11:15-Radio Household	12:30-Waldorf-Astoria	Waldorf (Cont.)	Yoeng's Orchestra (Cont.)	Yoeng's (Cont.)					5:35-Land O'Health
	NBC WJZ	7:30-Rise and Shine			Bluebirds	Woman's Magazine	Household									5:30-Jolly Bill and Jane
	COLUMBIA						Household									
	NBC PACIFIC						Household									

Note—Time figures are for Eastern Standard Time, except for Pacific Coast programs. Time figures then indicate Pacific Coast Standard Time.

In first column at left, NBC-WEAF indicates the National Broadcasting Company chain with WEAF as key station. NBC-WJZ indicates the chain of which WJZ is the key station.

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Latest Phonograph Records

BRUNSWICK

Brunswick-Balke-Collender Company
629 So. Wabash Avenue,
Chicago, Ill.

Record No.	Title and Recorder
273	Railroad Blues Long Gone—Richard Brooks and Reuben Puckett
274	William and Mary Bad Companions—Marc Williams
275	Green Backed Dollar Bill Run, Nigger, Run—Dr. Humphrey Bate and Possum Hunters
276	Mother's Grave The Last Mile of the Way—John B. Evans
278	Oklahoma Blues Walkin' Down the Railroad Track—Frank Marvin and His Guitar
279	Meet Me Tonight in Dreamland I'm Sorry I Made You Cry—Jack Major
280	Blessed Redeemer It Is You, Just You, Jesus Needs—Maury Pearson
281	She's More to be Pitied Than Censured Where the Red, Red Roses Grow—Brooks and Puckett
282	Acorn Stomp Shannon Waltz—East Texas Serenaders
286	Little Nell The Old Village Church—McFarland and Gardner
4066	Drowsy Waters One, Two, Three, Four—Randolph's Royal Hawaiians
4120	'Round Evening The Whole World Knows I Love You—Sisson and Orchestra
4121	By the Watermelon Vine Bless You! Sister—Bernard and Robinson
4122	The Mooche—Duke Ellington and Cotton Club Orchestra Since You Went Away—Hotsy Totsy Gang
4123	To Be Forgotten 'Cause I Feel Low Down—Dave Rubinoff
4124	Pompanola Maybe This Is Love—Broadway Broadcasters
4125	Me and the Man in the Moon Everybody Loves You—Johnson's Paramount Hotel Orchestra
4126	Happy Days and Lonely Nights High Up on a Hill-Top—June Purcell
4127	Bella Frae Balloch Myle Auld Scotch Sangs with Lullaby—Sandy MacFarlane
4128	Silly Willie The Road to the Isles—Sandy MacFarlane
4129	Doin' the Raccoon Glorianna—Jesse Stafford and His Orchestra
4132	How About Me? She's Funny That Way—Ben Bernie and His Hotel Roosevelt Orchestra
4133	Are You Making a Fool of Me? I'm Getting Even with You—Freddie Rose
4134	Happy Days and Lonely Nights When Summer Is Gone—Davis' Swanee Syncopators
4135	Just a Sweetheart Rose in the Bud—Allen McQuhae
4136	Baby I Can't Give You Anything But Love—Lyman's California Orchestra
4137	Dream Train Don't Be Like That—Abe Lyman and His California Orchestra
4138	My Inspiration Is You Me and the Man in the Moon—Chester Gaylord
4139	Notre Dame Victory March On Wisconsin—Abe Lyman and His California Orchestra
4140	Cross Roads Blue Shadows—Glen Wick
4141	The Song I Love My Tonia—Nick Lucas
4142	I'm Bringing a Red, Red Rose Makin' Whoopee!—Bernie's Roosevelt Orchestra

4144	A Love Tale of Alsace Lorraine Some Night When You're Lonely—Reed Wyle and Coronado Hotel Orchestra
4145	A Room with a View Watching the Clouds Roll By—Winges and Orchestra
4146	Carolina Moon The Song I Love—Joe Rines and His Orchestra
4147	Let's Do It All By Myself in the Moonlight—Dick Robertson
4148	Sonny Boy Neapolitan Nights—Eddie Dunstedter
4173	You're the Cream in My Coffee She's Funny That Way—Harry Richman
4150	Medley of Old Timers Medley of Old Timers—Jordan and His Old-Fashioned Boys
4151	Gypsy My Troubles Are Over—Hal Kemp and His Orchestra
4152	I Can't Give You Anything But Love Sonny Boy—Lee Sims
4153	An Old Italian Love Song Andalusian Caprice—Heermann Trio
4154	Cielito Lindo La Golondrina—Galla-Rini
4155	Some Rainy Day A Jazz Holiday—Abe Lyman's Sharps and Flats
4156	I'll Get By How About Me?—Nick Lucas

4158	My Tonia My Inspiration Is You—Arnold Johnson and His Paramount Hotel Orchestra
4170	The Sun Is at My Window My Mother's Eyes—Jack Denny and His Orchestra
4174	In the Big Rock Candy Mountains Who Said I Was a Bum?—Wendell Hall
4180	Barnacle Bill the Sailor A Gay Caballero—Frank Luther
15144	Little Star In the Time of Roses—Claire Durr
15188	The Song of the Volga Boatman The Trumpeter of Sackingen—Bohnen
15189	Prelude in C Sharp Minor Coppelia Ballet—Cleveland Orchestra
15194	Rigoletto Don Pasquale—Chamlee
20087	Kamennoi-Ostrow—Part I Kamennoi-Ostrow—Part II—Brunswick Concert Orchestra
50156	Roman Carnival Overture—Part I Roman Carnival Overture—Part II—Minneapolis Sym. Orch.
77009	Aisha Gypsy Love—International Concert Orchestra
77006	Fantasy on "Song of India" Dance Oriental—Peter Biljo's Balalaika Orchestra
77010	My Gypsy Princess Where the Lark Sings—Brunswick Concert Orchestra
77011	Lolita Tartar Dance—Brunswick Concert Orchestra

COLUMBIA

Columbia Phonograph Company,
1819 Broadway, New York City

Record No.	Title and Recorder
Set No. 102	Etudes Symphoniques, Op. 13, In Five Parts, Romance in F Sharp Major; Sonata in G Minor, Op. 22. In Four Parts—on 5 Records—with Album—By Percy Grainger
Set No. 103	Symphony No. 1, in C Minor, Op. 68, Brahms, In Ten Parts, (5 Records) with Album—By Felix Weingartner and Royal Philharmonic Orchestra
Album No. 3	Concerto in F, for Piano and Orchestra, George Gershwin, in Six Parts—3 Records—By Paul Whiteman and His Orchestra
175-M	The Pretty Creature Passing By—Louis Graveure
176-M	My Laddie My Pretty Jane—Anna Case
177-M	At the Brook Berceuse (Faure)—Sascha Jacobson
1663-D	The Lamp of Aladdin You Can't Take My Memories from Me—Art Gillham
1679-D	Where the Shy Little Violets Grow Me and the Man in the Moon—Guy Lombardo and His Royal Canadians
1680-D	I'm Bringing a Red—Red Rose Love Me or Leave Me—Ruth Etting
1681-D	The Devil Song—Ed McCConnell Bye and Bye—Ed and Grace McCConnell
1682-D	A Love Tale of Alsace Lorraine Along Came Sweetness—Leo Reisman and His Orchestra
1683-D	I'm Bringing a Red, Red Rose Makin' Whoopee!—Paul Whiteman and His Orchestra
1690-D	Kathleen Aroon The Click of Her Little Brogans—William A. Kennedy
1691-D	Absent La Cinquantaine—Celeste Octet
1692-D	A Gay Caballero All by Yourself in the Moonlight—The Happiness Boys
1693-D	A Room With a View Dance, Little Lady—Ben Selvin and His Orchestra
1694-D	I'll Get By Rose of Mandalay—Ipana Troubadours

1695-D	I Found Gold When I Found You! Live and Love—Oscar Grogan
1696-D	Don't Be Like That My Troubles Are Over—Harry Reser's Syncopators
1697-D	The New St. Louis Blues My Old Lady Blues—Roy Evans
1698-D	I Faw Down an' Go Boom! Down Where the Lolly-Pops Grow—Ethel and Dorothea Ponce
1699-D	Sweethearts on Parade Avalon Town—Ford and Glenn
1700-D	The Spell of the Blues Poor PUNCHINELLO—George Dewey Washington
1701-D	Let's Do It Japanese Mammy—Paul Whiteman and His Orchestra
1702-D	The Sun Is at My Window—Leo Reisman and His Orchestra The Song I Love—Ben Selvin and His Orchestra
1703-D	Beautiful Isle of Somewhere—Shannon Quartet How Can I Leave Thee—The American Singers
1704-D	How About Me? My Mother's Eyes—Milton Charles
1705-D	Me and the Man in the Moon Good Little Bad Little You—Cliff Edwards
1706-D	Mama's Gone, Good Bye—Thelma Terry and Her Play Boys Hey! Hey!—Charles Fulcher and His Orchestra
1707-D	You're the Cream in My Coffee To Know You Is to Love You—Ruth Etting
1708-D	I Love You—I Love You—I Love You That's What I Call Sweet Music—Paul Specht and His Orchestra
38008-F	Lost Love Once Upon a Time—G. Verdi's Mantolin Orchestra of Livorno, Italy
G38009-F	Franz Diener I Am a Lost One—Zither and Piano
50114-D	Ugonotti: Bianca Al Par Di Neve Pescatori di Perle: Mi Par D'udir ancor—Hippolito Lazaro
50115-D	Minuet (Boccherini) Canzona (Hasse)—Catterall String Quartet
50116-D	Liebestraum (Liszt) Romance in F, Sharp Major (Schumann)—William Murdoch
50117-D	The Promise of Life Abide With Me—Fraser Gange
50118-D	La Capricieuse (Elgar: Op. 17) Canzonetta (Tschaiakowsky)—Naoum Blinder

- 50119-D Ruy Blas: Overture—Parts 1 and 2 (Mendelssohn)—*British Broadcasting Company's Wireless Symphony Orchestra*
- 67485-D Oberon: Overture — Part 1 (Weber)
Oberon: Overture—Part 2—*By William Mengelberg and Concertgebouw Orchestra of Amsterdam*
- 67486-D Oberon: Overture (Weber) — Part 3
Midsummer Night's Dream (Mendelssohn)—*By William Mengelberg and Concertgebouw Orchestra of Amsterdam*

VICTOR

Victor Talking Machine Company,
Camden, N. J.

- Record No. Title and Recorder
- 1358 La Fille Aux Cheveux De Lin En Bateau—*Fritz Kreisler*
- 1361 Mignon—Connais tu le pays? Mignon—Me voici dans son boudoir—*Lucrezia Bovi*
- 1362 La Favorita—Like An Angel Elisir D'Amore—*Adina, Trust Me (Act 1)—Tito Schipa*
- 1363 Tristan und Isolde—Part 1—(Isolde's Love-Death) (Act 3)
Tristan und Isolde—Part 2—(Isolde's Love-Death)—*Maria Jeritza*
- 6877 Valse Brillante (In E Flat) Chopin, Op. 18
Valse Caprice (Rubenstein) — *Ignace Jan Paderewski*
- 6882 Petrouchka Suite—Part 1—1st Movement—(Strawinsky)
Apollon Musagete—Ballet—(Strawinsky)—*Boston Symphony Orchestra*
- 6883 Petrouchka Suite—Part 2—2nd Movement
Petrouchka Suite—Part 5—3rd Movement — *Boston Symphony Orchestra*
- 6884 Petrouchka Suite—Part 3—3rd Movement
Petrouchka Suite—Part 4—3rd Movement — *Boston Symphony Orchestra*
- 6885 PUNCHINELLO
The Sands O'Dee—*Reinald Werrenrath*
- 9295 Loch Lomond
Scotch Memories — *Sir Harry Lauder*
- 21168 My Man
The Song of the Sewing Machine—*Fanny Brice*
- 21796 By the Waters of Minnetonka
Meditation from Thais—Fox Trot — *Paul Whiteman and His Orchestra*
- 21797 Where Did You Get That Name? Etiquette Blues—*The Happiness Boys*
- 21803 My Suppressed Desire
What a Girl! What a Night! — *Coon-Sanders Orchestra*
- 21804 'Round Evening—*Johnny Hamp's Kentucky Serenaders*
Withered Roses—*Jean Goldkette's Orchestra*
- 21808 I'm Bringing a Red, Red Rose
Come West Little Girl, Come West — *George Olsen and His Music*
- 21810 I Can't Make Her Happy
The Song I Love — *Waring's Pennsylvanians*
- 21811 My Inspiration Is You—*Nat Shilkret and the Victor Orchestra*
Ev'rybody Loves You—*Jacques Renard and His Orchestra*
- 21812 Who Wouldn't Be Jealous of You? Here Comes My Ball and Chain — *Coon-Sanders Orchestra*
- 21813 Mia Bella Rosa
Please Let Me Dream in Your Arms—*Johnny Hamp's Kentucky Serenaders*
- 21814 My Man
I'd Rather Be Blue—*Nat Shilkret and the Victor Orchestra*
- 21815 I'd Rather Be Blue
If You Want the Rainbow—*Fanny Brice*
- 21816 Makin' Whoopee!
Until You Get Somebody Else—*George Olsen and His Music*
- 21817 Live and Love—*The Troubadours*
My Tonia—*Nat Shilkret and the Victor Orchestra*
- 21818 I Want a Daddy to Cuddle Me
Because I Know You're Mine—*Nat Shilkret and the Victor Orchestra*
- 21819 Where the Shy Little Violets Grow — *George Olsen and His Music*
A Night of Memories—*Nat Shilkret and the Victor Orchestra*

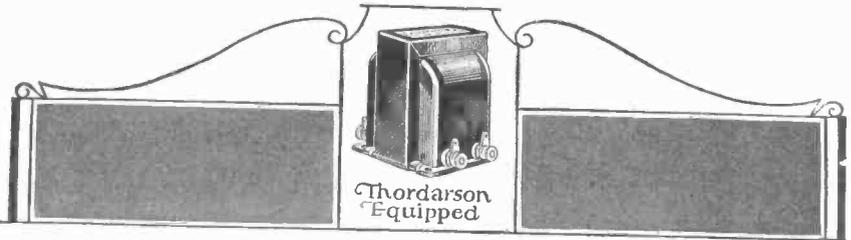
- 21820 Where the Shy Little Violets Grow
Sweethearts on Parade—*Johnny Marvin*
- 21821 The World Is Waiting for the Sunrise
Dorothy—*Frank Banta*
- 21822 Under the Stars of Havana
Blue Waters—*Hilo Hawaiian Orchestra*
- 21827 Sentimental Baby
Then Came the Dawn—*Ben Pollack and His Park Central Orchestra*
- 21828 In Romany
Bon Soir Cherie—*Jacques Renard and His Orchestra*
- 21829 Avalon Town — *Johnny Hamp's Kentucky Serenaders*
Sincerely I Do—*Charlie Fry and His Million-Dollar Pier Orchestra*
- 21830 Don't Be Like That
Me and the Man in the Moon—*Helen Kane*
- 21831 Makin' Whoopee!
Hungry Women—*Eddie Cantor*
- 21832 I Faw Down an' Go Boom
A Precious Little Thing Called Love—*George Olsen and His Music*
- 21833 Carolina Moon
I Wish I Had Died in My Cradle—*Gene Austin*
- 21834 Sweetheart of All My Dreams—*Irving Aaronson and His Commanders*
Caressing You—*Jacques Renard and His Orchestra*
- 21835 The Spell of the Blues
Wipin' the Pan—*The High Hatters*
- 21836 A Love Tale of Alsace Lorraine
Glorianna — *Waring's Pennsylvanians*
- 21837 My Tonia
Monna Vanna—*Lewis James*
- 21838 I'll Get By as Long as I Have You
You Wanted Someone to Play with.
I Wanted Someone to Love—*Johnny Marvin*
- V-29006 Royal Charley
The Windy Gap—*Packie Dolan's Melody Boys*
- V-29007 The Thirty-Two Counties
Killarney—*William A. Kennedy*
- V-29008 Rakes of Clonmell
Mason's Apron—*Frank Murphy*
- V-29009 1. Job of Journey Work. 2. The Blackbird
1. Miss Johnson—*Reel. 2. Sheehan's Reel—Selena O'Neill*
- V-29010 The Heroes of the Vestris
O'Laughlin—*Donnell O'Brien*
- V-29011 1. The Humors of Bantry. 2. Main on the Green
1. Rickett's Hornpipe. 2. The Little Stack of Barley—*Dan Sullivan's Shamrock Band*
- V-35956 Die Fledermaus—Overture—Part 1—(Johann Strauss)
Die Fledermaus—Part 2—*Victor Symphony Orchestra*
- V-38014 Ice Water Blues
Davidson County Blues—*De Ford Bailey*
- V-38015 A Black Woman Is Like a Black Snake
On the Road Again—*Memphis Jug Band*
- V-38016 If You Say You Got Good Religion, Don't Turn Back
From the Pit to the Thorne—*Rev. J. M. Gates*
- V-38017 Brownie Blues
Unknown Blues—*Tarter and Gay*
- V-38018 Fryin' Pan Skillet Blues
Got Cut All to Pieces—*Bessie Tucker*
- V-38019 Everytime I Feel the Spirit
I'm Going to Do All I Can For My Lord—*Pace Jubilee Singers with Hattie Parker*
- V-38020 Careless Love
You're Going to Leave the Old Home, Jim—*Eva Parker with Chorus*
- V-38021 South
She Is No Trouble—*Bennie Moten's Kansas City Orchestra*
- V-38023 Barrell House Stomp
Transatlantic Stomp—*E. C. Cobb and His Corn-Eaters*
- V-38024 Georgia Swing
Mournful Serenade — *Jelly-Roll Morton's Red Hot Peppers*
- V-38025 Stop Kidding
Put It There—*McKinney's Cotton Pickers*
- V-38026 Baby
Playing the Blues—*Black Birds*
- V-38027 Red Head
Honolulu Blues—*Black Birds*
- V-40014 Blue Yodel No. 4
Waiting for a Train—*Jimmie Rodgers*
- V-40015 I Cannot Get Beyond His Love
Grace Greater Than Our Sins—*Moody Bible Institute Trio*
- V-40016 The Trail to Mexico
Get Along, Little Doggies—*Harry McClintock and His Haywire Orchestra*

- V-40017 Matrimonial Intentions
Alimony Blues—*Buddy Baker*
- V-40018 Bill Cheatum
Bacon and Cabbage—*Blind Joe Mangum—Fred Shriver*
- V-40020 My Wife Died on Friday Night
Jobbin' Gettin' There — *Crook Brothers' String Band*
- V-40021 The Heroes of the Vestris
The Wreck of Number Nine—*Bud Billings*
- V-40022 Zebra Dun
The Gal I Left Behind Me—*Jules Allen*
- V-40023 I Truly Understand, You Love Another Man
My Mother's Hands—*Shortbuckle Roark and Family*
- V-40024 Roll On, Boys
Lay Down Baby, Take Your Rest — *Carolina Tar Heels*
- V-40025 The Wild Horse on Stoney Point
Little Boy Working on the Road—*Jilson Setters*
- V-40026 Ring Them Heavenly Bells
Dip Me in the Golden Sea—*Mc-Crazy Brothers*
- V-40027 Revive Us Again
At the Cross—*Turney Brothers*
- V-40028 Tell Her
Broken Dreams of Yesterday—*Kay Kyser and His Orchestra*
- Album M-42. (6886-6890)
Symphony No. 3, in F (Brahms, Op. 90)
In ten parts.
—*Leopold Stokowski—Philadelphia Symphony Orchestra*
- Album M-39. (6853-6856)
Concerto in A Minor (Schumann, Op. 54)
In eight parts.
—*Alfred Cortot and London Symphony Orch., conducted by Sir Landon Ronald*
- 21693 Get Low-Down Blues
Kansas City Breakdown—*Bennie Moten's Kansas City Orchestra*

EDISON

Thomas A. Edison, Inc.,
Orange, N. J.

- Record No. Title and Recorder
- 52460 Walking Down the Railroad Track
The Song of Sorrow—*Frankie Marvin and His Guitar*
- 52468 Fishing Song
Even' Glow—*Laurence Wolfe*
- 52469 Vision d'Amour
Valse Marilyn—*Herman Hertz*
- 52470 My Troubles Are Over
If You Want the Rainbow—*Duke Yellman and His Orchestra*
- 52471 To a Wild Rose
To a Water Lily—*Hotel Commodore Ensemble*
- 52472 The Bum Song
The Big Rock Candy Mountains—*Vernon Dalhart and Company*
- 52473 She's Funny That Way
I'm Crazy Over You—*Dick Robertson*
- 52474 Makin' Whoopee
I'm Bringing a Red, Red Rose—*B. A. Rolfe and His Orchestra*
- 52475 Melody in F
Berceuse—from "Jocelyn"—*Edison Concert Orchestra*
- 52476 Kashmiri Song
Roses of Picardy—*Frank Munn*
- 52477 Sweetheart of All My Dreams
Along Came Sweetness — *Golden Gate Orchestra*
- 52478 Easy Goin'
Sunny Skies—*Piccadilly Players*
- 52479 I Remember Calvary
He Is Coming After Me—*Ernest V. Stoneman and His Dixie Mountaineers*
- 52480 A Love Tale of Alsace Lorraine
To Know You Is to Love You—*B. A. Rolfe and His Orchestra*
- 52481 Mother's Lullaby
Pretty Pond Lilies—*Frank Kamplain*
- 52482 The Two Larks
Farewell to the Alps—*Gottsmann's Zither Trio*
- 52483 Mother Was a Lady
Will the Angels Play Their Harps for Me?—*Frank Luther and His Pards*
- 52484 Me and the Man in the Moon
Happy Days and Lonely Nights—*Al Friedman's Orchestra*
- 52488 Fitzmaurice's Polka
Bryant's Favorite Hornpipe—*J. J. Kimmel*
- 52491 Sari Waltz
Spring, Beautiful Spring—*Edison Concert Orchestra*



Supreme Musical Performance - Built To Exceed Your Expectations!

IT IS significant that the manufacturers of the world's finest radio receivers have almost universally turned to Thordarson for their power supply and audio transformers.

Thordarson power supply transformers exhibit an efficiency of design, an abundance of power and a constancy of performance that practically eliminates the necessity for service calls.

Thordarson audio transformers provide a fidelity of tonal reproduction that renders the finished receiver a musical instrument of the highest calibre.

If you seek the ultimate in radio performance, insist on Thordarson transformers.

THORDARSON ELECTRIC MFG. CO.
Transformer Specialists Since 1895
Huron, Kingsbury and Larrabee Streets
CHICAGO, ILL.



Federal
ORTHO-SONIC
Radio

Thordarson products have been chosen for incorporation in Federal Ortho-Sonic Radio Sets because we have always been certain that we would receive a quality of product entirely in keeping with the high standard set by us for Federal receivers.

Luister E. Nolle

President, Federal Radio Corporation

THORDARSON
RADIO
TRANSFORMERS

S U P R E M E I N M U S I C A L P E R F O R M A N C E

Keeping in Touch with

RADIO MANUFACTURING

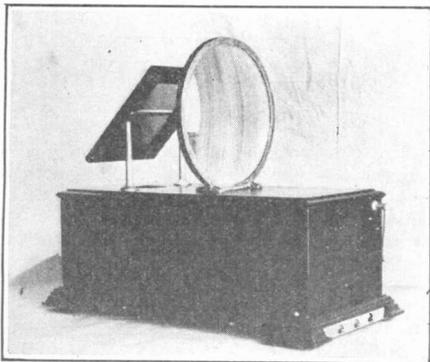
How the Jenkins Radio Movies Work

The Jenkins Radio Movies are broadcast three evenings each week, on Monday, Wednesday and Friday from 8 to 9 p.m., from station W3XK, operating on 46.72 meters, located in Washington, D. C. As soon as the number of those equipped with television receivers warrants it, however, the pictures will be sent out six times weekly. They are broadcast simultaneously on two wavelengths, a short-wave channel serving the distant "lookers-in," and a regular broadcast channel being employed for the benefit of the television enthusiasts of Washington and its immediate vicinity. At the present time, only simple picture subjects and picture stories in silhouette are being transmitted.

These are much easier for the amateur to pick up at first and, in addition, may be transmitted in a rather narrow wave band, thus allowing greater latitude in the choice of subjects. However, just as soon as the Federal Radio Commission grants Mr. Jenkins a satisfactory radio channel, he will install a new transmitter which he has developed and which is capable of handling half-tone pictures.

Let us now briefly examine the Jenkins Radio Movies from the standpoint of both transmission and reception.

Early in his experiments, Mr. Jenkins realized the difficulties inherent in picking up his television subjects directly. After struggling with the limitations imposed by the crude scanning disk, the supersensitive photo-electric cell, the small dimensions of the television stage itself, the critical lighting conditions and last but not least the apparent dearth of subjects suitable for

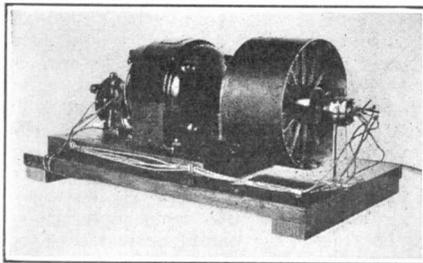


Jenkins television which reproduces radio movies so that a dozen persons can enjoy them.

televising, Mr. Jenkins fell back upon the motion picture for a satisfactory solution. In brief, he decided to record his subjects on a motion picture film. From the negative of this film, any number of positive prints may be made up and distributed to those broadcasters who are equipped with the Jenkins transmitting device. It is thus obvious that Mr. Jenkins has already disposed of one of television's most serious problems.

The positive print of the film is placed in the Jenkins transmitting device, a ma-

chine that resembles the ordinary motion picture projector. As the film moves through the gate of the projector, it is sharply bent to form an absolutely straight plane, and it is this plane that is ingeniously scanned by a narrow pencil of light which sweeps across it line by line. Passing through the more or less transparent film, this beam of light falls upon the photo-electric or light sensitive cell which converts the varying transparency of the film at any given point into varying electrical impulses. These impulses are amplified and impressed on the outgoing waves of a broadcast transmitter.



Chassis of Jenkins television or television receiver, showing driving motor, scanning drum, light-conducting rods, etc.

At the receiving end, Mr. Jenkins has likewise scored comparable and, indeed, noteworthy progress. As a matter of fact, there is little in common between the Jenkins receiving system and other television reception systems beyond the broad basic principles of the art. These principles are generally known and need not be repeated here in detail. Suffice it to say that a variable light spot is converted into a series of parallel and overlapping lines within a fraction of a second so that, because of the slowness of the human eye to respond to changes of scene, the illusion of an animated image is created. At any given instant, however, the television image is nothing more than a single point of light.

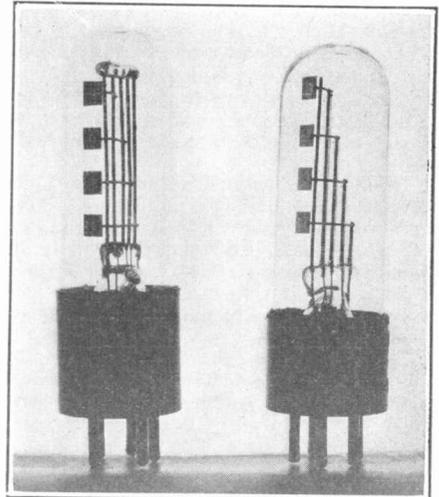
Some of the present-day television experimenters are still working with the giant, whirling scanning disk which, in conjunction with the powerful but electrically inefficient single-plate neon lamp, produces a tiny image about 1½ inches square. Inasmuch as this image can be viewed by but one person at a time, it is obviously little more than a laboratory toy in the hands of most of those who are seeking to perfect it. Jenkins, however, long since discarded these crude devices, and his latest home television receiver incorporates a novel scanning drum, a four-plate or multiple target neon lamp of modest current requirements and exceptionally high electrical efficiency, and an ingenious magnifying optical system which enables a group of persons to view the image at the same time.

Each of the four plates of the special neon lamp illuminates only one quarter of the total screen, and each plate is flashed in rotation, much after the manner of the spark plugs of a gasoline engine. This

ingenious device has enabled Mr. Jenkins to attain enormous illumination with an ordinary amplifier. Special light-conducting rods, made of quartz, are employed between the targets and the slits in the scanning drum, thus effecting a maximum conservation of light. The slits in the scanning drum sweep laterally line by line across an opening, translating the varying intensity of the glowing target of the neon lamp into successive dots of varying intensity. Due to the persistence of human vision, these dots appear as a line whose light gradations are a faithful replica of the object televised at the transmitting end.

The sum total of these lines, swiftly and deftly woven by the scanning drum, produces the illusion of a complete and animated picture. This picture is passed through an ingenious optical system so that it appears to be about one foot square.

Yet Jenkins is still not satisfied. With the idea of making the television presentation available to still larger groups of people, he has developed a scanning disk with matched lenses by means of which it is possible to project the image on a fair-sized screen. And with this same end in view, he is even now working on a powerful checkerboard light which will make the television image visible to entire theater audiences. In addition, he is experimenting with a television camera for outside work. Capable of amazing detail and scope, this camera bids fair to hasten the day when we shall be able to televise direct from the scene of action.



Four-target neon glow tube employed in Jenkins television. Each target or plate glows in due turn.

Resistance Element Patented

Electrad, Inc., New York City, has just been granted Patent No. 1,674,406, covering the construction of a flexible resistance unit made up of a convenient flexible resistance element and covering of insulating tubings such as spaghetti and terminals that contact to the resistance element and hold the insulating tubing in place. The resistance element is made up by spirally winding a resistance wire around a flexible

core member. A special winding machine has been designed by this company which turns out this type of element in lengths of 500 ft.

Although this type of unit was originally designed for use as a grid resistance for control of radio frequency oscillation, it has been found that its unique construction adapts it to many other uses in both radio and industrial work, where the current used is relatively low.

This unit, due to its construction, provides a high resistance element which can be located within a small available area and, being flexible, can, if necessary, be bent upon itself after assembly and compacted to a size that will fit it into any small available space. The granting of this patent marks one of the most outstanding developments in resistor units for radio work in recent years.

Insurance Rates Claimed Excessive in Radio Field

Complaint of radio dealers that their fire insurance rates had been greatly increased caused the inquiry being made by the radio industrial associations. Fire underwriters advised them that insurance rates on radio products were increased because they are more subject to damage from fire and water than electrical products. This also raises the question of whether radio apparatus is an electrical product or not—another burning question within the radio and electrical industries.

Insurance rates fairly adjusted on radio products as compared with electrical and other similar products are being sought by the Federated Radio Trades Association and the Radio Manufacturers' Association.

Booklet on New Alloy

The progress and process of the new light alloy called Bohnalite which was developed by Chas. B. Bohn, president of the Bohn Aluminum & Brass Corporation, of Detroit, Michigan, is interestingly and fully described in a booklet which this company has just issued. A wide variety of industries are using Bohnalite which the makers claim is 62 per cent lighter than iron, yet possesses all the advantages of the heavier metal.

Briefly the distinct advantages of this new alloy are high and uniform hardness, great density, fine grained structure, extreme lightness, exceptional strength and ductility. It can be used for all the major types of castings such as permanent mould—semi-permanent mould, sand casting and die castings.

This booklet contains much valuable data not only of a general descriptive nature, but specific information covering the physical properties of each Bohnalite process is carefully detailed.

Patent Applying to Electric Sets

On May 22, 1928, patent No. 1,670,893 was granted to S. P. Levenberg, of New York, N. Y., assignor to the Levenberg Corporation of New York. Application was filed on December 8, 1923.

The patent covers a series-wired A.C. or D.C. electric set. Claim 1 of the patent covers the use of a large capacity condenser across the filaments of the tubes; claims 17 and 18 apply particularly to the combination of the voltage-dividing system and the by-passing of audio frequency currents.

New Cone Diaphragm Shape

Instead of the usual straight-sided cone which has become standard practice in the magnetic and dynamic types of speakers, a new diaphragm with walls curved outward from the apex has just been developed by the Stevens Manufacturing Corporation, New York. This new diaphragm, made in one piece from Burtex acoustic material, and free from seams or joints, has exceptional acoustic properties and is capable of greater volume than any paper diaphragm of corresponding size.

"We believe our new diaphragm (patent applied for) is the solution of the small diaphragm for high-power dynamic drive," states Clifford E. Stevens, chief engineer. "We obtain a rigid apex which permits of applying real power to the entire surface, without give or flexing at the apex. This is essential in obtaining powerful vibrations for the reproduction of low notes. Then, with our curved walls so as to obtain graduated flexibility from the apex to the edge support, we automatically graduate our vibrating area for the various frequencies. Thus we have the entire diaphragm set in vibration for the low notes, while less and still less of the diaphragm surface is utilized for the higher frequencies. We have, as it were, the proper natural period for every frequency, and therefore obtain a uniform and natural response, without the 'forcing' that is evident in rigid cones. We obtain excellent high and low response, without the high-frequency fuzz on the one hand or the 'tubby' bass on the other. By having the edge support of the same material—still in one piece—we obtain perfect edge control and maximum flexibility, without the usual leather strips.

Available Information

EACH month *Radio Retailing* obtains from special correspondents in Washington, D. C., a record of all radio patents, designs and trade-marks issued during the previous month.

This information is kept on file and will be sent to any of *Radio Retailing's* readers upon request.

Credit

On Page 99 in this section in the January issue appeared an item entitled "Baffle Board Sizes." Credit should have been given to Wright-DeCoster, Inc., St. Paul, Minn.

New Audio System Developed by Freshman Engineers

A new method of audio amplification which at once provides a better response, particularly in the lower frequencies or bass note and makes for smaller audio transformers without danger of saturation, is now announced by George Eltz, vice-president in charge of engineering of the Chas. Freshman Company, New York.

"Some time ago," he says, "we introduced the lapped transformer core laminations as a means of avoiding core saturation and maintaining an automatic volume level, while at the same time reducing the size of our audio transformers even when employing silicon steel, rather than the costly alloys. In our present production of receivers, we are utilizing in addition the innovation of a shunt-feed system of coupling audio transformers. By keeping the

direct current component out of the transformer primary, the inductance value is enormously increased. In this manner it becomes possible to make a small transformer do the work of a large transformer under the usual method of wiring. We obtain a remarkable bass note response, without the boom which is so artificial and even disagreeable to the critical musical ear.

"Curves for our present shunt-feed system, when compared with the usual transformer coupling, show a fairly flat curve from about 30 cycles to 5,000, as contrasted with the humped curve for the usual audio system, with the volume gradually built up to a maximum at 1,000 cycles and then swinging downward in a gradual curve to a low value at 10,000 cycles. Incidentally, there is little use going below 60 cycles and going above 5,000 cycles, although our shunt-feed audio system gives us ample margin beyond those two points."

U. S. Trade Mark Protest

An attempt in Brazil to secure exclusive trade mark rights to the word "Radio" has caused an official protest by the United States Government to Brazil. The R.M.A. has been advised by the Federal Government that protests against the proposed Brazilian monopoly of the word "Radio" probably would be successful.

A Brazilian citizen, J. B. Junqueira, attempted to acquire exclusive rights in Brazil to the word "Radio," which would virtually have barred all radio exports of American manufacturers to Brazil.

German Electric Phonograph Pick-Ups

Recently there have appeared on the German market several types of electric phonograph pick-ups, designed for the reproduction of phonographic music through radio speakers. These pick-ups consist essentially of an electro-magnetic sound box, a tone regulating rheostat, and cable and plug for connecting to the detector socket of the radio set. The complete outfit sells for about 25 marks (approximately \$4.75) on the German market.

Short Waves Aid French West Indies

Not until broadcasting on short wave lengths was begun was anything approaching satisfactory results obtained in Martinique, French West Indies, from stations situated in the United States, Holland and France. As the number and diversity of programs transmitted on these short wave lengths is increasing there is also an awakening of interest in radio in the island.

Some months ago a local club was formed, principally for the purpose of inducing the French broadcasting stations to supply regular programs on wave lengths that can be well received in the colony. It is estimated that the total number in use in the island does not exceed thirty.

China Regulates Set Sales

A copy of the regulations governing the importation and sale of radio broadcasting sets in China together with a copy of the regulations for the installation and use of receiving sets are available in the Electrical Equipment Division of the Department of Commerce and will be loaned to interested firms upon request, referring to EE 1083.

DEALERS - NEW

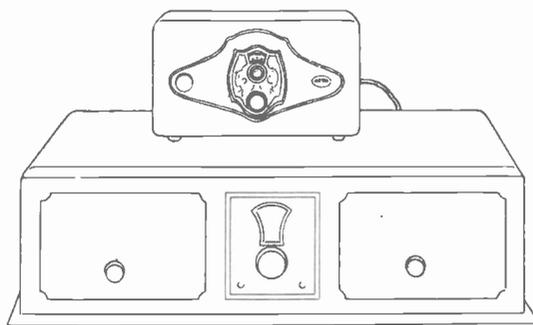
AERO-CALL for 1929

**Complete
Factory-Built
Short-Wave
Converter Box
A.C. and D.C. Models
Made by
Aero Products, Inc.
Pioneer
Short Wave and
Coil Specialists**
Size, only 9x5½x2½ inches.



**PLUGS INSTANTLY
INTO ANY RADIO!**

THE new 1929 Aero-Call Converter Box brings to music stores and radio dealers a real opportunity to increase sales and profits for 1929. Here is an entirely new adaptation of the wonders of radio. Heretofore, short waves have been only for "hams." Now they are available instantly to every radio set owner by the use of the Aero-Call Short Wave Converter Box. A compact, shielded, filtered, factory-built short wave adapter, equipped with special short wave coils. Designed for both A.C. and D.C. sets. Operates perfectly without motorboating, by an auxiliary filter system control, a patented feature that entirely eliminates the failure of most converters heretofore offered to the public. It can be plugged into any regular radio set.



Dials in on Foreign Countries

This amazing radio instrument now makes it possible to reach 'round the world—England, Germany, Holland, France, Australia, Panama, Java and many foreign stations are some that are tuned in regularly on short wave. Permits enjoyment of international programs and many others from coast-to-coast that regular receivers cannot get. What a thrill it is to plug this into a tube socket on any set and instantly be in another world!

No change or wiring required. All complete, ready to operate, tubes and coils hidden, no apparatus in sight, except the neat, golden-brown, compact metal cabinet in crackle finish, that harmonizes splendidly with the finest radio cabinet. Size, only 9x5½x2½ inches.

The only converter we know of that really works on all sets. Two models—A.C. and D.C. Dealers, write for literature and discounts, and name of your nearest jobber. Jobbers, write for our attractive offer.

EVERY SET OWNER A PROSPECT!

The public has already shown a decided interest in this remarkable new radio improvement. Jobbers and Dealers will find an instant demand for it from radio users. Order your demonstrator now and see for yourself.

Model A, for A.C. sets—List Price,] \$25.00
Model D, for D.C. sets—List Price.]

AERO Products, Inc.
4611 E. Ravenswood Ave.,
Dept. 2139
Chicago, Illinois

Special Demonstrator Offer

AERO PRODUCTS, Inc. 4611 E. Ravenswood Ave., Dept. 2139, Chicago

Send me, on trial, one of your new 1929 Aero-Call Short Wave Converter Boxes, ready to plug into any radio set now sold by me. If, after five days' trial, I find that it will work on any set, I'll be pleased to put them on sale and will gladly send you remittance at \$25.00 less 40% dealers' discount, less 2% for cash, or return it to you without obligation.

Dealer's Name
Street and Number
City State.....
State whether A.C. or D.C. Model is desired.....
Name and Address of Jobber..... (RR)

The Furniture for All ATWATER KENT Radios

\$157.50
 COMPLETE
 (Excepting Tubes)

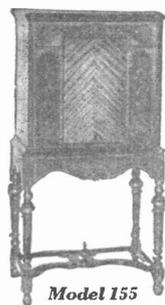
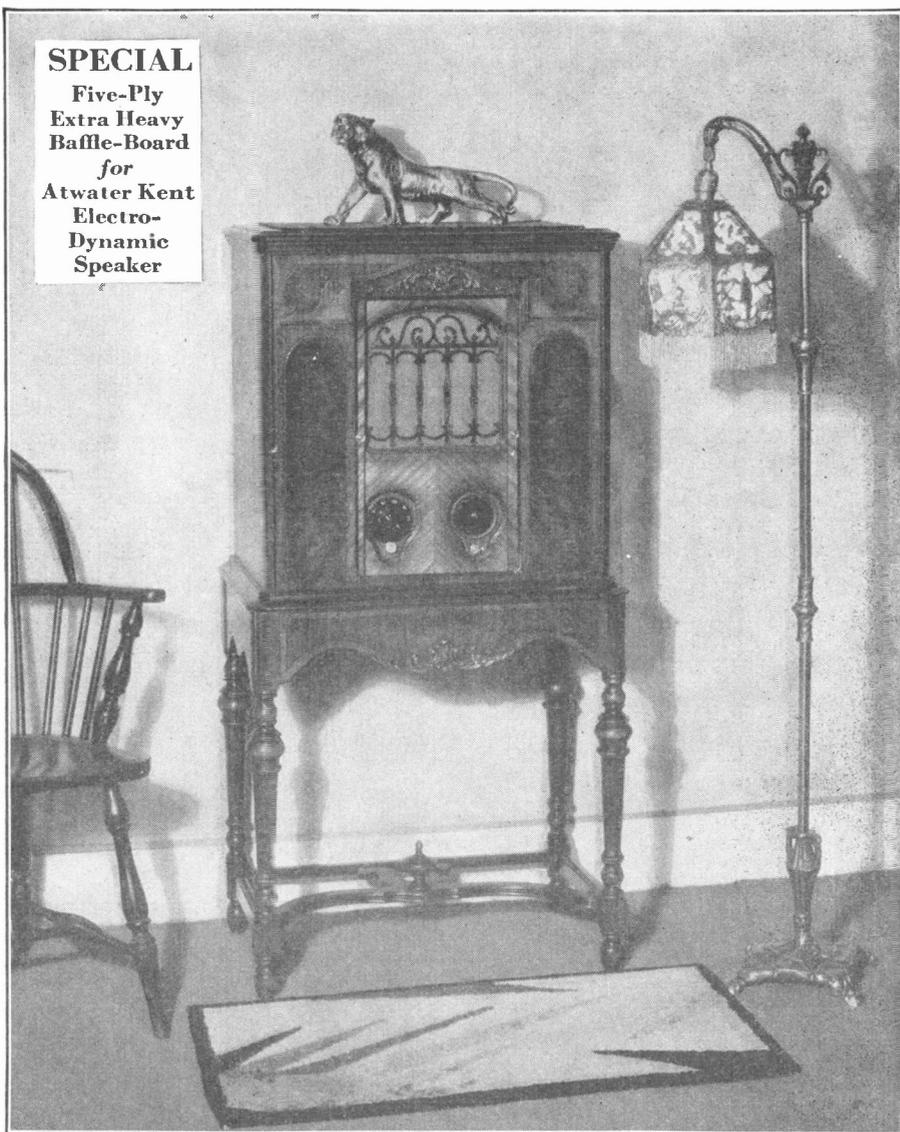
Model 155 RED LION Cabinet
 Model 46 ATWATER KENT Radio
 ATWATER KENT
 Electro-Dynamic Speaker

Here is value extraordinary—in the very latest Red Lion-Atwater Kent complete ensemble.

The newest model cabinet—a graceful high-chest type—most convenient for operating and correct for sound diffusion; with special baffle-board construction.

The latest Atwater Kent A. C. receiving set—and the new Atwater Kent Electro-Dynamic Speaker.

And you can sell, profitably, this up-to-the-minute radio, complete except tubes, for \$157.50!

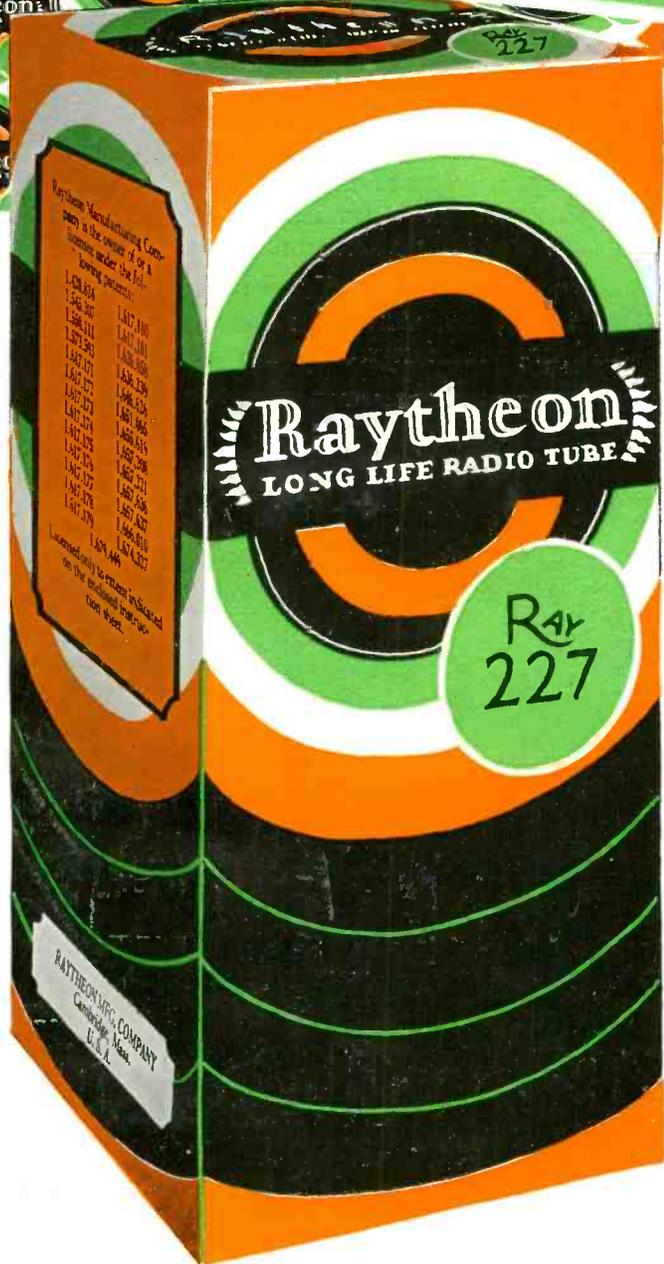


Model 155
 Closed

RED LION CABINET COMPANY

RED LION, PA.

Sell the "Healthy Tubes"



*and have a
Healthy
Business*

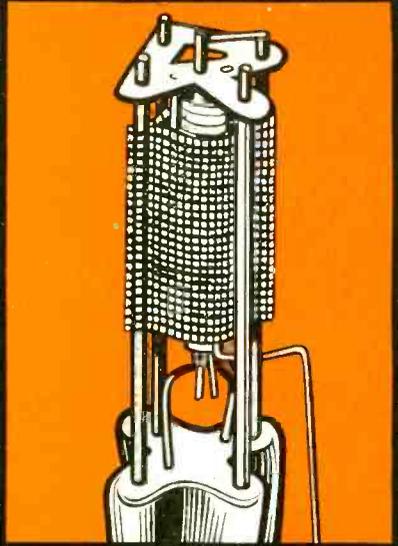
This orange, green and black box identifies the "Healthy Tubes" in every type.

Raytheon super-service in the receiving set means satisfied customers in your store.

Raytheon

LONG LIFE RADIO TUBES

4-Pillar Construction



**Cross-Anchored
Top and Bottom**

For Replacements ~ sell the "Healthy Tube"

Any A. C. set, no matter how originally equipped, can have Raytheon "Healthy Tubes" when replacement time comes.

When you sell Raytheons, you build business through the satisfaction of your customers.

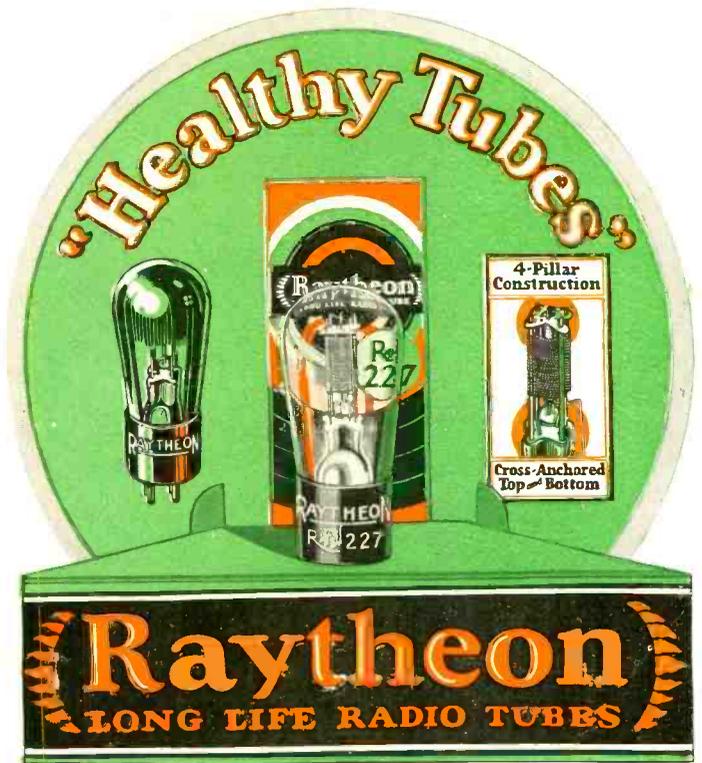
The illustration at the left shows why Raytheon is the ideal replacement tube. Its unique, super-rigid construction holds the elements permanently in their correct, relative positions.

This construction prolongs the life of the tube, eliminates microphonic noises, and improves reception.

A Customer Reminder to Replace with Raytheons

This counter display, which is in full colors, is attractive and arresting—and it tells the whole story of Raytheon exclusive inner construction. It is furnished free to all dealers.

Raytheon Tubes are shipped in cartons of 12, 24 or 48 tubes, eliminating broken packages and the extra handling and hazards involved in re-packaging.



RAYTHEON MANUFACTURING CO.
Cambridge, Mass.

Please send me a Raytheon "Healthy" Tube Display
as illustrated above.

Name _____
Address _____
Firm _____

G-E Fan sales will fill in that summer slump

Over 15,000,000 advertisements to sell your store!



IN the summer months when radio sales go down, fan sales go up. G-E fans and radio form a selling combination that can bring you a steady all-year profit.

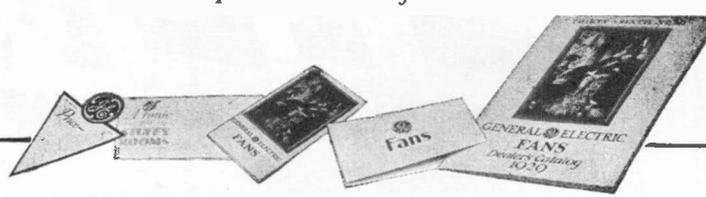
During the warm months of 1929 powerful advertising of General Electric Fans will appear, mostly in four colors, in such dominant magazines as The Saturday Evening Post, Collier's and Liberty.

There is strong coverage right in your own community. All you have to do is tie-in by using the G-E Fan dealer sign which is featured in each advertisement and to let prospects know that you sell General Electric Fans.

Forceful local campaigns, unusual sales helps and booklets, all are available to every General Electric Fan Dealer. This is the most aggressive campaign we have ever planned for G-E Fans . . . one which should yield generous profits to the dealer who uses it to the limit of its helpfulness.

Send coupon for the complete story . . . now's the time.

The coupon below will bring you a powerful tonic to brace up summer sales for 1929.



Section F-292, Merchandise Dept.
 General Electric Company
 Bridgeport, Conn.

I would like to know all about the General Electric Fan Plan for 1929. Please send me the details.

Name

Address

GENERAL ELECTRIC

A line of radio receivers so far ahead in engineering design, so startlingly beautiful in cabinet style and at the same time so amazingly low in price that it was freely predicted that no other radio could offer Steinite serious competition in 1929.”

The copy at the left is an excerpt from a full page Steinite advertisement which appeared in the Chicago Daily Tribune, January 8, during the recent private showing of the new Steinite line at the Steinite Jobber's Convention at Chicago

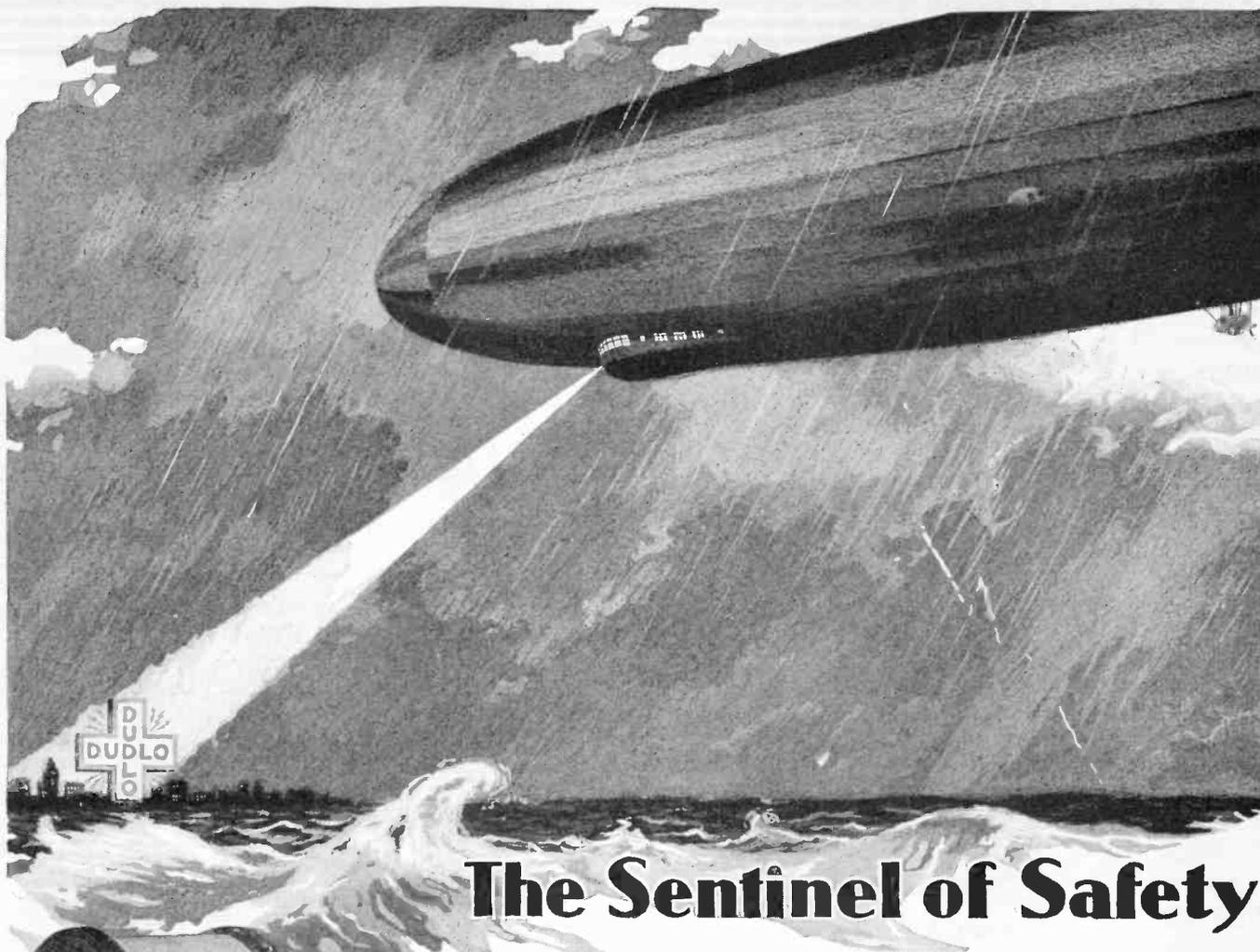
**DETAILS OF THE NEW STEINITE
WILL BE REVEALED SHORTLY TO
THE RADIO DEALERS OF AMERICA**

Steinite

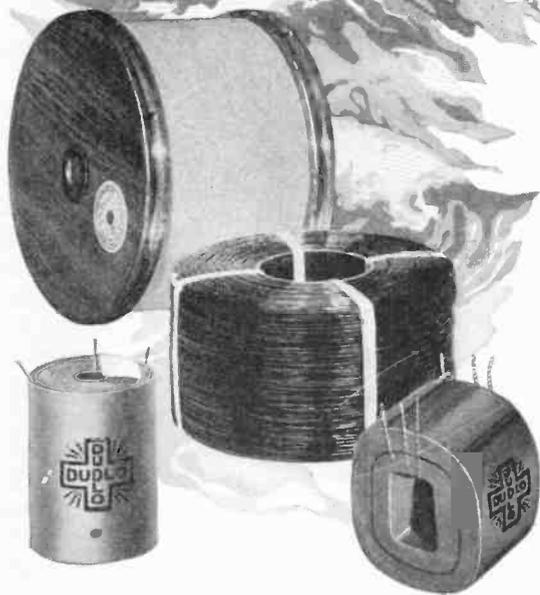
ELECTRIC RADIO

in 1929 ▲ ▲ ▲

*Your Greatest Profit Maker—
or Your Strongest Competitor!*



The Sentinel of Safety



Out of the darkness . . . a giant spectre . . . thrusting its nose fearlessly through the storm. Hours of flying over a raging sea . . . throbbing motors . . . dense blackness . . . then . . . faint points of light ahead on the mainland. A new chapter in the stirring history of man's conquest of the air.

Every precaution has been taken in building and equipping the great ship . . . every chance of failure guarded against by the use of proven materials. And deep in the vital organs of the dirigible . . . the ignition and radio . . . Dudlo coils and wire, like unseen sentinels of safety, are doing their bit in making the great experiment a successful reality.

No test too severe, no strain too great for Dudlo magnet wire and coils. That great proving ground—aeronautics—has shown them superbly adapted to every requirement of the electrical and radio industry.

DUDLO

DUDLO MANUFACTURING COMPANY, FORT WAYNE, INDIANA

420 Lexington Ave.
New York City

105 W. Adams St.
Chicago, Ill.

Division of
THE GENERAL CABLE CORPORATION

274 Brannan St.
San Francisco, Cal.

4143 Bingham Ave.
St. Louis, Mo.



CHAMPION
"Weatherman"
is broadcast daily
over Westinghouse
Station KDKA,
KYW, WBZ,
WBZA

SALES ATMOSPHERE!

The first order of things in this business of selling is to gain attention and confidence. These features, made practical at the *point of sale*, are characteristic of CHAMPION RADIO TUBES.

The unique Champion open faced box, has real "eye appeal." CHAMPION EQUIPMENT PACKAGES contain individual sets of A. C. tubes in various combinations to fit all the leading makes of radio sets. Every single detail of the CHAMPION equipment package and sales chart has been worked out to make Champions the easiest profitable tube to sell.

Look into this CHAMPION idea. It's a winner.

Champion Radio Works, Inc.

140 Pine Street
DanVers, Massachusetts

CHAMPION RADIO WORKS, INC.,
DanVers, Mass.

Gentlemen: Tell me more about CHAMPIONS—
more about your company. I'm interested.

Name

Address

Champion
RADIO TUBES

Buckingham

ALL ELECTRIC

*Beauty, Selectivity,
Volume, Distance
Natural Tone Quality*



**WITH
New Utah
DYNAMIC
SPEAKER**

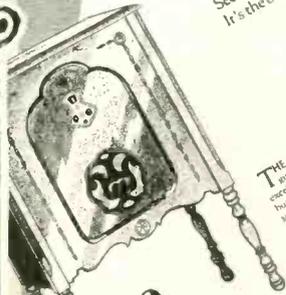
The Utah Dynamic Power Speaker is too well known to require description here. Its reputation for excellent performance is world wide.

\$99⁰⁰
LESS TUBES

COME in and see this sensational radio value—a value that is making the world sit up and take notice. Never before has a set of such quality, with so fine a speaker, in so beautiful a cabinet, been offered to the public at such an amazingly low price. Hear it. Notice the tone quality, the performance, the selectivity, and the volume. See it. You will be charmed with the beauty of its magnificent walnut finished cabinet. It is the best radio buy we have ever had the opportunity to offer you. Terms easily arranged.

Come in Today!

Dealer's Name Goes Here



\$79⁰⁰
LESS TUBES

THE \$79.00 model is an all-vacuum-tube set, excellent and durable, but somewhat in the smaller cabinet. The speaker is a Utah Dynamic. Terms of purchase as above. A highly efficient set at a price as well as an excellent radio value.

THIS AD

Is Appearing in Newspapers EVERYWHERE

The latest sensation in radio is going over with a bang! Dealers everywhere are taking advantage of BUCKINGHAM'S lower prices and longer profits to do the biggest business in their experience.

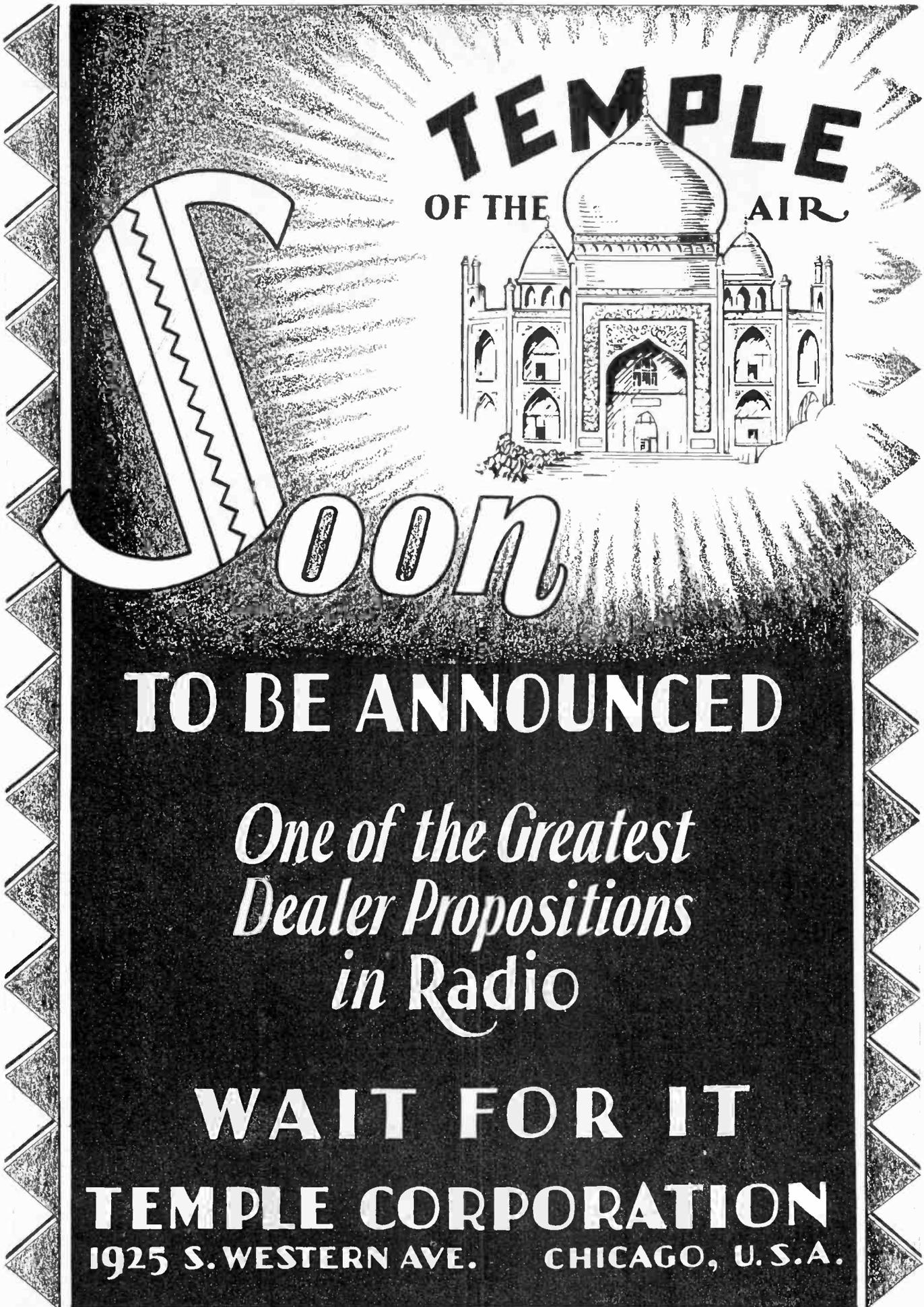
Are you in on this?

Wire or write for Dealer Discounts, etc.

Buckingham

RADIO CORPORATION

440 West Superior Street
Dept. R11
CHICAGO, ILL.



TEMPLE
OF THE AIR

Soon

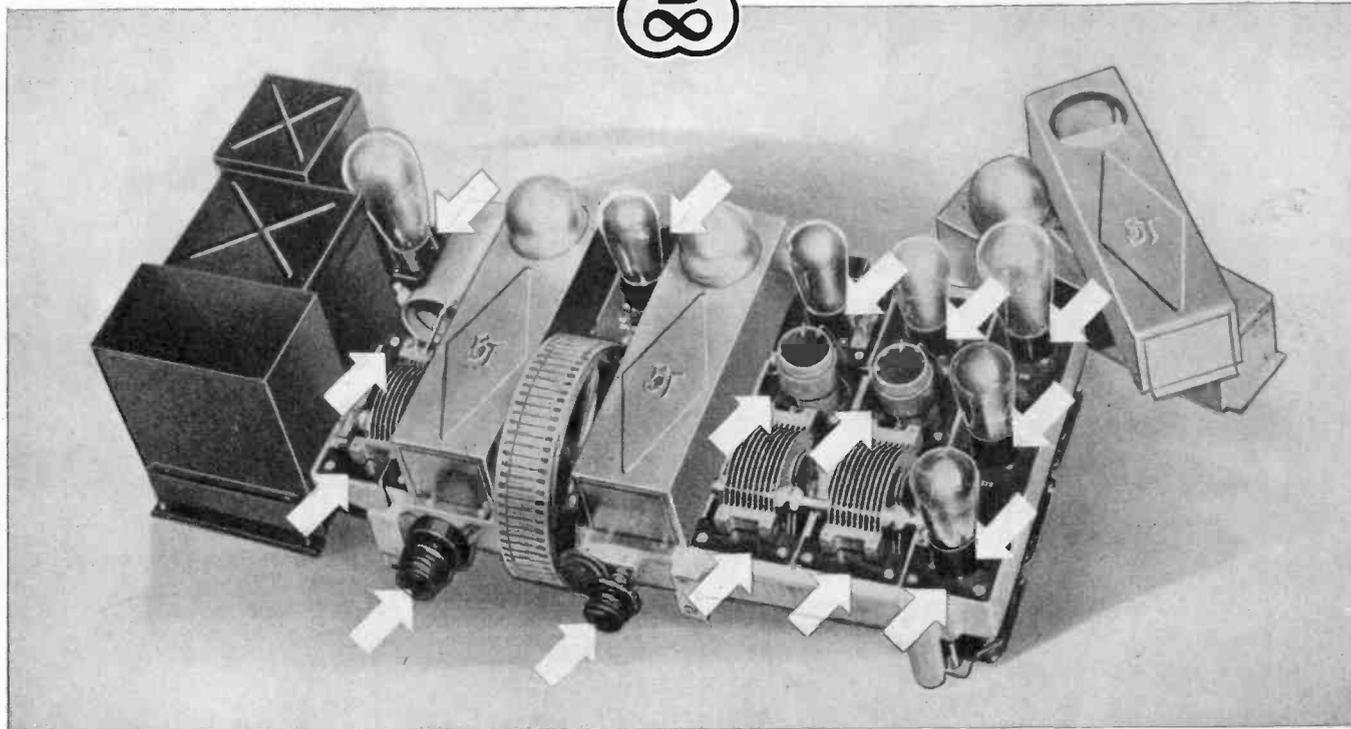
TO BE ANNOUNCED

*One of the Greatest
Dealer Propositions
in Radio*

WAIT FOR IT

TEMPLE CORPORATION

1925 S. WESTERN AVE. CHICAGO, U.S.A.



Bremer-Tully Counter-phase Receiver and chassis, showing some of the Bakelite Insulated parts. Made by Bremer-Tully Mfg. Co., Chicago, Ill.

Bremer-Tully is another Receiver with tonal values protected by Bakelite Insulation

ALL of the parts indicated on the photograph of the Bremer-Tully chassis, and many others which do not show, are insulated with Bakelite Materials. Tuning knobs and tube bases are of Bakelite Molded. Coils are wound on tubing of Bakelite Laminated, and the same material in sheet form is used for insulating the condensers, for mountings and for a number of unseen parts.

Before the introduction of the laboratory - designed, factory - produced radio receiver, Bakelite Materials were the pre-

ferred insulations of amateur set builders. The soundness of their preference is evidenced by the fact that all the later experimentation of radio engineers has endorsed Bakelite Materials as the premier insulations for radio work.

Radio dealers will find that the use of Bakelite Materials for insulating the vital parts of receivers is a protection against faulty reception due to impaired insulation properties. A copy of our Booklet 39 "Bakelite in Radio", will be mailed promptly to anyone requesting it.



BAKELITE CORPORATION

247 Park Avenue, New York, N. Y. Chicago Office, 635 West 22nd Street
BAKELITE CORPORATION OF CANADA, LTD., 63 Dufferin Street, Toronto, Ont.

BAKELITE

REGISTERED

U. S. PAT. OFF.



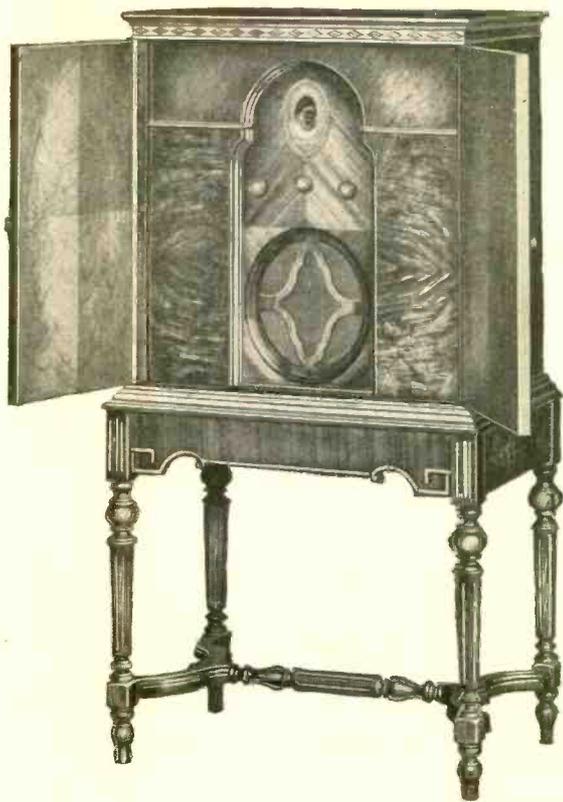
THE MATERIAL OF A THOUSAND USES

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

ANNOUNCING

The New and Mightier Quality You Can

*Here in a few words is a story of
the latest Majestic achievement:*



Model 72

Beautiful Louis XVI walnut cabinet with doors of diamond matched oriental walnut having genuine inlaid marquetry border. Instrument panel also of diamond matched oriental walnut framed with butt walnut and birds-eye maple panel. Seven tubes completely shielded using R. F. L. balanced circuit. Majestic Super-Dynamic Speaker. Volume control in-
\$167⁵⁰ Less
 Tubes
 stantaneous in action. Single dial control.

Slightly Higher West of the Rockies.

To build a product better, finer and for less money than has ever been asked for the highest quality merchandise before, is no easy task. All this, and more, was accomplished by MAJESTIC Electric Radio in 1928—an achievement that set the world to talking, thinking and buying MAJESTIC. Since last June, when the first MAJESTIC receiver left the factory, over 600,000 MAJESTICS have been produced, and are giving such consistently good performance that this, too, has amazed the world.

To make a product better than those that have gone before was a real achievement—but how to make the best product that could be made for the money still better, was a task that might well appear impossible.

Yet MAJESTIC has done it. Under the guiding hand of William C. Grunow, a genius of production, whose foresight, imagination, and ability to weave the finest technical achievements into mass production of radio receivers, has brought him international fame—A new and finer MAJESTIC has been created.

ENCING

Majestic Electric Radio Actually Feel!

Its performance is astonishing, its beauty outstanding, its price amazing.

When you see and hear these new MAJESTIC receivers, you forget all but quality—quality of performance, quality of appearance that you can really feel. You only know you want to own one of these new models—to have it for your very own—to add breathless beauty to your home and give you matchless performance which puts a new song of happiness in your heart.

Forget all but quality, yet receive your greatest thrill when you learn the price. For MAJESTIC'S newest achievement, the radio with quality you can feel, is within reach of every purse.



Model 71

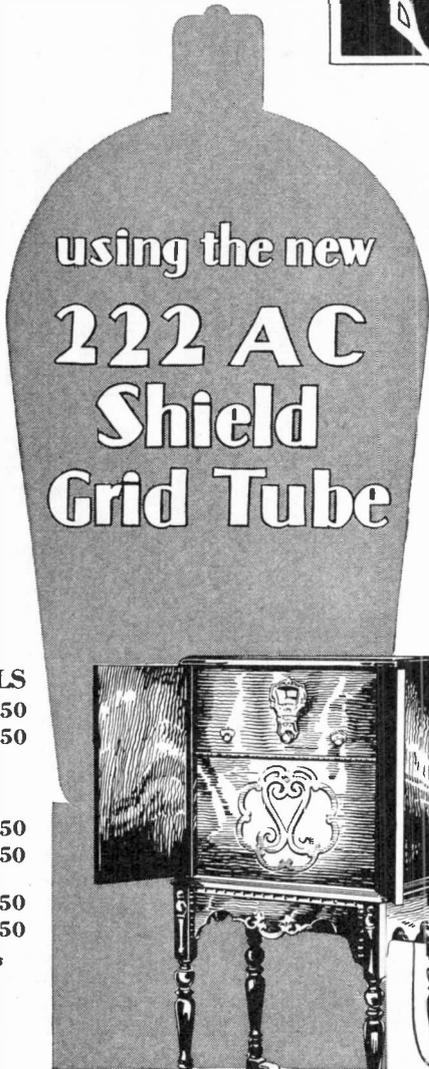
Post colonial period design with instrument panel of matched burl walnut framed by paneling of birds-eye maple and matched burl stump walnut. Seven tubes completely shielded using R. F. L. balanced circuit. Majestic Super-Dynamic Speaker. Volume control instantaneous in action. Single dial control. **\$137⁵⁰** Less Tubes

Slightly Higher West of the Rockies.

Majestic
~~ELECTRIC RADIO~~
Mighty Monarch of the Air

GRIGSBY-GRUNOW CO., 5801 Dickens Ave., Chicago

Federal Radio



using the new
**222 AC
Shield
Grid Tube**

"K" TABLE MODELS

- K 10-60 60 cycle \$127.50
- K 10-25 25 cycle \$137.50

**"K" CONSOLE
MODELS**

- K 40-60 60 cycle \$197.50
- K 40-25 25 cycle \$207.50
with DYNAMIC SPEAKER
- K 41-60 60 cycle \$227.50
- K 41-25 25 cycle \$237.50

*Prices do not include tubes
and are slightly higher
in west.*

OFFERS

*tremendous
sales possibilities
NOW!*

Federal is the first licensed Manufacturer to offer you the tremendous sales opportunities made possible by the new 222 A. C. Shield Grid Tube—the tube that Engineers claim will do the work of two or three extra tubes.

Federal's new "K" models with this revolutionary improvement—with their fine selectivity for metropolitan areas and unusual sensitivity—with their tremendous power combined with push-pull amplification which contributes perfected dynamic speaker operation—are the outstanding radios of the New Year.

If you're interested in the business that these new Models will bring you, either ask your Federal wholesaler or phone, wire or write for complete details of the Federal Proposition.

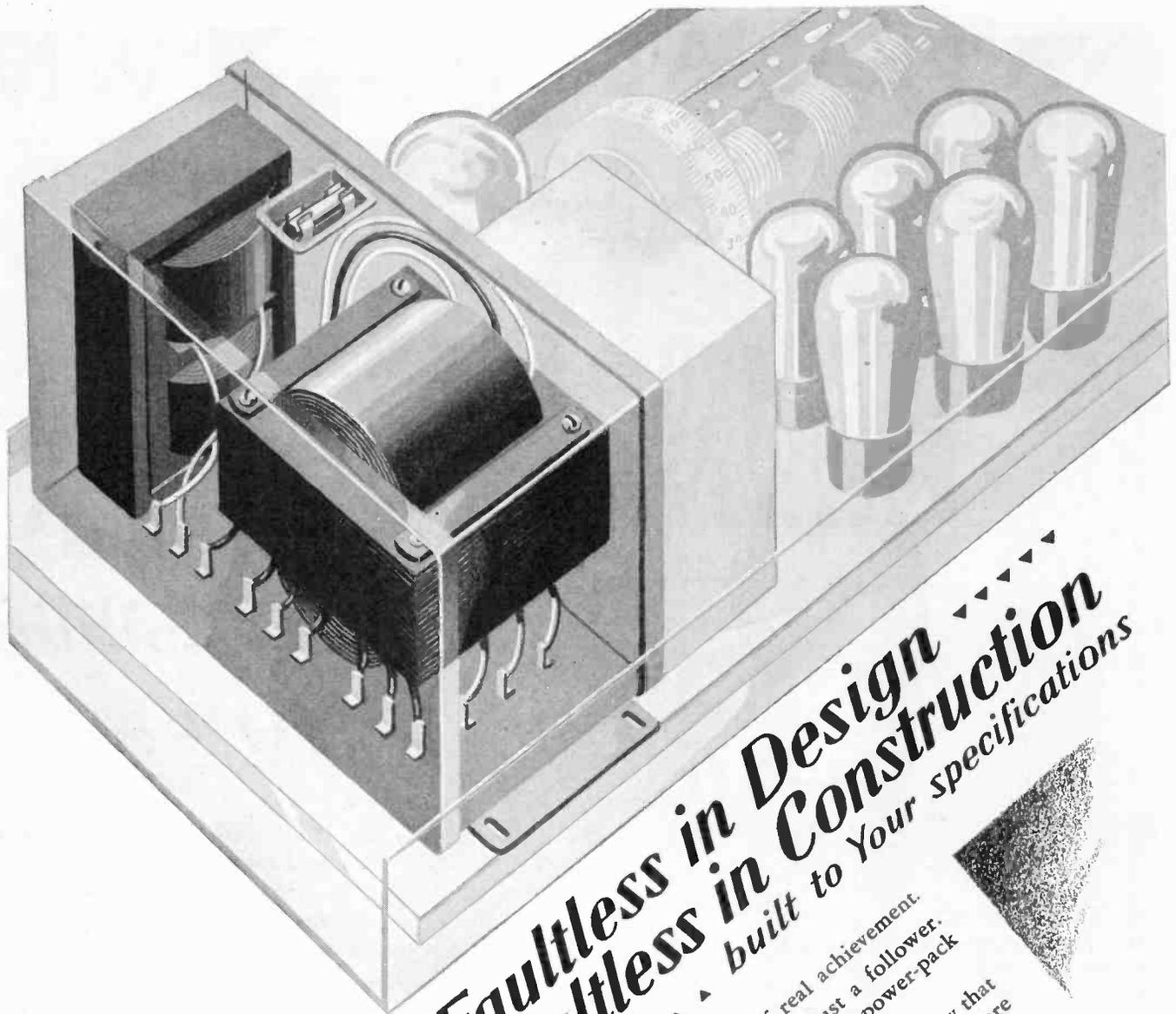
**FEDERAL RADIO CORPORATION, BUFFALO, N. Y.
Federal Ortho-sonic Radio, Ltd., Bridgeburg, Ont.**

**FEDERAL RADIO CORPORATION,
1738 Elmwood Avenue, Buffalo, N. Y.**

Please send me complete details of the Federal Proposition.

Name

Address..... City.....



POWER PACKS

Faultless in Design
Faultless in Construction
built to Your specifications

The leadership conceded T. C. A. is founded on a record of real achievement. Pioneers in the field, T. C. A. has always been a leader—not just a follower. Many important, accepted features of present day transformer and power-pack design were developed in the T. C. A. laboratories. Complete manufacturing facilities enable a step-by-step control over quality that would be impossible if these units were only "assembled." T. C. A. products are *dependable* because they are *right* from start to finish. Those radio manufacturers who have adopted T. C. A. Power-Packs *know* that the performance of their receivers will never be crippled by the failure of the power transformer installation. Why content yourself with a "second-best" when the finest costs no more?

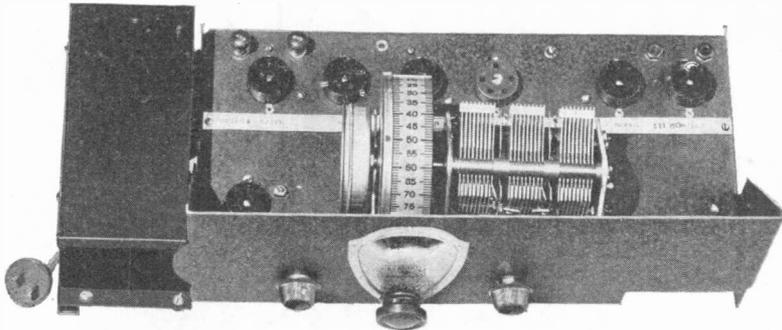
Correspondence Invited

The Transformer Corporation of America
 1428-1432 ORLEANS STREET, CHICAGO, ILLINOIS
 Sales Offices In Principal Cities



NATIONALLY KNOWN

—12 Nationally known parts manufacturers contribute to ACME'S outstanding success



THAT'S the list of parts that makes ACME the set for the millions. Show your customers the ACME chassis—tell them about the parts—then tune in and let them hear ACME performance.

There are two ACME sets. A four tube A.C. set listing at \$49.50 without tubes. A seven tube A.C. set listing at \$65.00 without tubes. The seven tube chassis listing at \$58.00 is available for installation in console cabinets. Both sets have illuminated single dial control, all electric—no batteries.

Write today for sample set—stock ACME radios today and watch them sell—they're truly the Set That Sells the Millions!

Faradon Filter
Condenser

Allen Bradley Grid
Leaks

Acme Products
Precision R. F.
Coils

Electrad Volume
Control

Thordarson Audio
Transformers

Dudlo Transformer
and Choke Coils

Defiance Variable
Condenser

Dubilier Bi-Pass
Condensers

Ohio Carbon
Resistors

Yaxley Control
Switch

Kurz Kasch Knobs

Eby Tube Sockets

THE ACME ELECTRIC & MANUFACTURING CO.

1440 Hamilton Ave.

Representatives in principal cities

Cleveland, Ohio

Established 1917 Member R.M.A.

The MERSHON CONDENSER

in the Radio Lines
You Handle is Your
GUARANTEE of

NO CONDENSER TROUBLE!



Self-healing in
case of puncture

Economical

Extremely efficient for high
voltages

Unaffected by
weather

Many a wise radio manufacturer incorporates the Mershon Condenser in his line because it guarantees *No Condenser Trouble* for himself, the distributor, dealer or consumer. Why not ask *Now*, Mr. Dealer, if your radio lines will include the Mershon Condenser?

Made exclusively by the
AMRAD CORPORATION
MEDFORD HILLSIDE, MASS.

J. E. HAHN,
President

For information concerning the Mershon Condenser and its use by manufacturers, please address Dept. A 2.

POWEL CROSLLEY, Jr.
Chairman of the Board

the
extra
heavy-
duty



30%

longer life
and costs
only

13%
more

A dominant advertising campaign is telling the story of the Ray-O-Vac Extra Heavy-Duty Radio "B" Battery No. 8303 to millions of radio fans in 1929. Be sure you're prepared for your share of this business!

FRENCH

Radio B

This is the ultimate in radio "B" batteries; it gives thirty per cent longer service to the radio user... and it costs (retail) but 13% more. Extra heavy-duty for extra-heavy demands; extra large size (though it's proportioned to fit all console type radios and all radio consoles). Extra power...extra life...extra value for you and for your customer. Start your new customers off right with the Ray-O-Vac Extra Heavy-Duty Radio "B" No. 8303; your old friends will welcome it—they've been waiting for such a battery! Ray-O-Vac exclusive Cell-Pocket Construction, of course. Details await your request.

BATTERY COMPANY

Factory: Madison, Wisconsin

Sales Office: 30 N. Michigan Ave., Chicago, Ill.

Branches: Minneapolis, Kansas City, Atlanta, Chicago, New York, Los Angeles

Also makers of Ray-O-Vac "A" and "C" Radio Batteries, Ray-O-Vac Flashlights and Batteries, Ray-O-Vac Telephone Batteries and Ray-O-Vac Ignition Batteries

The

AUDAK

Electro-Chromatic

PICK-UP

IN CONTINUING to use the name of our Company for our new electro-chromatic Pick-up, we are simply complying with the expressed wishes of the radio-music trade. As a well known Philadelphia jobber put it—"Don't believe that there is any name more suitable for a line of tonal equipment than the old standby, AUDAK—so well known." And there were many other recommendations in different terms, to the same effect. All the music world knows that the AUDAK Company stands for supreme acoustical quality. Therefore, what better name for our great new Pick-up! Very well . . . AUDAK it shall be . . . and thank you for your kind expressions of confidence in the continued excellence of AUDAK products.

. *nevertheless,*

WE ARE DISTRIBUTING THE PRIZES, JUST THE SAME

We deeply appreciate, too, the thought and effort developed by the Contest.

First Prize \$150.00

Edw. Schultz, Buffalo, New York

Second Prize \$50.00

R. E. Overly, Longview, Washington

Five \$10.00 Prizes

Javier Gomez, Apt. 534, Calle de Orizaba, Num. 14, Mexico City, Mexico

C. M. Whitfield, Sioux Falls, South Dakota

Samuel J. Cater, Austin, Texas

Mrs. Lilian Younginger, Pittsburgh, Pennsylvania

Lillian Hanson, Cottonwood, Minnesota

The **AUDAK COMPANY**

565 Fifth Avenue

New York

"Creators of High Grade Electrical and Acoustical Apparatus Since 1915"

Look Ahead with KEN-RAD

NOW
is the time
to Insure
Your Tube
Profits
This Year



THIS YEAR . . . if you are going to make more money selling radio tubes, the line you handle *must* assure you of a continuous supply of standard quality tubes and be backed up by sound, sales-producing policies. The Ken-Rad line will give you these advantages . . . Be among the first to *settle* your source of supply and have the outstanding sales cooperation Ken-Rad can

offer you. Ken-Rad's merchandising program for this year will offer even greater opportunity for tube sales. It includes the factory cooperation you need to make every sale a *completely* satisfactory one . . . Tie up with Ken-Rad now. Make sure you are going to sell all the tubes you *can* sell—and insure your profits. Ken-Rad will help you! The coupon below will bring you the information you want. Mail it today . . . *Look ahead with Ken-Rad!*

KEN-RAD

ARCHATRON

THE KEN-RAD CORPORATION, *Incorporated*
Owensboro, Kentucky



The Ken-Rad Corporation, Incorporated, Owensboro, Kentucky

We are looking ahead to a bigger tube business this year and are interested in a definite source of supply for standard quality tubes. How can you help us?

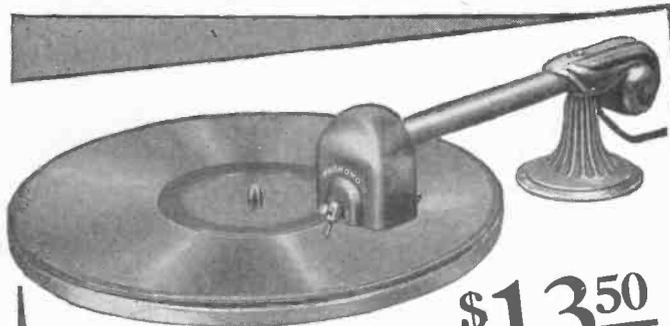
Firm Name _____

City _____

Street Address _____

State _____

PACENT



\$13⁵⁰

PHONOVOX

Still Breaking All Sales Records

Its flawlessly beautiful tone has made it the outstanding pick-up on the market. Excellent to demonstrate sets and records. Priced within means of all. Scientifically engineered throughout with typical Pacent precision. Easy to install and requires no servicing.

ELECTROVOX

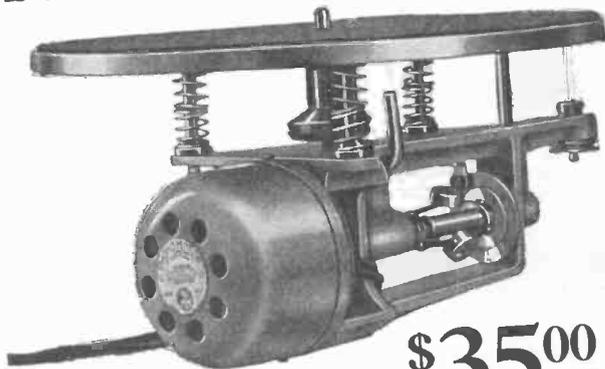
\$75⁰⁰



Another Fast Selling Pacent Product

A COMPLETE, electrically operated, beautifully toned phonograph when hooked up to a radio. All the tone quality and volume that is available in instruments costing hundreds of dollars. Powered with the famous Pacent Electric Phonograph motor, which assures finer performance and complete freedom from motor troubles.

ELECTRIC PHONOGRAPH MOTOR



\$35⁰⁰

The Silent Induction Motor

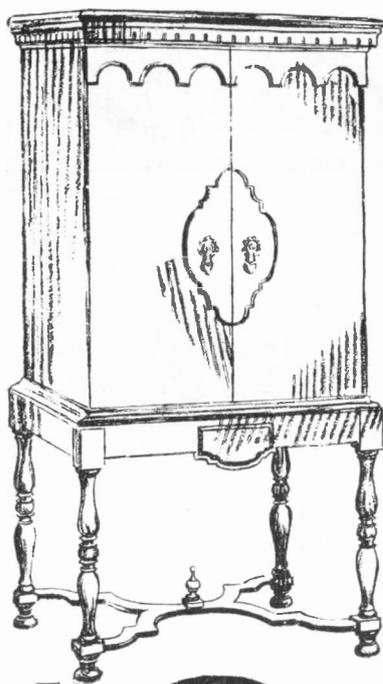
FINEST electric power plant for phonographs that money can buy. Squirrel cage induction type, absolutely silent, spring suspended turntable with felt cone friction drive. Scientifically insulated against noise.

Manufacturers write us for quantity prices. Dealers write your jobber for complete details, prices, discounts.

PACENT ELECTRIC CO., Inc., 91 Seventh Ave., New York City

Pioneers in Radio and Electric Reproduction for Over 20 Years

Manufacturing Licensee for Great Britain and Ireland, Igranic Electric Co., Ltd., Bedford, England



Model R-1—Radio with Dynamic Speaker.
Price, with Speaker, less tubes: \$315.

EDISON RADIO AND RADIO-PHONOGRAPH COMBINATIONS

The name *Edison* is all the public needs to know about this radio. When they hear it play, they like it. When they hear its name, they *buy* it. They respect the greatest name in science, and buy with a confidence which the set itself justifies. Thomas A. Edison, Inc., Orange, N. J.

TRADE MARK
Thomas A Edison

Edison Distributing Corporation

ATLANTA, 155 So. Forsyth St.

BOSTON, 96 South St.

CHICAGO, 3130 So. Michigan Ave.

DALLAS, 500 Elm St.

DENVER, 1636 Lawrence St.

KANSAS CITY, 1215 McGee St.

MINNEAPOLIS, 608 First Ave. N.

NEW ORLEANS, 128 Chartres St.

ORANGE, N. J.

PITTSBURGH, 909 Penn Ave.

RICHMOND, 1204 East Main St.

SAN FRANCISCO, 1267 Mission St.

CLEVELAND: B. W. Smith, Inc., 2019 Euclid Ave.

DETROIT: E. A. Bowman, Inc., 5115 John R. St.

LOS ANGELES: H. B. Curtiss Co., 727 Venice Blvd.

ST. LOUIS: Silverstone Music Co., 1114 Olive St.

OGDEN: Proudft Sporting Goods Co., 2327 Grant Ave.

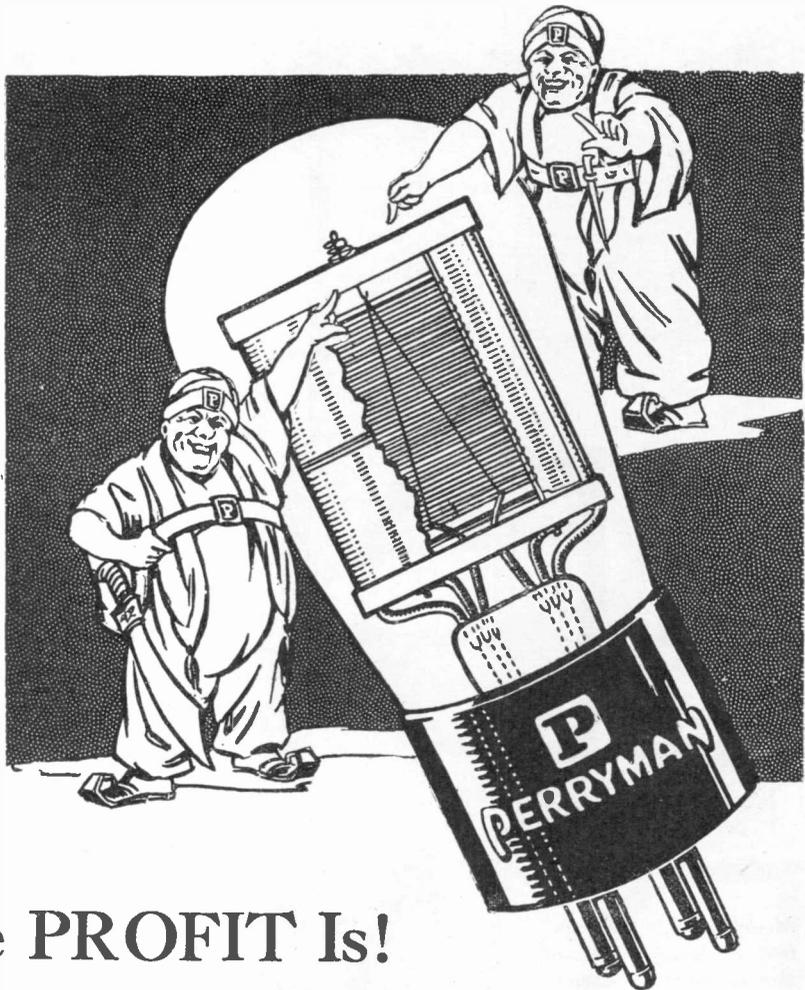
PHILADELPHIA: Girard Phonograph Co. Broad and Wallace Sts.

ROCHESTER: Alliance Motor Corporation, 727 Main St., East



PERRYMAN RADIO TUBES

"DISTANCE WITHOUT DISTORTION"



Here's Where the PROFIT Is!

WHOLESALEERS PLEASE NOTE

We are prepared to cooperate actively with all responsible wholesalers who wish to distribute Perryman Tubes. Our cooperation takes the form of intensive advertising in your own territory, right where it does you the most good. Write for our 1929 proposition.

The patented bridge in Perryman Tubes gives to Perryman Dealers permanent profit. Free from replacement worries.

The Perryman guarantee is based on the Perryman Bridge. Jars and jolts do not affect Perryman tubes. The bridge holds the elements in proper alignment, top and bottom—just as the cross bars support the pickets of a fence. Springs set on the bridge allow for filament expansion and contraction.

Dealers who sell Perryman Tubes get a fair profit on every sale—and keep it.

If you want to increase your net return on tube sales, write us at once for further information.

PERRYMAN ELECTRIC COMPANY, Inc.

33 West 60th St., NEW YORK, N. Y.

Laboratories and Plant: NORTH BERGEN, N. J.



PERRYMAN RADIO TUBES
A Complete Line of Standard Equipment for every Radio Purpose



SONORA *makes*

3 *important* *announcements*



Model A-44. An exquisitely designed combination instrument embodying the utmost perfection of the electrical reproduction of music—either by record or from the air.

Model A-36. In this instrument Sonora presents a radio that represents the highest development in the art of recapturing music from the air.



1. Sonora's production economies, together with a tremendous consumer demand, have made possible new lower prices on two Sonora Radios. These are Radio Models A-30 and A-32, now listed at \$260 and \$280 respectively—without tubes—instead of \$325 and \$345 as before. All stocks now in the hands of the trade will be protected to cover these price adjustments and credits will be issued to dealers who have stocks of these models on hand.

2. In addition, Sonora announces complete distribution of the famous De Luxe instruments during February. These include Radio Model A-36 and the Sonora Radio-Melodion combinations A-44 and A-46.

3. Instruments operating on 25-40 cycle current will be available this month—good news particularly for dealers located where this type of instrument is in demand.

With these important additions and adjustments, Sonora is now prepared to meet the demands of a tremendously growing volume of business. The 1929 Sonora line meets every need with low inventory requirements.

THE SONORA MELODION
MELODION WITH RADIO
SONORA PHONOGRAPHS

Sonora
CLEAR AS A BELL
(Acoustic Products Company)



NEW SONORA RADIOS
MELODIONIC SPEAKER
SONORA PORTABLES

SONORA PHONOGRAPH CO. INC., SONORA BUILDING, 50 WEST 57th STREET, NEW YORK CITY

Popular MAGNETIC REPRODUCERS

*that assure
satisfaction with
all radio receivers!*

Exceptional tone quality and volume . . . a Condition Equalizer that compensates for inequalities of audio amplifiers . . . moderate price within the means of every set owner . . . these three features make Newcombe-Hawley Magnetic Cone Reproducers big sellers. Order a stock today and get your share of this profitable business!

MODEL 83

(shown at left)

Portable model in walnut—with or without Condition Equalizer.



MODEL 81

(shown at right)

Table model with unit concealed behind grill—with or without Condition Equalizer.

THE COMPLETE NEWCOMBE-HAWLEY LINE includes magnetic and dynamic reproducers in a large variety of portable and table models. Write for catalog.

NEWCOMBE-HAWLEY

Division of United Reproducers Corporation
201 First Avenue, North St. Charles, Ill. Export Dept., 130 W. 42nd Street
New York City, N.Y.

The CONDITION EQUALIZER boosts reproducer sales

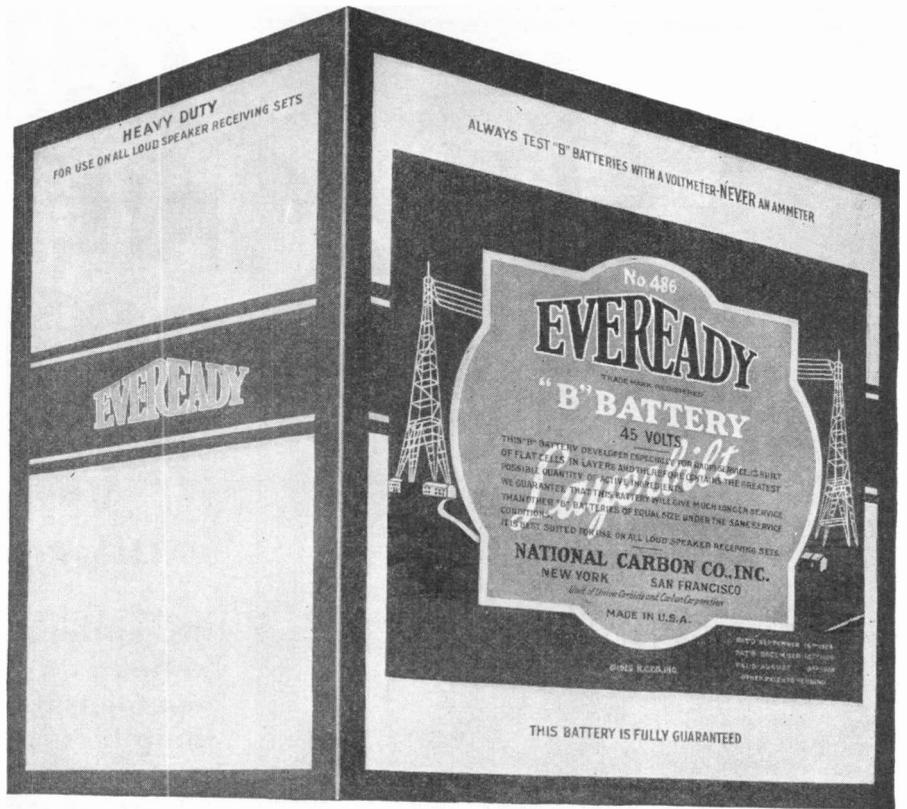
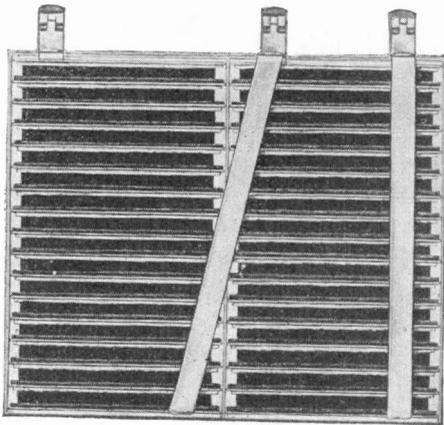
The Condition Equalizer offers three step control of tone quality, and compensates for variations in conditions of broadcast reception and in the quality of audio amplifiers. Clear articulation of speech depends largely on the higher frequencies. For this reason speech is more easily understood if the equalizer is set on the "high" position. Music is often more pleasing on one of the other settings. The Condition Equalizer is a big sales feature.



NEWCOMBE-HAWLEY

RADIO  REPRODUCERS

Here is the exclusive Eveready Layerbilt construction. Only five solderings, and two broad connecting bands, all other connections being made automatically. Waste space minimized. Layerbilt construction is a patented Eveready feature. Only Eveready makes Layerbilt Batteries.



LARGE SIZE Eveready Layerbilt "B" Battery—for heavy duty, No. 486, the original Layerbilt and the most economical of all Evereadys. List, \$4.25. There is also the Medium Size Eveready Layerbilt No. 485, listing at \$2.95.

Here is the **GREATEST SALES STORY** on "B" batteries you have ever had!

BY THE invention of the patented Eveready Layerbilt "B" Battery, 82 chances for trouble were abolished. That means greater reliability than ever before. It means greater satisfaction to your customers. It means that the Eveready Layerbilt is the best "B" battery made today, best from the standpoint of the dealer because it is best from the standpoint of the user.

Here are the places where trouble can come in a battery assembled of separate, individual cells—at the 29 fine connection wires, and at the 60 solderings. Every such battery, whether its cells are cylindrical, hexagonal, square or any other shape, contains those 89 weak points, for the only way to connect a lot of separate cells together is by soldering

wires to them. But the Eveready Layerbilt has only five soldered connections, big, firm and trouble-proof, and only two broad connecting bands, each $\frac{3}{8}$ inch wide. At the most, 7 places against 89. That means 82 chances for trouble abolished.

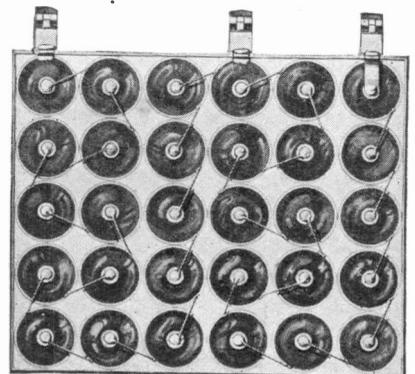
More than that—the Eveready Layerbilt flat cells that make connection with each other automatically, without soldered connections, also fill all available space inside the battery case. That means more active materials, and so the battery lasts longer.

When your customers ask you for "B" battery advice, tell them this story of "B" battery perfection. Tell them that Eveready Layerbilts last longer, give more satisfaction, and are most economical. Sell Eveready Layerbilts.

They will repay you in profits and in added reputation for knowing your batteries. Order from your jobber.

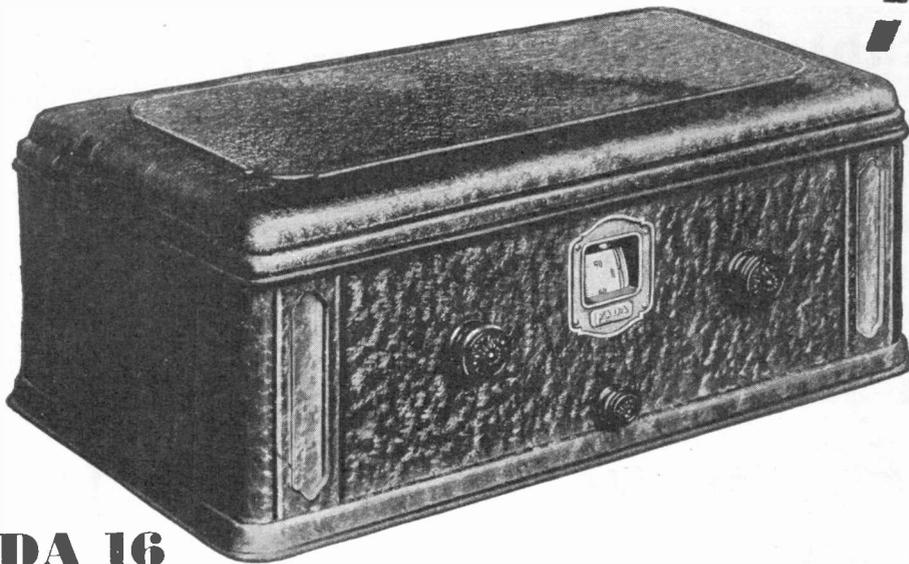
NATIONAL CARBON CO., INC.
 New York San Francisco
 Atlanta Chicago Kansas City Long Island City
 Unit of Union Carbide and Carbon Corporation

This is a typical cylindrical cell "B" battery. Note the 29 fine wires and 60 solderings—89 chances for trouble! See also the large amount of waste space between cells.



FADA Radio

**Selling like wildfire
... and no wonder!**



FADA 16

Uses 8 tubes, including two 171-A tubes and rectifier—Uses heater element tubes—Push-pull amplification—For use with dynamic or magnetic speaker—equipped for phonograph attachment—Smooth volume control—Illuminated single dial—Single tuning knob—Reproduction not affected by line voltage fluctuations. Completely self-contained in a handsome metal cabinet—Operates from A. C. light socket (90-130 volts, 50 to 60 cycles.) Yes, it's a neutrodyne!

All prices slightly higher west of the Rockies



← FADA 32

All the features of the 16—with built-in dynamic power speaker in a beautiful walnut console. To sell at \$225, without tubes.

OF course the public is strong for a radio that gives push-pull amplification—phonograph attachment—the use of heater element tubes and dynamic speaker... all for only \$110. The Fada 16 is selling—and selling fast... because it is the greatest radio value of the day.

Fada dealers are reaping a real harvest of profits this year with a whole line of outstanding values. Communicate with us for details regarding our protective policy franchise in your territory.

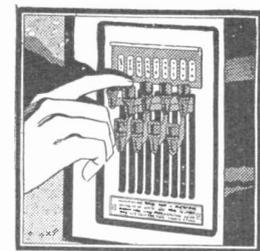
F. A. D. ANDREA, Inc., Long Island City, New York

FADA 17

Same as Fada 16 in artistic, dark brown burl walnut table model cabinet—to sell at \$135, without tubes.

THE last six months teach a lesson about Zenith Automatic Radio—a lesson that any radio dealer can study with profit. The reception which the radio-buying public has accorded this remarkable new development is decisive. Automatic Tuning is here to stay—to grow as All Electric Radio grew. And the point of interest to the radio dealer is this—*Only Zenith has Automatic Tuning.*

30 Models—3 different circuits including De Luxe, Automatic and Phonograph Models—with or without loop or antenna—battery or completely electric—\$100 to \$2,500



Just press a button—there's your station *instantly*. No uncertainty—no logging—no hunting for stations. The owner himself sets the Zenith Automatic in half a minute without any tools. Yet there is no interference with the ordinary dial tuning in the old-fashioned way.

ZENITH
 TRADE MARK REG.
 → LONG DISTANCE ← **RADIO**
 TRADE MARK REG.
 3620 Iron Street
 CHICAGO

"Automatic Radio" Owned and Controlled by The Zenith Radio Corp., Chicago, U. S. A., under the following patents—Vasselli 1581145, Re-issue 17002, Heath 1638734, Canada 264391, Gt. Britain 257138, France 607436, Belgium 331166. Also under Marvin and other U. S. and foreign patents pending.

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

WORLD'S LARGEST MANUFACTURERS OF HIGH GRADE RADIO

The BRISTOL

There is no substitute for
QUALITY



The Bristol Console with
RCA 100-A or Peerless Magnetic
Speaker . . . \$106.50 list.

Outside Dimensions:
Height—50³/₈" Width—30¹/₄"
Depth—17³/₄"

Dimensions of set compartment:
Height—9⁷/₈" Width—24"
Depth—14"

Announcing the
Bristol Console
with Jensen Dynamic Speaker

At a list price of **\$127⁵⁰**

In the Bristol, one finds a charm of authentic period cabinet-work seldom attained. The correct Jacobean character is reflected in the finely carved frieze moulding, in the framing of the doors with their

matched walnut panels and overlays of precious woods, and in the fretted skirting below. Here is old-world grace which fits, nevertheless, most perfectly into the modern American decorative setting.

Our liberal jobber and dealer discounts apply.



WASMUTH-GOODRICH Co.
New York City Peru, Indiana

Symphonic Sales Corporation
National Sales Managers
370 Seventh Ave. New York City

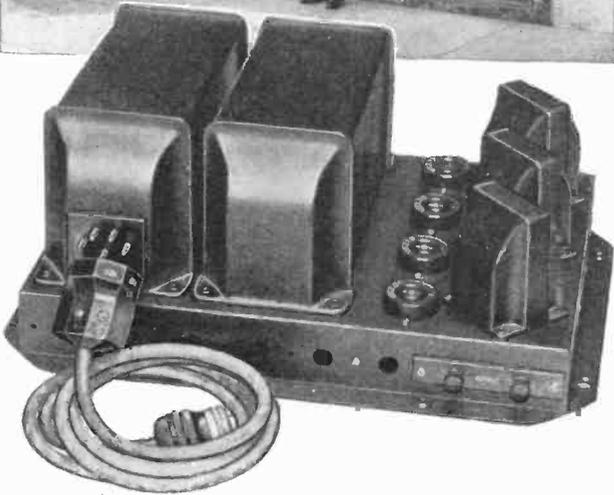
SYMPHONIC SALES CORPORATION
370 Seventh Avenue, New York

Please give us full information on Wasmuth-Goodrich Radio Cabinets and your cooperation with jobber and dealer.

Name _____

Address _____

City _____



The installation, the dealer and the PRODUCT

Foreseeing the business possibilities of educational broadcasts, Harold Batchelder, proprietor of the Garden City Radio Company, Newtonville, Massachusetts, installed in the Frank A. Day Junior High School, Newtonville, a receiving set and "PAM" amplifier, which proved to be the forerunner of many other school installations he has made.

Other radio dealers have foreseen the possibilities of "PAM" amplifiers not only for this use, but for many other purposes, and are working hard on this *profit-making non seasonal item.*

What do you foresee?

The PAM-17 is identical with the PAM-16 except that it furnishes in addition field current for a dynamic speaker designed to have its field energized by 90 to 165 volts direct current. For all other types of speakers, including dynamics, having their field energized from storage battery or AC 110-volt, 60-cycle, use the PAM-16. Both amplifiers are designed to operate from 105 to 120 volts, 50 or 60 cycles AC.

Write for handsome folder RR-5 describing the above and other PAM Amplifiers which are also a "Sound Investment."

Samson Electric Co.

MEMBER
RMA

Main Office: CANTON, MASS.
Manufacturers Since 1882

**Factories at Canton
and Watertown, Mass.**

THE CART ▲ ▲ ▲ and _____ THE HORSE ▲ ▲ ▲

Big national advertising circulation is important to the sale of any product.

But don't put the cart before the horse!

IT'S circulation in your city that does the work for you. Circulation influencing your community—reaching your customers—moving your merchandise—is the only circulation that does any pulling so far as you are concerned.

The American Weekly is the one national publication that will do as big a job for you as for the manufacturer—a publication that blankets nationally and dominates locally!



What is the American Weekly?

The American Weekly is the magazine distributed through the seventeen great Hearst Sunday Newspapers from seventeen principal American Cities*—a magazine whose colossal circulation concentrates in 485 of America's 784

towns and cities of 10,000 population and over.

In each of 153 cities it reaches one out of every two families.

In 119 more cities it reaches from 40 to 50%.

In an additional 108 cities it reaches from 30 to 40%.

In another 105 cities it reaches from 20 to 30%.

And almost two million additional copies of the American Weekly are bought in thousands of other thriving communities—constituting a tremendous national total of 5,646,898 families who buy and read The American Weekly—the greatest circulation and the most responsive circulation of any publication in the world!

THE AMERICAN *Greatest Circulation in the World* A WEEKLY

Main Office: 9 East 40th Street, New York City

Branch Offices:

Wrigley Bldg. Chicago	5 Winthrop Square Boston	753 Bonnie Brae Los Angeles
222 Monadnock Bldg. San Francisco	1138 Hanna Bldg. Cleveland	101 Marietta Street Atlanta
11-231 General Motors Bldg., Detroit		
*Albany Los Angeles San Antonio	Atlanta Milwaukee Syracuse	Baltimore New York San Francisco
Boston Omaha	Chicago Pittsburgh Seattle	Detroit Rochester Washington

-----MAIL THIS COUPON-----

The American Weekly
9 East 40th Street
New York City

Please send me a copy of the American Weekly and a statement of its circulation in my trading territory.

Name.....

Address.....

Town..... State.....

A Proven Success! MASTER HEAVY DUTY VOLTAGE CONTROL

Eliminates Free Service Calls

Especially adapted for use on radio sets with *Built-in* Dynamic Speakers which draw 80 to 100 watts, such as Majestic, Radiola 62, Zenith, Sparton, Kolster, Bosch, Freed-Eisemann, Fada, Day-Fan, Amrad, Freshman NR 12, etc. Also Radiola 60.

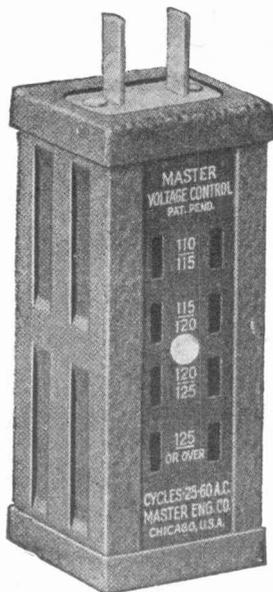
Maximum Capacity 100 Watts
List Price.....\$3.00

Also Standard Model MASTER VOLTAGE CONTROL, for use on all popular price sets such as Atwater Kent, Radiola 18, Crosley, Apex, Steinite, Philco, Stewart-Warner, Case, Acme, A-C Dayton, Freshman, etc., which draw 40 to 60 watts.

Maximum Capacity 60 Watts
List Price.....\$2.50

Endorsed by Leading
Tube Manufacturers

Order at Once From
Your Jobber

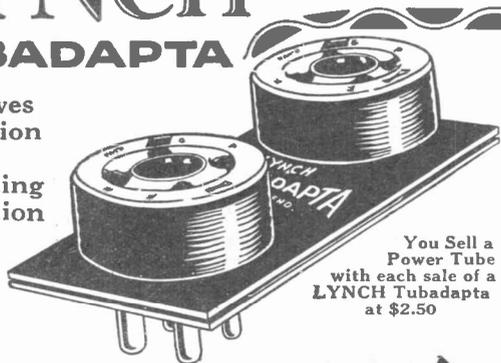


MASTER ENGINEERING CO.

122 So. Michigan Ave., Chicago, U. S. A.

LYNCH TUBADAPTA

Improves
Reception
by
preventing
Distortion



You Sell a
Power Tube
with each sale of a
LYNCH Tubadapta
at \$2.50

HERE'S A
DOUBLE PROFIT
OPPORTUNITY FOR YOU!

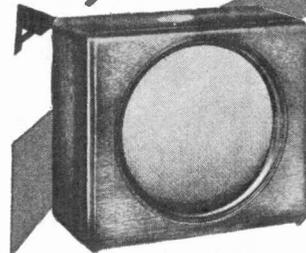
The Lynch Tubadapta can be installed in ONE minute, by anyone. It provides a simple means of using two tubes in parallel. This reduces impedance in power stage, resulting in far better reproduction. Blasts and unnatural noises of full volume reception are eliminated. Dynamic speakers give amazing results.

Order from your Jobber, or DIRECT

Arthur H. Lynch, Inc., 1775 B'way, N. Y. C.

Manufacturers of
QUALITY RADIO PRODUCTS

ROLA SALES SENSATION IN RADIO



A new
SPEAKER
of remarkable
value meets
heavy demand
only **\$22.50**

Rola Model Fifteen is sturdily built of hardwood with attractive walnut finish.

In the past few weeks a new standard of low-priced quality reproduction has been set in the radio industry—a new market of users has been opened for radio dealers.

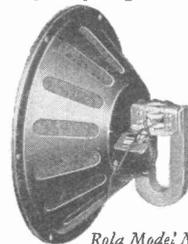
INSTANTLY, from all parts of the country, dealers have reported tremendous public approval of the new Rola Model Fifteen—have sent in repeat orders. Here is the reason: The new Rola Model Fifteen is daily out-demonstrating much more expensive speakers.

The new Rola Model Fifteen has sufficient power capacity to operate on the full volume of any standard radio set. In life-like realism, tone-range and volume, it closely approximates the results of the average dynamic speaker and equals any magnetic speaker made. It is equipped with the famous Rola Model M Magnetic Armature Unit, the same unit contained in the more expensive Model Twenty. Its performance is therefore identical with the more expensive speakers. At the price, the new Model Fifteen offers value never before approached in radio history.

Cultivate This New Market! Radio dealers can now sell quality speakers in a much lower price class than heretofore. Thousands of radio users, who are not prospects for the more expensive speakers, but desire greater realism, greater volume, greater power than is possible with the average magnetic, will buy at the low price of \$22.50. Here is your opportunity to meet the low-priced speaker demand with a speaker that you know will give permanent satisfaction—a speaker of marvelous performance. *The Rola Model Fifteen, once in your store, will prove a rapid seller.*

MANUFACTURERS: The new Rola Model M Magnetic Armature Unit is ideally adapted to built-in consoles and speaker tables. It is the same unit installed in the Rola Models Fifteen and Twenty. It has the Rola full-floating diaphragm and responds to all tones between 100 and 5000 cycles per second in frequency. In conception the Model M is founded on correct, enlightened engineering and upon careful fabrication from quality materials. Its superior performance and freedom from maintenance troubles have been proven in actual use. Inquiries for details, blue prints and prices from responsible parties are solicited.

Ask your jobber for full details on the 1929 loudspeakers or write to the nearest factory for name of Rola jobber.



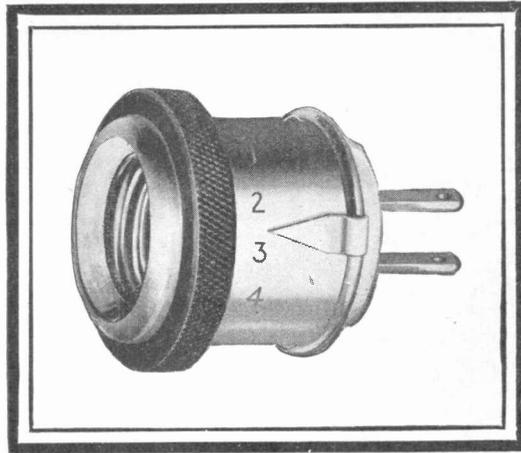
Rola Model M
List Price \$15

Rola Dynamic and Magnetic Speakers
for Every Radio Installation

THE ROLA COMPANY

CLEVELAND, OHIO OAKLAND, CALIF.
2570 East Superior Avenue Forty-Fifth & Hollis Streets

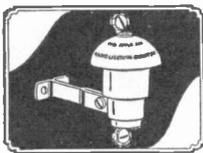
You can profitably cut down service time with Wirt A.C. Voltage Regulators



Free service calls make no profits — so have your service men carry a pocketful of our A. C. Voltage Regulators and sell one per call. It's easy to do, because the Wirt Regulator is well-known and because it does a job nothing else will do — saves tubes and sets from current "surges" and eliminates most line noises. Sells for only \$2.25.

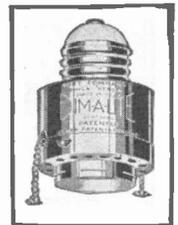
It is an item that one customer recommends to another. Thousands of radio dealers are making profits on it — you had better, too! Use the coupon.

LIGHTNING ARRESTER



Protects sets and homes, too. It is the air gap type made of bakelite and brass — "petticoat" insures ample insulation in any weather. Terminals are extra heavy and so arranged that aerials can be connected without cutting — much the best practice for better reception and complete protection. Only \$1.00 list.

DIM-A-LITE



The Wirt Company is the originator and sole maker of the famous Dim-a-lite attachment that gives five changes of light to any bulb. Perhaps you can carry them, too. They are very profitable and easy to handle. A great addition to beauty and comfort in any home. Send for our free booklet "Many Lights from One Bulb". It tells the interesting story of Dim-a-lite and will help you to sell them.

WIRT COMPANY

Here's a good display idea. Get a modern standard (we can supply at cost); put on it a No. 23 Dim-a-lite with tags, which we'll furnish free, and a 25 watt bulb. Then place the outfit on a counter, connect it up, and let your customers play with it. This sure sells Dim-a-lites! They cost only \$1.00 for No. 23, 25 to 40 watt size; and \$1.25 for No. 23A, 50 to 60 watt size.



Wirt Company, 5221 Greene St., Philadelphia, Pa. RR 2-29

Please send me by return mail

... display cartons of 10 Voltage Regulators, No. 211

... display cartons of 10 Wirt Lightning Arresters, No. 200

Free interesting booklet "Many Lights from One Bulb".

Bill through..... (jobber)

Name.....

Address.....

Town..... State.....

INDIVIDUAL INSTRUCTION CARDS for testing Factory-Built Radio Sets



An Added Service of the
WESTON MODEL 537

A. C. and D. C. Radio Set Tester

THESE Instruction Cards, by covering the specific testing requirements of individual receivers, make the Model 537 a still more useful test set for the service man.

They save the service man's time by giving a complete outline of procedure for testing the principal makes of factory-built sets and, in addition, give the socket voltages and tube plate current for every stage throughout the set, as well as the comparative grid test on the various tubes.

The Model 537 is designed to meet the service requirements of every type and kind of radio receiver. Its use, however, is reduced to still greater simplicity when testing any particular make of set in conjunction with its individual instruction card.

Write to us and we will be pleased to acquaint you with full particulars. Or, better still, address your inquiry to your radio jobber, supply house or our nearest representative—and ask for a demonstration.

WESTON ELECTRICAL INSTRUMENT CORPORATION
581 Frelinghuysen Ave., Newark, N. J.

Weston
PIONEERS
SINCE 1888
INSTRUMENTS



CONDENSER TISSUES

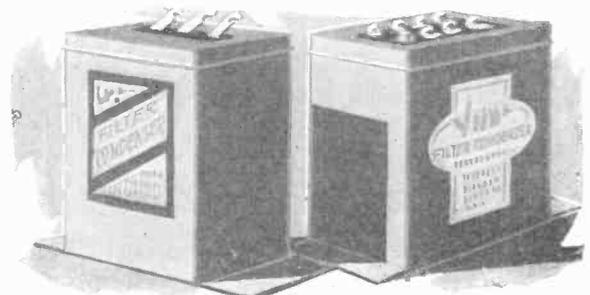
NO Radio set is any better than its weakest link, and the weakest link is very often a filter Condenser. No Condenser is any better than the thin strips of Insulating Tissue which separate the layers of metal foil. A pinhole or a speck of metal in the Condenser Tissue means a break down of the Condenser, with the entire set put out of commission.

DEXSTAR Condenser Paper is regarded by Radio experts as being the highest grade Insulating Tissue ever made—the freest from defects, the most uniform in quality, the most lasting under exacting and unusual requirements. DEXSTAR Condenser Tissue is the specialized product of a paper mill which has excelled in Tissue Paper production for three generations.

RADIO dealers and builders should have the assurance that Condensers which they use are made with DEXSTAR Condenser Tissues. It is insurance against many radio troubles. The leading Condenser manufacturers are now using DEXSTAR Condenser Tissues exclusively.

For Samples and Prices Address Dept. No. 3

C. H. DEXTER & SONS, INC.
Makers of Highest Grade Thin Papers
WINDSOR LOCKS, CONN.



BOSCH RADIO



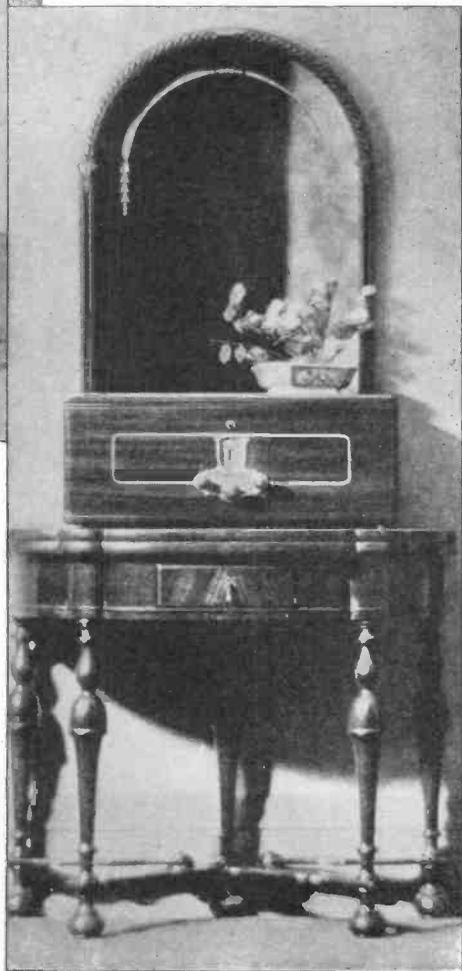
Authorized Bosch Radio Dealers are now showing specially designed Console illustrated, with its fine selected and patterned woods, rich carvings and beautiful finish, and are offering this Console 28A with Standard Bosch Radio speaker and the Model 28 Bosch Radio Receiver. Price \$197.50, less tubes. Model 28C, a similar model, with electric dynamic speaker is \$237.50, less tubes.



Authorized Bosch Radio Dealers are now showing the Console Model 29B, specially designed for them with super-dynamic speaker and special high-power speaker supply. Console has sliding doors, beautiful craftsmanship and selected woods. Bosch Radio Dealers are offering this Console 29B with super-dynamic speaker and special high-power speaker supply with Bosch Radio Model 28 Receiver. Price \$295.00, less tubes.



Bosch Radio Model 28—110 volt AC. Seven AC tubes and power tube. Single tuning, lighted dial. Solid mahogany cabinet. Price \$132.50 less tubes.



LAST year we predicted that the Bosch radio contract would be the outstanding money maker of the year—and it was. The Bosch Dealer Success this year needs no prediction—it is proving itself every day. Bosch Radio for 1929 has an unparalleled price position, a wide selling range, flexibility of inventory backed by a sound merchandising policy. The appearance and performance of Bosch Radio is a valuable selling asset. There is a twelve-month market for Bosch Radio to those who seek it. Bosch advertising and Bosch Factory-to-Dealer co-operation will help you. Write the main office or nearest branch to be a participator in Bosch success this year.

Bosch radio is licensed under patents and applications of R.C.A., R.F.L., and Lektophone—Prices slightly higher west of Rockies and in Canada.

AMERICAN BOSCH MAGNETO CORPORATION
SPRINGFIELD MASSACHUSETTS

Branches: New York Chicago San Francisco

Two New Models at a Price
to Advertise Them Quickly

**LAST WORD in
Modern Electric Sets**



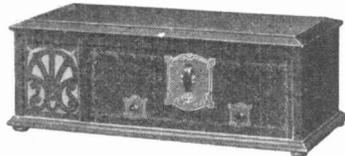
Desk Model H4
American Walnut
Finish
Height 37 in., Width
30 in., Depth 16 in.
6 Arcturus Tubes
1 280 Rectifying Tube
Aluminum chassis
Aluminum shielding
Illuminated Split
Drums
Big Airchrome Speaker

Your Cost. **\$76.50**
Check with order

Complete or 25% with order;
Balance C. O. D.

Model C2

Same specifications as
above without speaker.



Your Price. **\$56.50**
Check with order

Complete with all tubes or 25%
with order; Balance C. O. D.

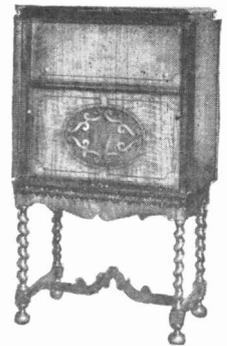
VALUES like these only possible be-
cause of our *Direct To Dealer for
Cash* selling plan.

*Set your own retail price and make
a hit in your town*

DIAMOND T. RADIO MFRS.
South Bend, Indiana

**Appearance—
25% of your battle**

BEAUTIFUL in de-
sign and in con-
struction — Buckeye
Radio Furniture has
that outward distinction
which never fails to at-
tract discriminating
buyers.

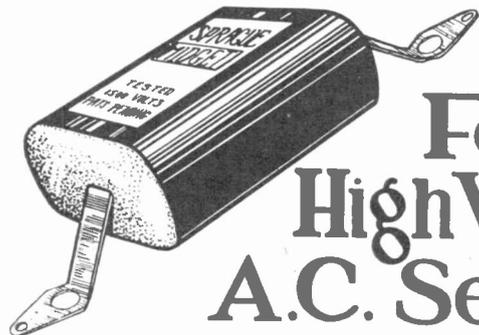


For appearance is 25%
of your sales battle—
and the handsome
Buckeye Console Cab-
inets are *distinct* sales assets to any radio equipment.

Write today for beautiful illustrations and price
lists.

THE BUCKEYE MANUFACTURING CO.
Springfield, Ohio

National Sales Agent, Studner Brothers, Inc.
New York City: 67 W. 44th St.
Chicago, Ill.: 28 E. Jackson Blvd.



**For
High Volt
A.C. Sets**

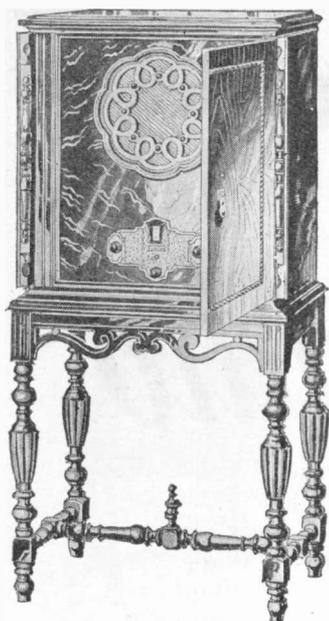
The same craftsmanship that has made Sprague
Midgets the choice of leading set manufacturers
is evidenced in this new type condenser. Safe
for continuous A. C. operation up to 550 volts,
60 cycles and up to 750 volts D. C. Water-
proofed with asphalt covering and special
process of triple impregnation. Capacities from
.00007 to .1 MFD.

SPRAGUE SPECIALTIES CO.
Quincy, Massachusetts

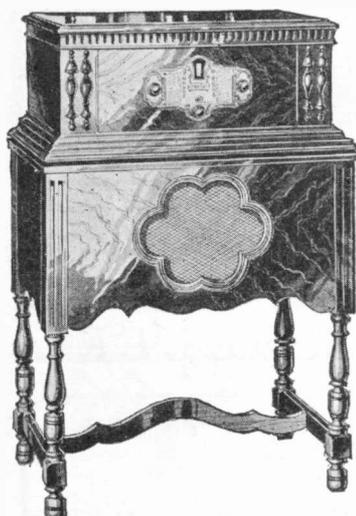


THIS REINFORCED LINE-UP of DAY-FAN RADIO Will Put PEP IN SALES NOW

February—when public interest in radio is keen because reception is at its best—offers the opportunity for splendid business. February sees Day-Fan backing up its dealers with a line of models incorporating recent developments of its laboratories—a line improved from a merchandising standpoint—but the basis of which line is the Day-Fan 9-tube receiver—the set, which by its masterful performance, has made this the outstanding season in Day-Fan Radio history.



New Model 43 Dynamic



New Model 48-46 Dynamic



New Model 25-47

DYNAMIC Speaker Combinations withheld until PERFECTED; New lower priced complete unit

Day-Fan engineers have now completed work in matching the Day-Fan receiver to dynamic speaker, which has overcome their objections to previous dynamic speaker performance.

We now offer two dynamic models: Model 43, the magnificent console above, and Model 48-46, the speaker table combination shown in the middle at left.

Model 43 in the opinion of many people is the finest radio instrument that has ever made its appearance, regardless of price. It is unusually attractive in appearance; now, with dynamic speaker built in, its quality of performance makes it an even greater value than before. The list price remains at \$295, less tubes.

Model 48-46 is a combination of Model 48, dynamic table model,

and Model 46 dynamic speaker table. This is a matched unit and neither the set nor speaker table should ever be sold separately. The combination sells at only \$215, less tubes. This model will prove even more popular than it was with magnetic speaker.

Model 25-47 is a combination of Model 25, the distinctive table cabinet, and neat, harmonious table with magnetic speaker. This magnetic speaker is faithful in tone and handles volume well. This is a high-quality radio combination, and is proving immensely attractive at only \$190, less tubes.

Model 25, table model, is still available as a separate unit.

Get in touch with your jobber, or write us for name of Day-Fan distributor nearest you.

DAY-FAN ELECTRIC COMPANY
DAYTON, OHIO

Day-Fan

RADIO

STEWART-WARNER

will soon announce the
year's biggest profit
opportunity in

Radio

A NEW RADIO OF REALISM, perfected by the exclusive Stewart-Warner Electric Ear test! A complete line, with a range of style and price enabling you to meet every class of demand. New Stewart-Warner features that will give you outstanding advantages over competition and help you to attain radio leadership in your community. See announcement on pages 20 and 21 of this issue.

Write today for full particulars of this greatest of all money-making opportunities in the radio field.



STEWART-WARNER SPEEDOMETER CORPORATION, Chicago

22 years in business—22 million products in use—world-wide service—
50 million dollars in resources—5th successful radio year

STEWART-WARNER—THE VOICE OF AUTHORITY IN RADIO

NOT EVERY VOLTAGE CONTROLLER IS A "RESISTOVOLT"

TRADE MARK REG. U. S. PAT. OFF.

"Resistovolt"

Automatic voltage controller—first in the field—first in volume sales—miles ahead in mechanical features. Entirely automatic, entirely air-cooled, all metal in design. Consumes no current.



LIST PRICE
\$1.75

Only those made by Insuline Corp of America (I.C.A.) are genuine Resistovolts.

Insist on your jobber supplying Resistovolts when you order them or send your order direct to us. Why accept substitutes when you can get the genuine RESISTOVOLTS.

Write for Complete Catalogue of Radio Products and Television Sets, Kits and Parts.

INSULINE CORP. of AMERICA
78-80 Cortlandt St., N. Y. C.

"Antennavolt"

Combination of Resistovolt and light socket antenna — improves reception, minimizes static—has all the features of a socket aerial without tying up the outlet for set current, PLUS automatic voltage control protection. Consumes no current.



LIST PRICE
\$2.25



Why Sell a Powerful Set to Have It's Reception Ruined by Snaps and Cracks from the AC Line?

The NEW THERMATROL 110-Volt Interference Filter

Plugged Ahead of the Set Takes This Noise Away. Also quiets interference from household appliances when placed ahead of appliance in the A.C. line. Priced at only \$3.50 and requires no wiring or extra cord. Every set you sell should have this protection.

THERMATROL MFG. CO., Springfield, Mass. Makers of the popular Thermatrol line of radio necessities including Dynamic Speaker Controls, Voltage Controls and Lightning Arresters.

CORWICO

Braidite

HOOK-UP WIRE
"THE BRAID SLIDES BACK"

LORNISH WIRE Co

30 Church Street New York City

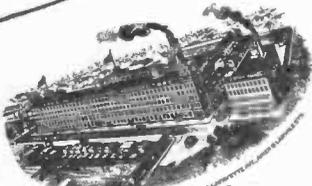


ESTABLISHED 1912

Chas. M. Stieff
Manufacturing
Grand Rapids, Michigan

36 N. HOWARD ST., BALTIMORE, MD.

January 18, 1929.



FACTORIES & LUMBER YARDS IN ALL OF EAST LANGLETT, MD. BALTIMORE, MD.

ADDRESS ALL COMMUNICATIONS TO THE FIRM

Arcturus Radio Co.,
220 Elizabeth Ave.,
Newark, N. J.

Gentlemen - You may be interested to learn that we have made a positive check of Arcturus tubes and find that after service of one month they give a higher meter reading than any other tube on the market.

Also, we are pleased to say that our percentage of replacements is smaller than any other tube. Be assured that we do not hesitate to recommend the use of Arcturus tubes to all of our customers.

With best wishes for your continued success, we remain

Very truly yours,
Chas. M. Stieff, Inc.
Edward Stieff
Manager, Radio Dept.

H. E.

DEMONSTRABLE points of superiority—7-second action, no hum, 2000 hours of life—explain Arcturus sales success. If you want to sell the fastest moving A-C tube on the market today, get all the facts about **ARCTURUS**.

ARCTURUS

BLUE ^{A-C} LONG-LIFE TUBES

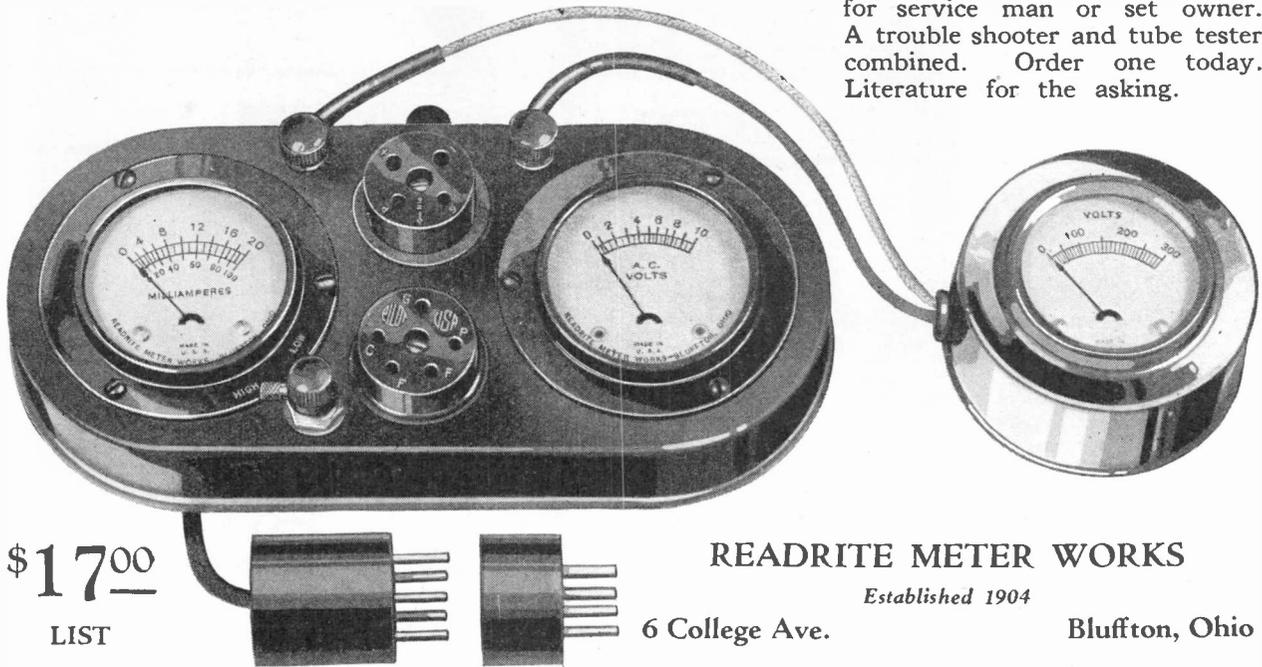
ARCTURUS RADIO TUBE COMPANY, 220 Elizabeth Avenue, Newark, N. J.

Readrite

Universal Test Set

Complete Outfit, Shown One-Half Scale

Operates equally well on A. C. or D. C. circuits. Just the thing for service man or set owner. A trouble shooter and tube tester combined. Order one today. Literature for the asking.



\$17⁰⁰
LIST

READRITE METER WORKS

Established 1904

6 College Ave.

Bluffton, Ohio

CENTURY

**A-C DYNAMIC SPEAKERS
A-C ELECTRIC RECEIVERS**

FOR EXCLUSIVE DISTRIBUTORS
and DEALERS ONLY

While new in name and design and employing latest approved methods, the new products are not without a well known background. The builders of the old line of THOROLA sets and speakers have brought out these new products for public acceptance.

EXTREME VOLUME—
BEAUTIFUL TONE—
VERY SELECTIVE—
FAR REACHING—

Our merchandising plan for Distributors is a liberal one. Many are now making application. Outline your actual territory and organization in your application.

UNITED RESEARCH LABORATORIES, INC.
864 W. North Ave., CHICAGO, ILL.

Potter Condensers

Quality Long Life Economy

- T-2900** Condenser Block for the single 250 type tube amplifier..... **\$20.00**
- T-2950** Condenser for the push-pull 250 type tube amplifier..... **\$22.50**
- T-2098** Condenser Block for single 210 type tube amplifier..... **\$20.00**
- SM-673** Condenser Block for Silver-Marshall Power amplifier and power supply.... **\$20.00**

Potter Interference Eliminator

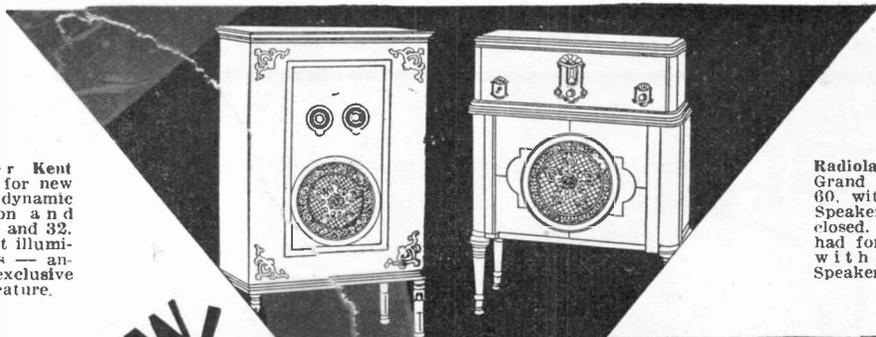


Do not allow your radio broadcast programs to be spoiled by interference from oil burners, ice machine motors, violet rays, vacuum cleaners, fans, etc. The remedy, connect a Potter Interference Eliminator to the line circuit at the point where the interfering device is connected, and enjoy good reception from your radio set.

Code	Size	A.C. Supply Line Volts	Price
103-03	1" x2" x4 3/8"	110	\$2.25
104-04	1 3/8" x2 1/4" x4 3/8"	110	3.00
105-05	1 3/4" x2 1/4" x4 3/8"	110	3.75

The Potter Co.

North Chicago, Illinois
A National Organization at Your Service



Atwater Kent Model — for new electro - dynamic combination and Models 40 and 32. Panel light illuminates dials — another exclusive Findlay feature.

Radiola Console Grand for Model 60. with Dynamic Speaker 106 enclosed. May be had for Model 18 with Magnetic Speaker 100.

NEW! *Dynamic Radio Consoles*

-by FINDLAY

HERE are the best sellers for the radio year 1929 . . . Findlay Radio Consoles built especially for the new dynamic sets and speakers.

Exclusive console designs in rich walnut finishes with genuine bronze ornaments—all the eye-beauty of fine veneers plus the Findlay Console features; vibrationless, sturdy, and sound construction that glorifies the true notes from the speaker. You who are tone conscious will be astonished.

Findlay Consoles also have another feature that dealers like. No trouble in installation—simply place the table model for which the particular console is made, in the set compartment. Push set forward until dials extend through panel of console. Installation is then completed.

There is a Findlay Console for every set mentioned on this page.

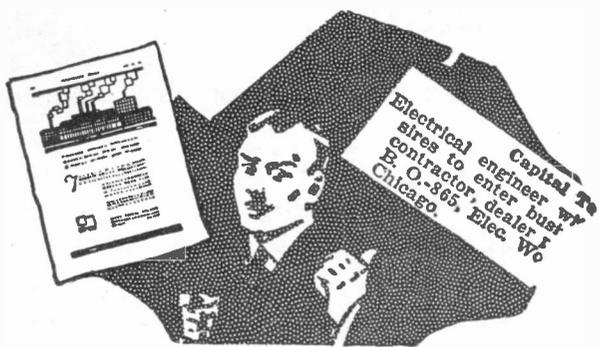
Your jobber will supply you with Findlay Radio Consoles **BUT** write us for more detailed information.

American Bosch
Atwater Kent
Crosley
Fada
Radiola

ROBERT FINDLAY MFG. CO.

Metropolitan and Morgan Aves., Brooklyn, New York

Makers of the already Famous Findlay Console Tables for all popular radio sets.



Don'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 the

SEARCHLIGHT SECTION

For Every Business Want

"Think SEARCHLIGHT First"

0156

Good Territory Open for Sales Representatives

For



8 TUBE ELECTRICS

CHASSIS and CABINET MODELS

For A. C. or D. C.

Get Your Application In Now!

Write for prices and discounts or send for a sample Pierce-Airo Electric Receiver for test in your own store.

PIERCE-AIRO, INC.

113-R Fourth Ave., New York City

Perfection in Appearance and Performance



Bremer-Tully Radio is designed to give the greatest satisfaction over the longest period. It offers greater economy than any lower priced set.

Once sold it stays sold insuring the purchaser *lasting satisfaction* and the dealer *permanent profit*.

Every Bremer-Tully product has been eminently successful—has proved a good-will and profit builder. *No name in radio stands higher.*

Prove it to your own satisfaction as others have by securing the franchise for your community. *Write today.*

The model illustrated is the B-T 7-71, AC electric with finest quality Dynamic speaker

Five other models priced from

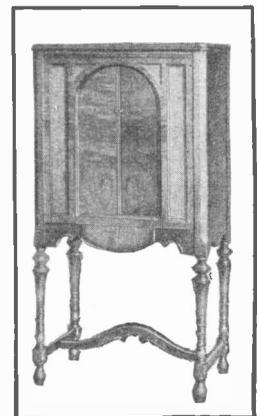
\$115⁰⁰

to

\$490⁰⁰

complete the line

Closed



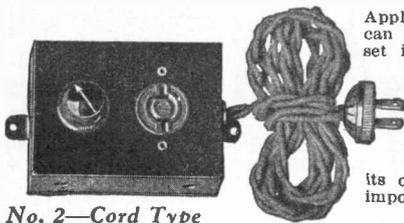
Bremer-Tully Mfg. Company

656-662 Washington Blvd.

Chicago

Proved By The Test of Time

Eliminate the Element of Chance!



No. 2—Cord Type Standard Modu Plug\$2.50

Design and mechanical construction are more to be considered than just mere quantitative resistance. A piece of raw carbon or roll of resistance wire may have great resistance value but are of no use as a control of voltage.

Centralab Resistance units of all types are specially designed to perform the function for which they are made. They are accurate, mechanically sound, durable and technically correct in construction and value.

Send for booklet, "Volume and Voltage Controls—Their Use."

No. 1—Standard Modu Plug.....\$2.50

Centralab

CENTRAL RADIO LABORATORIES

CENTRAL RADIO LABORATORIES

30 Keefe Avenue, Milwaukee, Wis.

Applying the old proverb it can truly be said that a radio set is no more efficient than its smallest part.

Resistances and volume controls, from a standpoint of size, are small parts of a radio receiver, but in their effect upon its overall operation are very important factors.



No. 3—
"Easy Chair"
Modu Plug
\$3.00

WATCH Jensen in 1929

Everyone knows how Peter L. Jensen's perfection of the dynamic speaker in 1927 and 1928 served as the pattern for the entire radio industry.

And now Jensen has started 1929 with the announcement of the Jensen Auditorium Speaker—designed to operate with all types of amplifiers from the smallest with one tube to the largest with push-pull stages employing type 250 tubes. It is the ideal reproducer for use in theatres and auditoriums, out-of-doors, or in the home.

Jensen Dynamic Speakers are now offered at new low prices. For complete information, write or wire today.

JENSEN RADIO
MANUFACTURING COMPANY

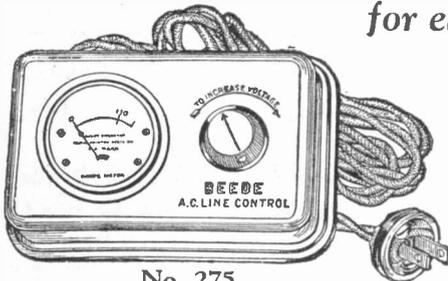
338 N. Kedzie Avenue, Chicago, Ill.
212 Ninth Street, Oakland, Calif.

Jensen
DYNAMIC SPEAKERS

Jensen Patents
Allowed and Pending
Also Licensed under
Lectrophone and Magnacord
Patents

BEEDE Line Controls

for electric sets



No. 275

Assure the user of perfect operation with long tube life.

EXCESSIVE line voltages, which greatly shorten the life of AC Tubes can be easily corrected with the Beede Line Control.

Made of Bakelite—Attractive in Appearance—Rheostat of ample capacity to prevent heating—Accurate Meter calibrated with line at 110 volts.

Dealers will profit and be of service to their customers by recommending the Beede Line Control.

LIST PRICE \$8.00 DEALER'S PRICE \$4.80

If your Jobber cannot supply you, we will ship direct.

Beede Electrical Instrument Co.
PENACOOK, N. H.

The new Beede test kit will be ready soon.
Send for information on other Beede Products

No SALE!

is ever consummated unless your customer feels certain that he is receiving value for his investment.

To retain his good will and to insure his return you must give him a product that you can conscientiously stand in back of. You have this assurance with Vogue tubes. They are all and even more than can be expected from a GOOD TUBE.



A Complete Line A.C. D.C.

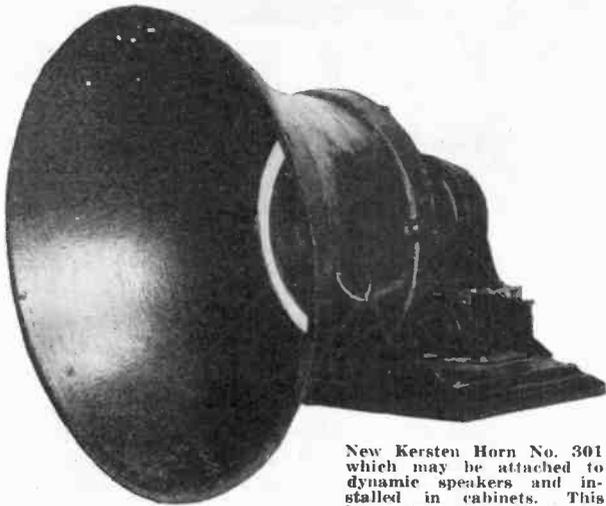
VOGUE NONPAREIL



Fully Guaranteed



Allan Manufacturing Company
Harrison, New Jersey
Los Angeles, 487 Chamber of Commerce Building



New Kersten Horn No. 301 which may be attached to dynamic speakers and installed in cabinets. This horn gives three times the tone quality secured when dynamic speaker is used alone or with baffle board.

Watch KERSTEN

in 1929

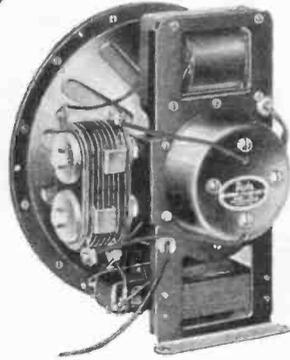
The new KERSTEN line of loud speakers will be announced within a few weeks—an announcement of vital interest to every distributor and retailer in the industry.

The new KERSTEN line will include every approved type of loud speakers, dynamic, magnetic and air column styles; also horns for Theatrical and Public Address systems, which will bring more business, satisfied customers and greater profits.

Watch for the opening announcement in this publication and take advantage of the opportunities and profits offered by KERSTEN in 1929 for aggressive dealers and distributors who are seeking a line of products that will sell and stay sold.

Kersten Radio Equipment
INCORPORATED
1415 Fulford Street
KALAMAZOO, MICHIGAN

ROLA



▲ ▲ This new Rola Electro-dynamic Unit is now used as standard equipment in many makes of radio sets, electric phonographs, sound film installations and public address systems. The model illustrated is J-110, equipped for light socket operation. Other models are wound for D.C. operation at from 6 to 220 volts. An inquiry will bring complete information and description of each model.

NOV

IN LOUDSPEAKERS... ...AND RADIO SETS

An increasing number of receiving sets are now Rola-equipped. There is a reason: In the past few months the new Rola Electro-dynamic speakers have created a tremendous sensation among users for their startling life-like realism. Rola has proven "A Winner at Every Demonstration". These new 1929 loudspeakers reproduce with amazing accuracy from the deepest bass to the highest treble . . . every sound frequency that can be broadcast.

RADIO USERS ARE DEMANDING THIS VOICE OF LIFE-LIKE REALISM

RADIO manufacturers have been quick to answer the preference of users. They are now using Rola speakers as standard equipment in their sets. Regardless of how good a set may be, *the speaker tells the story*. As a dealer will you be equally prepared to answer the demands of users in 1929? Two sources of sales await you: Sell new radio sets *Rola equipped*. Sell Rola separate speakers for use with table model sets. *For further information on Rola-equipped receiving sets or upon the complete Rola line of Electro-dynamic and Magnetic speakers write*

▲ the
ROLA COMPANY
CLEVELAND, OHIO
2570 East Superior Avenue
OAKLAND, CALIFORNIA
Forty-fifth and Hollis Streets

LARGE HOTELS required TO HOUSE the 3rd annual RADIO

The Annual R.M.A. Trade Show has become such an important factor in the radio industry that this year it will require three large Chicago hotels to exhibit and demonstrate the new lines of all the manufacturers.

*There Will Be General Exhibits
At the Following Hotels*

- BLACKSTONE - - Ballroom**
- CONGRESS - - - Gold Room**
- and the
- STEVENS - - Exhibition Hall**

In addition to these general exhibitions, the exhibiting manufacturers will also have their demonstration quarters in the above hotels.

The Stevens, Blackstone and Congress hotels are all in a row within four blocks on Michigan Boulevard, making it convenient for you to visit all of them. Each section of the Trade Show is equally important to dealers and jobbers, so in order to see it all and get the most out of your visit, it will be necessary for you to visit the exhibitions and demonstrations in each of the official hotels.

The number, variety, and size of this year's exhibits will make it the biggest and most important Trade Show ever held. You should therefore make your plans now to visit the Third Annual R. M. A. Trade Show in Chicago, June 3rd to 7th inclusive.

Invitations—

To the trade will be issued about May 1st.

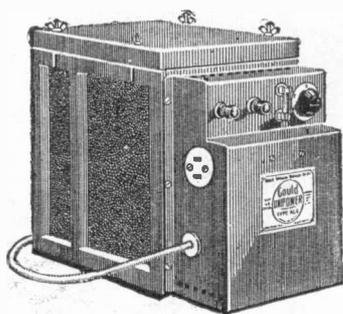
MANUFACTURERS' ASSOCIATION TRADE SHOW CHICAGO JUNE

3rd to 7th Inclusive in CONJUNCTION WITH THE 5th Annual R.M.A. CONVENTION



Radio Manufacturers' Association Trade Show, Room 1800 Times Bldg., New York
Under Direction of U. J. Herrmann and G. Clayton Irwin, Jr.

Seldom, if ever, do you run value radio products



The New Gould Kathanode
Unipower
GOULD PRODUCT
(With Built-In Relay)
Automatic Radio "A" Power
From Light Socket

Model A.C. 6K (6-volt) Kathanode Unipower is the highest quality "A" Power Unit built. Furnishes rich, smooth, unflinching "A" current, without any trace of hum, which is automatically replenished from the light socket. Installed in less than three minutes, makes any set as simple and convenient to operate as an expensive A.C. outfit at only a fraction of the cost. No rewiring necessary in your set.

The Kathanode construction uses the glass mat retainer, which insures extra long life of the battery elements and when sold it will require no servicing. It is very economical and will outlast several storage batteries. This exclusive patented feature (Kathanode) is used and approved by the United States Government for its submarine batteries, which are furnished by Gould.

Equipped with a new noiseless Balkite Charging Unit which has four graduated charging rates, and in addition one booster rate (1½ amperes) for an emergency charge, which enables it to properly take care of all sizes of sets and conditions of operation. Operates on 110-120 V., 50-60 cycle A.C. current. Complete with extra fuse.

List Price \$39.50 Ea.

Special \$9.75 Ea.
Lots of three, \$8.50 "
Lots of six, \$7.50 "

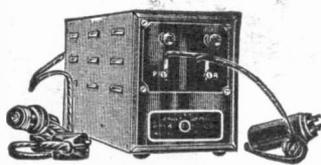
NOTE

All units offered in this advertisement are BRAND NEW, packed in original factory sealed carton and fully guaranteed!

TERMS:—20% cash with order, balance C.O.D. f.o.b., New York. (2% Discount for Full Remittance with Order.)

Low price probably "sells" more products than any one other feature. And when "low price" is coupled with "established value" you have a combination hard to equal.

These few items shown here are offered for your immediate acceptance. Your better business judgment teaches you that prompt action is necessary.



Timmons 210 Power Amplifier



Excellent for use with Dynamic Speakers

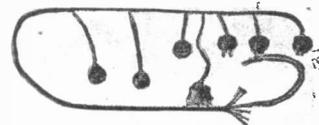
An absolute necessity with any radio set for getting full tone quality from Dynamic Speakers, which only can be done with a Power Amplifier. The Adapter Plug is inserted into the last audio socket of any type of Battery or Electric radio set, thus supplying a stage of amplification employing the super power tube. No rewiring necessary in the set and no additional parts are needed.

This high quality 210 Power Amplifier can also be used with any Cone Speaker, for distortionless and true natural reproduction, and will modernize any radio set.

Uses the UX-216B or 281 rectifying tube and the UX-210 super power audio tube. Operates from 110 to 120 volt, 50 to 60 cycle A.C. current.

These units have been approved by Popular Radio and Popular Science Laboratories.

List Price \$45.00 Ea.
(without tubes)
Special \$8.75



EBY PATENTED
A. C. Adapter Harness
with Volume Control

All Adapters have Mid-Tap resistances and can be used with A.C. Filament Transformers which are and are not center tapped.

The EBY A.C. Harness when used with any standard filament transformer will convert any D.C. set to A.C. operation. Designed for use with UX-226, UY-227 and UX-171, or 112A, power tube.

The best Nationally Advertised Harness sold. Recommended by the following Transformer Manufacturers: Scanlan, Karas, Acme, Jefferson, Silver-Marshall, and many others.

Very simple to connect. No rewiring necessary on sets. Installation can be made in 10 minutes.

Complete simple instructions packed with each Harness.

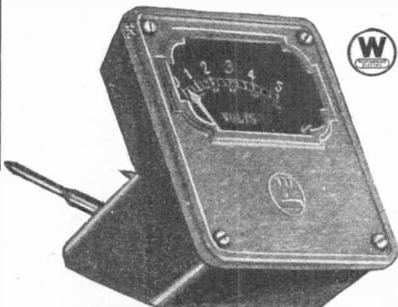
Two Universal Models

For 5 tube set—List Price \$9.00

Special \$1.65

For 6 tube set—List Price \$10.00

Special \$1.85



Westinghouse Portable Voltmeter
(Double Range—0-5 and 0-150 V.)

This high grade pin Jack Double Reading Voltmeter is especially suited for sets equipped with pin jacks as the Radiola 20, 25, and 28, Victor and Brunswick Radiola Combinations. Also can be used to measure voltages on any set. This Meter has two ranges and will measure "A" and "B" voltages and can be used as a portable or pocket Voltmeter. Genuine Bakelite case with beautiful bronze finished brass faceplate and gilt dial and pointer to harmonize with panel fittings of any set.

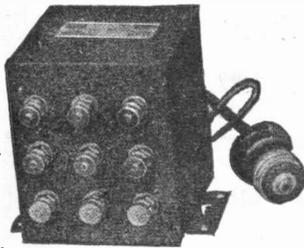
List Price \$6.50 Ea. **Special \$1.25**

AMERICAN SALES COMPANY

across such offerings of priced so attractively!

We trust that the special prices of each item shown here will not cause you to question your urge to place an order today.

We also believe that former purchasers who bought at higher prices will fully appreciate our policy of "value plus low price."



SCANLAN

A. C. Filament Transformer
(Model 413)

Supplies up to—six 226 tubes, one 227 tube, two 171-A tubes

This Scanlan A.C. Filament Transformer fills a very definite existing need for an accurate and reliable Transformer. Will not overload or heat up. Used in conjunction with an A.C. Cable Harness such as the Eby, Carter, Naald, Enterprise, Sterling, etc., which makes an ideal combination for converting battery sets to A.C. operation. No rewiring necessary. For 110-120 volts, 50-60 cycles A.C. current.

Green crackle finish case. Size overall 3 1/4 x 4 1/4.

Look at These Features!

1. Absolutely correct voltage.
2. All voltages center tapped.
3. "B" Eliminator Plug-in.
4. Sturdy and Compact.
5. Wire to panel switch.

List Price \$9.00 Ea.

Special \$2.00



The New

Algonquin

Cone Speaker

Will stand powerful or weak volume equally well and reproduce with wonderful tone quality and volume.

Has a full-floating large 18-inch Cone, brought to the highest point of perfection. Made of a special impregnated fabric (not paper) which is absolutely unaffected by moisture or atmospheric conditions.

Equipped with an extremely sensitive electro-magnetic Cone unit with direct drive to Cone and is exact to highest degree.

A beautifully designed Speaker with art metal scroll. Ship model. Finished in polychrome gold stipple.

List Price \$30.00 Ea.

Reduced to \$15.00

Special \$3.95



POWERIZER

PXY-1 Model R-20.
Complete "A, B & C"
Eliminator and 210 Power
Amplifier

This is the new, improved Powerizer, exceptionally fine for use in conjunction with Dynamic Speakers, which require the use of a 210 power tube to bring out their best tone quality. Also can be used with any Cone Speaker.

It is a "B & C" Eliminator furnishing "B & C" current to the entire Radio Set, also a Super Power Amplifier furnishing "A, B & C" current to the 210 power amplifying tube. Simple to connect, no rewiring necessary in the set. Comes equipped with an adapter plug which is inserted in the last audio tube socket. Has filament windings which will also supply A.C. current for the A.C. tubes, if desired. Uses the UX-210 super power and the UX-280 full wave rectifying tubes.

Using this Powerizer with any Battery or Electric Set will bring out the finest tone reproduction and volume, comparable with the results obtained from any of the best modern receivers.

Operated direct from light socket; 110-120 V., 50-60 cycle, A. C. current.

List Price \$59.00 Ea.

Special \$16.50

(Complete with Harness)

Manufacturers
and Jobbers

We are prepared to offer cash for surplus stocks of Radio Merchandise. This means of course stock in first class condition and in such volume that insures a good value to our many established buyers. Send details of your offerings for quick action.

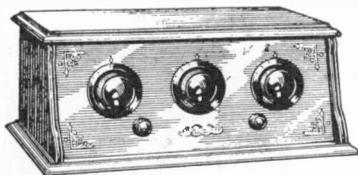
—LAST MINUTE SPECIALS—

DeForest Output Transformers, 1-1 ratio.....	List \$7.50	Our Price \$1.25 each
E-210 Bradleystats, fine for A.C. line voltage control	" 4.00	" " .85 "
R.C.A. Power Rheostats, PR-535 (heavy duty) ..	" 2.75	" " .25 "
Reliable Automatic Relays. Automatic Power Control Switch for use with trickle charger and "B" eliminator	" 2.00	" " .35 "
Scranton Storage Battery Cap Testers, sets of three; descriptive booklet on request.....	" 2.00	" " .37 per set
Standard makes of Filter Condensers and Resistors at special bargain prices. Send for complete list.		

19-21 Warren St., New York, N. Y.

If you want to get more for your radio dollar don't pass up these bargains!

SIX TUBE BATTERY SET



A Sensational Offer!

Genuine Freed-Eisemann Receiver

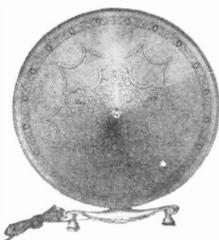
The set needs no introduction. It employs the popular tuned R. F. Hook-up and is wired for power tube.

Completely shielded, 3 stages, T. R. F. 1 Detector and 2 Audios—six tubes. Stippled panel, genuine Mahogany Cabinet.

List Price, \$80

Our Price, \$11.50

FREED-EISEMANN CONE SPEAKER



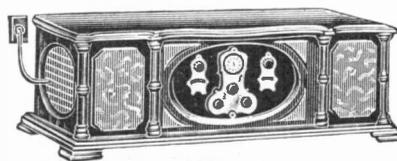
Model 330

List Price
\$35.00

**Our Price
\$7.50**

The New Freed-Eisemann Cone Speaker is 26 in. in diameter, making it one of the largest on the market today. It is built on new principles and is especially designed for reproduction of low frequencies. It has a 20-foot cord, allowing removal from set to adjoining room.

Faithful reproduction of all notes from the lowest to the highest.

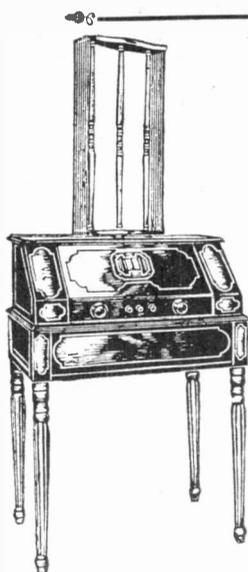


The Famous Argus Electric Set

The Argus Electric is a real power receiver . . . The cabinet is an exquisite example of workmanship, finished in burlled walnut. Uses standard tubes and a 210 tube in the last audio stage. Two illuminated dials. Voltmeter on panel. Tip-jacks for phonograph pick-up.

List Price, \$195.00

Our Price, \$37.50



RCA RCA Radiola—28

RADIOLA 28 is an eight-tube Super-Heterodyne, the receiving circuit of which is acknowledged to be superior to all others for four fundamental reasons:— First, because the RCA eight-tube Super-Heterodyne is the most sensitive of all radio sets, and, therefore, requires no outside antenna or ground wire. Second, because this same circuit is known to be supreme in selectivity, an important factor in large cities served by numerous broadcast stations. Third, because Radiola 28 is designed acoustically to give a pure and undistorted reproduction of the original broadcasting. Fourth, because Radiola 28 is so easily controlled that the owner need think only of the entertainment at his finger tips.

Radiola 28, complete with Radiotrons

List Price, \$260.00

Our Price, \$60.00



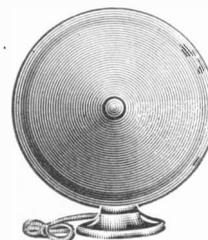
King Electric Sets (7 Tube)

A real 1929 electric set, built in one cabinet—(no additional power packs, no water or solution). Set uses four 226, one 212, one 199 and one 281 tube. The best value you will ever be able to buy — a sample will convince you! King is an R.C.A. license.

List Price \$225.00

Our Price, \$37.50

PACENT CONE SPEAKER



New and improved oversize unit. Flawless reproduction. Takes the tremendous power of a power amplifier or power tubes without rattle or blasting. Has extreme sensitivity reproducing the highest violin notes down to the zooming of the bass viol without distortion. Greater rigidity and ruggedness in construction. Dia. 17-in. List Price \$22.50

**Our Price
\$6.75**

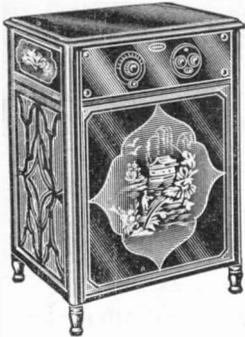
20% with order.
Balance C. O. D.
All Merchandise
Brand New.

THE RADIO SET HOUSE OF BROOKLYN
BROOKLYN RADIO
Service Corp.

AS YOUR business life is gauged by the purchasing power of each dollar spent by the radio public it is essential that you get the most for your money in order to offer more.

Due to the low prices shown here, you can run a clearance sale that will far outclass any radio offering ever put in your vicinity. Sweeten your stock by making your selections from these choice items.

Atwater Kent (Pooley) Armchair Consolelette
(Without Set)



A Genuine Pooley Cabinet—that's enough. Made for the Atwater Kent battery sets. Built-in speaker. Suitable for A. K. Model—20 and 30. Two-toned mahogany Console.
(Illustration shows the cabinet in Japanese finish but those we are offering are finished in two-tone mahogany.)
List Price \$75.00

Our Price, \$9.75

Crosley Musicone Tip-Table Model
Mahogany Base



The secret of this instrument's faithful reproduction of all tones lies in its reproducing unit. This patented actuating unit is exclusively Crosley and is found in only the genuine Crosley Musicone. Every note is received with perfect clearness, there being no metallic sounds or distortion to mar the otherwise perfect radio reception.

List Price, \$27.50

Our Price \$3.75

RCA "B" Eliminator

The New R.C.A. "B" Eliminator is a decided improvement over all previous types. It is sturdy, compact and reliable. The cost of operation is unusually low and it will last indefinitely in service. The power output is ample for sets having up to eight tubes with a power tube in the last stage.

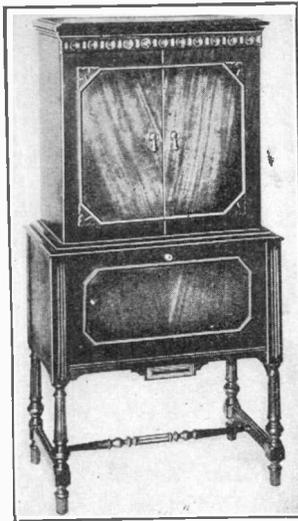


Our Price \$17.50

A junction type of Rectifier is used, requiring no attention or replacements during its exceptionally long life.
List Price \$48.00

Freshman Console

The console is 53 inches high, 27 inches wide and 16 inches deep. The panels are cut out 8 x 10 in. now but can be re-cut to accommodate any set with panel up to 10 1/2 in. x 22 in. and 15 in deep.



Beautifully matched mahogany veneers throughout, hardwood legs and crossbar for strength and delicately decorated with overlays.

The Speaker compartment is exceptionally roomy and will accommodate any type dynamic, magnetic or air column speaker.

Our Price \$22.50



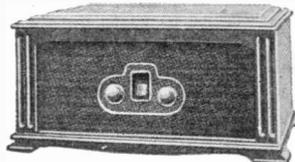
Freshman A. C. Electric in Genuine Freshman Console

An artistic Freshman A.C. 7-tube electric radio panelled in Genuine mahogany of striking lines with fine proportions. The built-in cone speaker has been placed in the correct position. For A.C. current, 110 Volt, 60 Cycle.

One dial illuminated, completely enclosed chassis and Power Supply. Nothing else to buy but tubes. List Price, \$225.00

Our Price \$57.50

A-C Dayton All Electric Receivers (Table Model)



List Price, \$175.00.

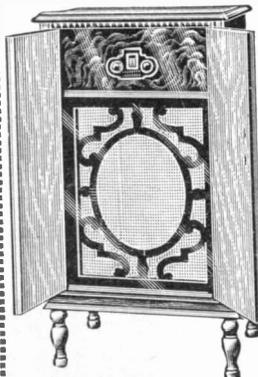
This six-tube electric receiver has three stages of radio frequency, one untuned and two tuned, one tuned detector stage and two stages of audio frequency amplification. We mention this as this circuit is particularly adapted to the neat, compact, and efficiency construction of the XL-50. The tone quality of this set will satisfy the most musically trained and critical ear.

The cabinet and wooden panel are of beautifully grained walnut, and all controls are grouped on a beautifully embossed instrument plate. Dimensions are 22-in. long, 9-in. high and 9-in. deep.

For 110-120 Volt, 50-60 Cycles A.C. Current.

Our Price, \$35.00

CONSOLE GRAND



Our Price, \$43.00

The XL 50 A.C. Dayton receiver installed in this beautiful console. Large orthophonic speaker gives the low, full tones.

Console built of the finest grained and matched walnut veneers.

The XL-50 six tube AC Dayton receiver installed in the famous Duophonic Console Grand. Has two separate reproducing chambers and especially designed units.



Our Price, \$49.00

This combination make possible the true reproduction over the entire scale.

Dimensions 43-in. wide x 41 1/2-in. high x 20-in. deep.

THE RADIO SET HOUSE OF BROOKLYN
BROOKLYN RADIO
Service Corp.

20% with order.
Balance C. O. D.
All Merchandise
Brand New.

SEARCHLIGHT SECTION

Radio Retailing,
February, 1929

RADIO BARGAINS

"A" Eliminators Sentinel

Bone Dry, using Elkon Rectifier and Elkon Condensers; regular \$39.00. Our price \$11.75.

"B" Eliminators Genuine Thomas-Andrews

Using B-H Raytheon. Price with tube, \$9.50. Built by Thomas-Andrews Corp. of Waukegan, Ill.

Valley "B" Eliminators

135 to 180 Volts. Has "C" Battery Taps of 9 Volts for 112-A power tube and 40 Volt Tap for 171-A power tube. Price, with B-H Raytheon tube, \$12.50; regular \$35; latest model.



BORKMAN

Argus Electric Sets

Model 125. List \$125. Chassis only \$23.50. Takes 6 tubes and rectifier tube.

Borkman Air Column Speakers— Cone Shape

With \$7.00 Borkman unit, \$3.50; without unit, \$2.25. Very fine tone. Will take power tube volume.

All goods in original factory cartons.
TERMS: 20% with order, balance C. O. D.

SMERAGE MUSIC CORP.

53 W. Jackson Blvd., Chicago, Ill.

FOR SALE RADIO JOBBING BUSINESS

Owing to the death of one of its officers, a well established jobbing firm is discontinuing its radio department. This company is the only jobber in the immediate territory and a good trade has been built up. For further particulars in regard to this decidedly attractive proposition, address BO-87, Radio Retailing Tenth Ave. at 36th St., New York City

Tested Sales Representation Offered Manufacturers of Low Priced Dynamic Speakers and Radio Cabinets

Established Sales Organization can give manufacturers of articles mentioned and other radio products high quality representation in Eastern and Southern Territory—profitably. Inquiries solicited.

RA-85, Radio Retailing
Tenth Ave. at 36th St., New York City

SALESMEN WANTED

Salesmen

Side line for salesmen calling on dealers— a speaker filter to retail at around 65c— write now for details, also low priced solid-molded resistors. Craftsman Radio Products, 351 Halsey St., Newark, N. J.

REPRESENTATIVES AVAILABLE

Manufacturers Sales Representatives

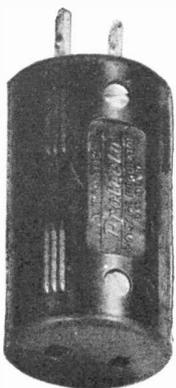
Calling on radio and electrical jobbers and large retail outlets in Philadelphia, Baltimore, Washington territory are open for few additional substantial lines with volume possibilities. Best references. RA-84, Radio Retailing, Tenth Ave. at 36th Street, New York.

Radio Lines Wanted

The radio factory representative of 155 1/2 Lafayette Street, Schenectady, N. Y. is looking for radio lines for New York State, New England and a part of Canada. Main office located at 155 1/2 Lafayette Street, Schenectady and branch offices in Springfield and Buffalo.

Solve Your Service Problems! Sell a PROTECTO PLUG with each Electric Set

Automatic Voltage Regulator



Protecto No. 1 List \$1.50
Net 75c. ea.

This "Protecto" Voltage Regulator checks all house current voltage in excess of 110 volts, a protection against overloading current and line surges (a daily occurrence everywhere). It also holds back line noises such as are caused when any electric switch in the house is turned on or off to operate electric lights and appliances. This has been a great source of annoyance to many electric set owners. —Also acts as lightning arrestor. —For any A.C. Tube or eliminator operated sets, A.C. or D.C. current.

Lamp Socket Antenna



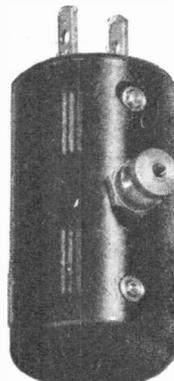
Protecto No. 2 List \$1.25
Net 65c. ea.

The light socket plug eliminates the use of an outside aerial. Will operate any electric or battery set.

Utilizes One Side of Electric Line for Antenna.

When this plug is inserted into the lamp socket it automatically connects one side of the line, which serves as an excellent aerial. An added feature to this Socket Antenna Plug is that it has a double convenient outlet tap, which makes it useful in connecting the eliminators, chargers or electric set.

Combination Voltage Regulator and Antenna



Protecto No. 3 List \$2.25
Net \$1.10

This "Protecto" plug has the combined features of the Voltage Control (No. 1) and the Lamp Socket Antenna (No. 2). You will find this to be an excellent seller.



Protecto Plugs

Are made of Brown Bakelite. Packed in Attractive Counter Display Carton. Ten to a Carton

Every dealer should have a carton of each. There is a ready sale and good profit in it for you.

Federated Purchaser

206B BROADWAY, NEW YORK, N. Y.

20% with Order. Balance C. O. D.

Big Savings on Carton Lots

No. 1—Carton of 10—\$6.50

No. 2—Carton of 10— 5.50

No. 3—Carton of 10— 9.00

\$20.00 for a
carton
of each

Over 200 Radio Specials

in the **Federated Purchaser** Catalog to boost your sales

New Edition now going to Press

The items listed on this page are only a few of the many fine sales boosters shown in our catalog—Every edition adds a lot of new ones that you won't want to miss. Make sure of getting this New Edition and future ones—as they come off the press—by sending in the coupon below.

OUR TERMS

are 20% cash with order and balance C.O.D.

Buy Thru the **Federated Purchaser** and Meet All Competition

SETS ERLA (PEARSON) CONSOLE SET 5 tube, 2 dial, selective and sensitive. In handsome American walnut Console, with built in modern air column speaker and genuine Erla unit. Each console set is packed in original factory crates. At this figure you should order for your trade while the limited quantity lasts. List price \$135.00. Our price.....\$27.50

FREED-EISEMANN 5 tube set, Model 10. The supply of this popular model Freed Eisemann receiver is almost exhausted. We have the remainder of what is still available and we advise our dealers to purchase while they can. In original factory cartons. List price \$60.00. While they last, \$11.50. MELORAD five tube set using genuine Splitdorf parts from cabinet to subpanel. Factory built set. Special price, ea., \$9.50

Buy Thru the **Federated Purchaser** and Meet All Competition

SPEAKERS, UNITS and METERS

Sonora cabinet clock model, mahogany speaker, with new magnetic unit that will take 600 volts without vibration. In original factory cartons. List \$35. To dealers...\$8.50

Grebe 20-in. cone speaker, list \$35.00; to dealers \$7.95

Pacent 18-in. cone speaker. List \$35.00. To dealers...\$7.50



Bosch Cone Speakers, List \$25.00. To dealers, \$6.75

Amplion Cone Speakers AC-21, List \$25.00. To dealers \$7.50. Nationally known Baldwin Type C. Bakelite Casing. To dealers \$1.65. Baldwin Type H. Aluminum Casing. To dealers...\$1.50

Buy Thru the **Federated Purchaser** and Meet All Competition

ELIMINATORS, POWER AMPLIFIERS and CHARGERS

ATWATER KENT "B" ELIMINATOR: This wonderful "B" Power Unit comes with special built-in relay. It will automatically operate trickle chargers. Packed and sealed at factory. Regular list price \$50.00. Our special dealer's price.....\$13.50

Raytheon BH tube for same 2.25

Or Sonatron SH Rectifier 2.00

A. B & C ELIMINATOR: Receptrad Powerizer: The only A, B & C unit accepted by the R. C. A. to be used in electrifying their Radiola battery sets. List \$50.00. Dealer price.....\$16.50

Empire dynamic A.C. chassis, List, \$30.00. Dealer's price\$17.50

In beautiful grained cabinet. Dealer Price \$22.50

CHARGERS

Silver Beauty Storage Charger. List \$18.50\$4.05

GOULD, 25 cycle, uses Raytheon type, List \$35.00 Net \$12.50

"B" BLOCKS

Splitdorf, 4 Gang, .00035\$2.50

Freshman 2 Gang, made by Scoville, .00035\$.85

"B" BLOCKS

Faradon 14 mf B block, 450 Working Voltage. List \$12.00 Net \$2.85

Splitdorf 14 mf B. Block, 600 Working Voltage. List \$10.00. Net \$2.50

Splitdorf 25 mf B. Block, 800 Working Voltage. List \$15.00. Net \$3.50

Dubilier Majestic replacement B Block. List \$9.50. Net...\$4.80

King Cardwell Condenser, .00035 MFD.\$.85c.

Splitdorf 2 Gang .00035\$1.25

Buy Thru the **Federated Purchaser** and Meet All Competition

TUBES, TRANSFORMERS and CONDENSERS

Complete line of Sonatron Tubes write for dealer discount.

Raytheon Rectifier Tubes\$2.20

Western Electric V. T. 150

1/2 Amp. Rectifier Charger Bulb 1.90

2 Amp. Rectifier Charger Bulb 2.25

5 and 6 Amp. Rectifier Charger Bulb 3.15



These transformers have been selected as best fitted for replacements in most standard sets:

Genuine Freed-Eisemann, List \$5.00, Net \$1.49. Thordarson, List \$4.50, Net \$1.39. Acme Audio, List \$5.00, Net \$1.65

All-American Type List, \$5.00. Net \$1.65

List, \$3.00. Net \$.75

Kenyon Push Pull Transformers, List \$9.00. Net \$3.00 per pair.

DUBILIER CONDENSERS

No. 908 By-Pass, will carry 400 working volts, latest model, from .1 to 1.0 mfd.

No. 901 Filter Condenser. All new in original boxes. Write for Prices.

Federated Purchaser

Serving Over Ten Thousand Retail Merchants

Vol. II No. 10

September, 1928

Presenting—America's Greatest Radio Value!
Wonderful Tone



8 Tube
ELECTRIC
Radio

Marvelous Selectivity
Phonograph Pick-Up

1 Dial — 4 Condensers — All Shielded

The Philharmonic is the greatest all-electric set ever designed in its class. Uses five 226-AC tubes; one 227-AC detector; one 171 power tube and one 250 rectifier—8 tubes in all. The Philharmonic has a built-in phonograph pickup. Works with any speaker, dynamic or magnetic. One dial, beautifully illuminated. Four condensers—a new sign of fine selectivity. Marvelous tone quality! Heavy audio transformers specially designed for this radio receiver in its class with any instrument. The power pack contains condensers with a capacity and voltage far beyond the safety factor.

THIS RADIO SET IS WARRANTED ELECTRICALLY AND MECHANICALLY

\$75.00 LIST PRICE
DEALERS PRICE \$38.25 Net

MAIL THIS COUPON TODAY!

Federated Purchaser, 206-B Broadway, New York, N. Y.

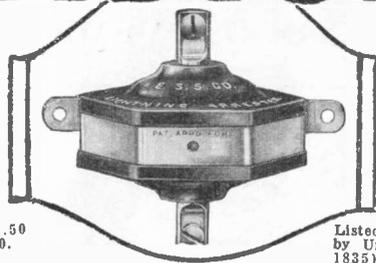
Gentlemen: Please put us on your mailing list to receive the Federated Purchaser Catalog as issued. Also any other notices of special radio bargains.

Name
Address
Quote us on:

Federated Purchaser

206-B Broadway, New York, N. Y.

KEYSTONE



Retail price \$1.50
in Canada \$2.00.

Listed as Standard
by Underwriters (E-
1835).

Sell one with every set!

Every time you sell a radio set or some antenna material, you can easily sell the purchaser a Keystone Radio Lightning Arrester.

This proven protective device is made of genuine Bakelite and heavy brass and provides maximum protection always. It is reliable, safe and stays sold.

Manufactured by a company having more than thirty years' experience in design and manufacture of lightning arresters.

Jobbers and retailers—send for complete details of our attractive proposition.

ELECTRIC SERVICE SUPPLIES CO.

Home office and plant at 17th & Cambria Sts., PHILADELPHIA; District Offices at 111 N. Canal St., CHICAGO; 50 Church St., NEW YORK; Bessemer Bldg., Pittsburgh; 88 Broad St., Boston; General Motors Bldg., Detroit; 316 N. Washington Ave., Scranton.

RADIO LIGHTNING ARRESTERS

ASTON Phono-Radio Cabinet

featuring
Ample space plus
well proportioned
design and
beauty



A COMBINATION radio-phonograph cabinet, with ample space for record albums, ease of phonograph or radio operation, and yet giving a pleasing well-proportioned appearance is offered in the ASTON model shown. Electrical phonograph equipment, 110 A. C. 60 cycle motor, 12 in. turntable, electric pick up, needle cups, etc., are optional.

Our catalog describes this and other ASTON designs fully. Write for a copy.

ASTON CABINET MANUFACTURERS

*Distinctive Originality in design of
High Grade Radio Cabinet*

1223-1229 W. Lake St., CHICAGO, ILL.

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EVERYTHING POINTS TO GOLD SEAL RADIO TUBES



THE way they're made; the way they sell; the way they make golden tones of radio broadcasting; these all point to the profits on Gold Seal—for the dealers who handle 'em.

If you want this golden profit-finger to point your way, find out about this outstandingly successful tube. Dealers all over making money—why shouldn't you? Write 250 Park Avenue, New York.

Gold Seal Electrical Co., Inc.
NEW YORK AND CHICAGO
Also Manufacturers of Gold Seal Electrical Appliances



Gold Seal

RADIO TUBES

**A Radiotron
for every purpose**

- RADIOTRON UX-201-A**
Detector Amplifier
- RADIOTRON UV-199**
Detector Amplifier
- RADIOTRON UX-199**
Detector Amplifier
- RADIOTRON WD-11**
Detector Amplifier
- RADIOTRON WX-12**
Detector Amplifier
- RADIOTRON UX-200-A**
Detector Only
- RADIOTRON UX-120**
*Power Amplifier Last
Audio Stage Only*
- RADIOTRON UX-222**
*Screen Grid Radio
Frequency Amplifier*
- RADIOTRON UX-112-A**
Power Amplifier
- RADIOTRON UX-171-A**
*Power Amplifier Last
Audio Stage Only*
- RADIOTRON UX-210**
Power Amplifier Oscillator
- RADIOTRON UX-240**
*Detector Amplifier for
Resistance-coupled
Amplification*
- RADIOTRON UX-250**
Power Amplifier
- RADIOTRON UX-226**
A.C. Filament
- RADIOTRON UY-227**
A.C. Heater
- RADIOTRON UX-280**
Full-Wave Rectifier
- RADIOTRON UX-281**
Half-Wave Rectifier
- RADIOTRON UX-874**
Voltage Regulator Tube
- RADIOTRON UV-876**
Ballast Tube
- RADIOTRON UV-886**
Ballast Tube

The standard by
which other vacuum
tubes are rated



Look for this mark
on every Radiotron



POWEL CROSLY, Jr.
President, THE CROSLY RADIO CORPORATION, Inc.

"Exhaustive tests have demonstrated that RCA Radiotrons materially improve the reception of Crosley Radio sets. We consider them the highest attainment of vacuum tube efficiency."

Powel Crosley, Jr.

RCA Radiotrons are used exclusively in the laboratory tests of manufacturers of quality receiving sets. The leading radio engineers recommend them for initial equipment and for replacement. When one or more vacuum tubes are worn, better results will be obtained if you get new tubes in every socket. Once a year at least it is wise to replace all of your tubes with RCA Radiotrons.

RCA RADIOTRON
RADIO CORPORATION OF AMERICA - New York - Chicago - Atlanta - Dallas - San Francisco

This is the second of
the 1929 series of
Radiotron advertise-
ments, each of which
will be signed by a
leading manufacturer
of radio sets.

Your tube customers hold you responsible as their purchasing agent. Make 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.

Manufacturers of quality receiving sets specify RCA Radiotrons for testing, for initial equipment and for replacement.



RADIO CORPORATION OF AMERICA - New York - Chicago - Atlanta - Dallas - San Francisco

RCA RADIOTRON

MADE BY THE MAKERS OF THE RADIOLA