

Radio Retailing

The Business Magazine of the Radio Industry

A McGraw-Hill Publication

AUGUST, 1928

80% OF 6,637,500 is the MARKET



Operates on 105-120 volts A.C. 50 to 60 cycles. Complete with "B" Eliminator receptacle and pendant switch.

The simple method of making one model answer two purposes. Nothing complicated, no rheostats.

**One Model —
One Stock
for either 4 or 6 volts**

The Knapp "A" Power supplies filament voltage of either 4 or 6 volts. You need stock but one item.

The Knapp "A" Power will supply rippleless Direct Current up to

2½ amperes at 6 volts. Ideal "A" Power for Super-Hetrodynes and short wave sets. On the 4 volt tap, it will operate any set using 4 volt tubes including the Radiola 28 with a power tube.

..... that's the market for you radio dealers to shoot at with "A" Eliminators. Last year only 10% of the new sets sold went to people who already owned radios. This year the set manufacturers have set 20% of the set owners as their goal. That leaves 80% of 6,637,500 as prospects for "A" Eliminators. The Knapp "A" is the one for you to sell to this tremendous market because:

It is absolutely dry. The famous ELKON rectifier and three dry ELKON Condensers are used. Even with headphones across the output you cannot detect the slightest hum.

Deliveries now—territories now being assigned. An unusual newspaper campaign in your city—plus dealer helps—write for details today.

KNAPP ELECTRIC, INC., Port Chester, N. Y.
Division of P. R. Mallory & Co., Inc.

Knapp "A" POWER

IT is easy to reason why Farrand can give you more and charge you less. For every Farrand Speaker is ALL Farrand—built in its entirety in the vast Farrand plant, largest in the speaker industry. No “assembling”—to add to costs. No foreign-made parts—to lessen efficiency or uniformity.



At upper right—

Model 70—Farrand Gothic
DYNAMIC . . . \$50

Same cabinet—Model 60
—Balanced Armature type
\$35

At lower left—

Model 74—Farrand Tiffany
Table DYNAMIC . \$75

*Eight other models—
ranging from \$16.50 to \$110*



On this same basis it is easy to reason why Farrand outsells all other quality speakers — why the present Farrand line, more than ever excelling in performance and value — will again break all selling records. Get in touch with your nearest Farrand distributor at once—and place your order NOW!

Farrand

FARRAND MFG. CO., INC., LONG ISLAND CITY, NEW YORK

EARL WHITEHORNE,
Editorial Director
RAY V. SUTLIFFE,
Western Editor, Chicago
HENRY W. BAUKAT,
Technical Editor
S. J. RYAN,
Merchandising Counsellor

Radio Retailing

The Business Magazine of the Radio Industry

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Radio Retailing for AUGUST, 1928

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Listings Are Valuable— Do You Use Them?

SPECIFICATIONS of various types of radio products that appear in this publication regularly can be made of extreme value to the trade if kept and referred to as needed.

In this issue, for instance, a catalog and directory of the latest receivers, speakers and furniture is published beginning on page 73. It is as complete as is humanly possible and contains all the information concerning these three major products which the trade might want to know.

Kept as a handy reference guide, this catalog and directory will be found useful and valuable for many months to come.

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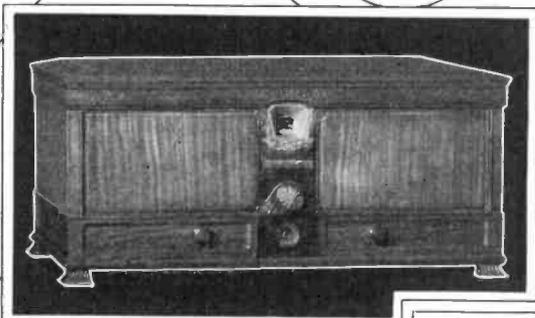
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LONDON, E. C. 8 Boulevard St.



THE NO. 635 STROMBERG-CARLSON TREASURE CHEST

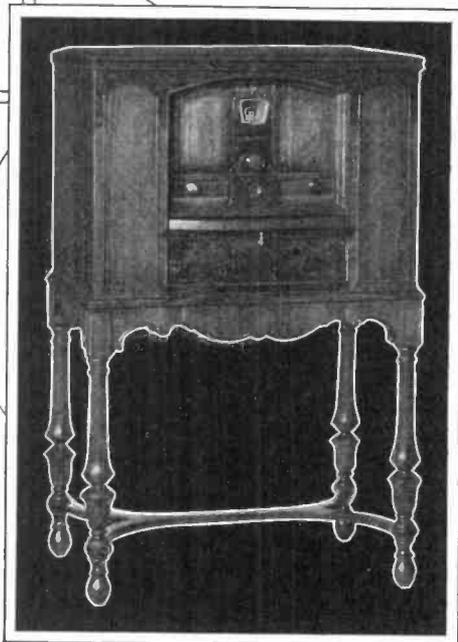
Uses 5 UY-227 A. C., one UX-171-A Output and one UX-280—a total of 7 R. C. A. Tubes. Price, less Tubes and Speaker, East of Rockies \$185.



NO. 10 CONE SPEAKER
A 22-inch Seamless Cone Speaker. Complete with long cord. Price, East of Rockies, \$40.

THE NO. 636 STROMBERG-CARLSON CONSOLE MODEL

Uses 5 UY-227 A. C., one UX 171-A Output and one UX-280—a total of 7 R. C. A. Tubes. Price, less Tubes and Speaker, East of Rockies \$245.



"Stromberg-Carlson Tone"

STROMBERG-CARLSON TONE is not merely a coined phrase—it is something very tangible, very definite in the minds of most radio dealers and innumerable users of radio—indicating a beauty and faithfulness of reproduction which has become the standard by which radio tone is judged.

There are many reasons for this superlative quality of tone. The experience of thirty years making telephones. The use of perfectly balanced circuits to avoid regeneration. Scientific total shielding. The two new Stromberg-Carlson Receivers shown above as well as the Strom-

berg-Carlson Cone Speakers are brilliant examples of Stromberg-Carlson Tone. The cabinetry of both Receivers is so rich and graceful as to set new standards. The prices of both are lower than Stromberg-Carlson quality has been obtainable at heretofore.

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

Other Models Range in Price to \$1205, East of Rockies

Hear the Stromberg-Carlson Sextette through the NBC and 22 Associated Stations

Stromberg-Carlson

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

Get it *Better* with a Grebe



Grebe
Consolette

There's *Prestige*
and *Profit*

in the sale
of the

GREBE
SYNCHROPHASE
TRADE MARK REG. U.S. PAT. OFF.
A-C Six
RADIO

Tone—clear, true, natural,
freedom from A-C hum.

Volume—without distortion.

Selectivity—without loss of
tonal fidelity.

Local-Distance Switch

Antenna Control

Illuminated Dial in kilo-
cycles.

Line Voltage Control

The Grebe Consolette
with its mahogany finish,
(which matches panel on
set) and self-contained loud
speaker is a masterpiece of
the cabinet making art.



THE dealer who shows this handsome cabinet model of the Grebe Synchronphase A-C Six gains prestige—there's profit not only in its ready sale but in the minimum of servicing required after it has been sold.

The Grebe Consolette is a timely offering to that rapidly growing army of radio enthusiasts who are demanding, in addition to superiority of tonal quality, range, selectivity and ease of operation established by the Grebe Synchronphase A-C Six, an article or furniture of which they can justly be proud.

Write for Booklet RR

A. H. Grebe & Co., Inc.

109 West 57th Street, New York City

Factory: Richmond Hill, N. Y.

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

Makers of quality radio since 1909

UTAH



Type X26 — \$26.00

The new Italian Renaissance mahogany carved wood cabinet speaker equipped with UTAH Power Motor.



Type X30 — \$30.00

Beautiful genuine brown mahogany cabinet speaker equipped with Utah power motor. One of Utah's leading new creations.



Utah Dynola Cabinet made of 5 ply walnut with genuine Burl walnut front finished in antique brown. This Cabinet is of nondirectional design having same grille and appearance both front and back. Dimensions: 12½" high, 15½" wide and 12½" deep. Packed one to a wood crate.

**Utah Dynola
Speaker**

equipped with "A 100"

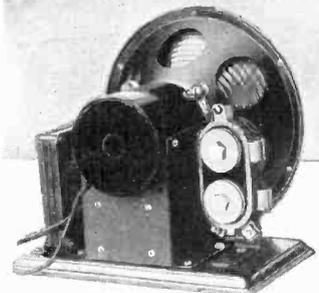
\$75.00

equipped with "R 300"

\$60.00

equipped with "D 200"

\$65.00



110 volt alternating current light socket supply for field excitation using Westinghouse dry rectifier. 9" high, 9½" wide and 7½" deep.

*...answering
present demand in
price and quality*

PRIDE of ownership has long been an established fact with Utah owners. Now, with a new and *complete* line of improved models, Utah Speakers will win even greater customer approval.

To specialize on the full Utah line is to insure for yourself lasting profits and customer satisfaction. Prepare today for the growing trade-tide that will pass your door—unless you are amply stocked with Utahs!

Full information to responsible dealers upon request

UTAH RADIO PRODUCTS COMPANY
1615 South Michigan Avenue
Chicago, Illinois

WE ARE MANUFACTURERS, NOT ASSEMBLERS



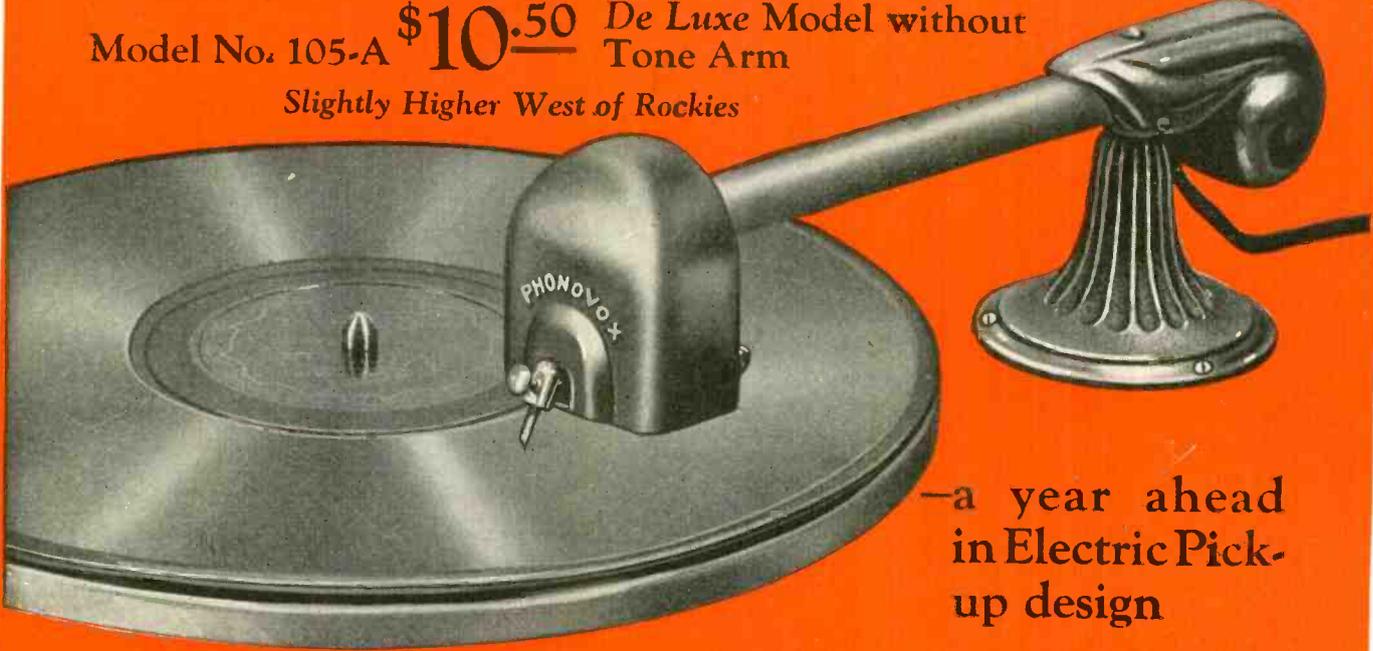
PERFORMANCE, GRACE *and* BEAUTY
have won for Utah leadership among radio speakers

Utah is licensed under Lektophone patents. . . . Utah Dynola Power Speakers licensed under Magnavox patents

Model No. 124 \$13.50 De Luxe Model complete with Counter-balanced Tone Arm

Model No. 105-A \$10.50 De Luxe Model without Tone Arm

Slightly Higher West of Rockies



—a year ahead in Electric Pick-up design

Never Before have dealers had such Outstanding Sales Features offered in an electric pick-up



Uses either a fibre or steel needle

NEVER BEFORE, in electric pick-up history, has the quality and brilliancy of reproduction been attained as that produced by the new De Luxe Model Pacent Phonovox. With Radio Sets coming completely equipped and fitted for attaching an electric pick-up, the Pacent De Luxe Phonovox offers sales potentialities second to none among radio and phonograph accessories.

No other electric pick-up offers the use of the fibre needle without loss of volume, the scientifically balanced tone arm and the ability to switch from phonograph to radio without removing the detector tube. These are but a few of the many talking points.

Be prepared for the big selling season. Order a stock from your jobber. If he cannot supply you, write us at once.

PACENT ELECTRIC CO., INC., 91 7th Avenue, N. Y.

*Manufacturing Licensee for Great Britain and Ireland:
Igranic Electric Co., Ltd., Bedford, England*

PACENT DE LUXE MODEL

PHONOVOX

THE Electric Pick-up



replace every 171 in your customers' AC sets with the **New Sonatron 171AC!**



now offered exclusively by

Offered only by Sonatron!

SONATRON gives the radio dealers of America a new opportunity to increase their tube sales—by offering the 171 AC to replace the 171 and 171-A. This tube, *exclusive with Sonatron*, has been especially designed by Sonatron engineers for the 171 sockets in AC circuits—and offers far longer life, greater volume and a newer and richer tone quality! Every owner of an AC set in your territory is a prospect for this tube—and you will soon find your new set buyers clamoring for it!

ALREADY!

A Sensational Success

Many thousands of these tubes, already in actual use, have amazed set owners—and the results have been shown in tremendous sales of this tube! Ask your jobber immediately to supply you, or write us for the Sonatron Proposition including details of our great national advertising campaign!



SONATRON TUBE COMPANY

16 Hudson St., New York, N. Y. 108 W. Lake St., Chicago, Ill.
88 Eighth Avenue, Newark, N. J.

SONATRON

THE WORLD'S LARGEST RADIO TUBE LINE



AMMUNITION! ↗ ↗ ↗

☞ Good men make a good army but victory comes only to the army with a full supply of ammunition! ☞ Like thousands of other dealers you may be all set in a good location with the right kind of a store, but have you got the right kind of ammunition? ☞ Every radio dealer must have the ammunition of victory. ☞ Not merely new merchandise of great distinction of design and



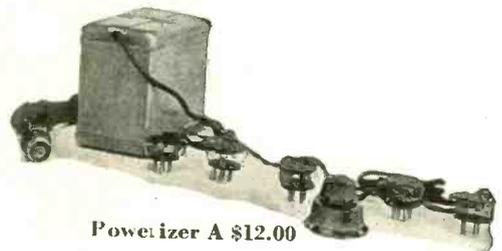
mechanical excellence but merchandise backed by a name which is on the tongue of the nation! ¶ Advertising by word of mouth, by magazines, newspapers and by radio has rolled up a great tide of fame and demand. ¶ This is the ammunition you can use and conquer with! *And Kolster has it!* ¶ Get the new Kolster Sets, display them, demonstrate them and do the business.

¶ Drop us a line today and we will send you pictures of the merchandise in a deluxe volume, together with full details of the Kolster selling and advertising plans.

**Your
dealer**
will make
your battery
set a Power
Amplified
A.C. ELECTRIC
from . . .

\$12 up

*This News
of Battery Set
Means Big*



Powerizer A \$12.00

POWERIZER
REG.

A —

converts a battery set into A. C. operation where "B" Eliminator is used. Supplies filament current and grid bias to from six to seven UX-226 Tubes, two UY-227 Tubes, and two 171 Tubes. Taps for the 226 and 227 and 271 Tubes, and also a "B" connection and "Hum control."

\$12.00

POWERIZER
REG.

JUNIOR —

converts a battery set into the usual electric employing the 171 Radiotron in the last stage, such as the Atwater Kent or Radiola 17 or 18. Supplies current for six or seven 226 Tubes, two to three 227s, and 171s, Hum control—external on-and-off-switch.

\$35.00

Dramatically Told to the Millions Owners Throughout the Country Profits for You!

With the beginning of Powerizer's national advertising campaign, people everywhere will be looking for the Powerizer Sales and Service Station "that makes every battery radio an A. C. Electric, for \$12.00 and up." Powerizer helps you get new set business—it solves the trade-in problem for you—it solves the problem for the fellow who paid \$350.00 for a battery radio—it solves the problem for the family that has an \$80.00 set with "B" Eliminator. The field of prospects is unlimited.

Wire now for complete details

RADIO RECEPTOR COMPANY

106 Seventh Avenue

New York City

Chicago Office:

307 N. Michigan Blvd.

Licensed by Radio Corporation of America & Associated Companies

POWERIZER REG.

DE LUXE

A Powerizer that gives power amplification—finest tone quality in radio. General model for all standard sets. With A, B and C Supply.

\$54.00

POWERIZER REG.

25-28 —

Special Powerizer and Power Pack designed for Radiolas 25 and 28.

\$84.00

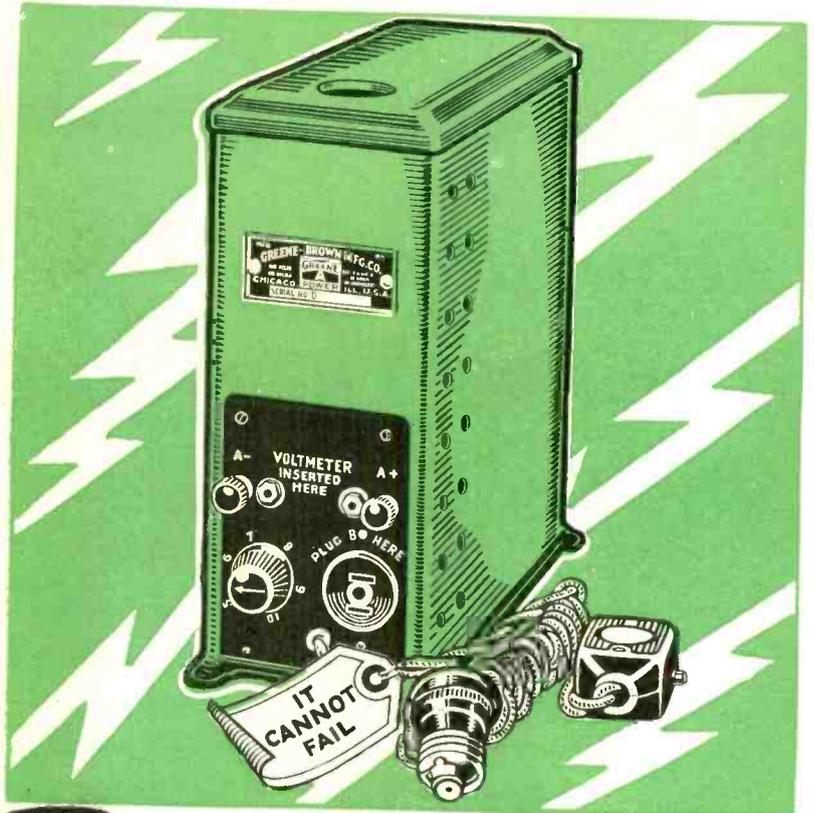
DRY and Batteryless
 "AC" Light-Socket POWER

The Great GREENE "A"
 DRY-Electric

Sensational! New and novel, adjustable design . . . vibrationless. AC-Humproof. Supplies unflinching "A" power from any 90-135 volt (50-60 cycle) AC light-socket. Permits conversion of any battery-operated set using up to 10 DC-tubes, without requiring change of tubes or wiring. Never needs water or recharging. No acid content . . . no replenishments needed. Nothing to weaken or run down. Maximum output 2½ amperes at 6-volts. Ample for power tube requirements. Excellent team-mate for any properly designed "B" Power Unit. Compact size, fits most set-cabinets. Handsomely enameled.

LIST PRICE
 East of Rockies **\$37.50**
 COMPLETE

Now . . . for the World's
 Lowest-Cost "AC" RADIO



Super AC Reception

The ULTIMATE in Radio Power



A GAIN, as in 1927—The Great Greene Line for 1929—anticipates this season's nation-wide demand for "all-electric" AC Radio, free of battery attention and replacements.

No longer is there need for the owner of a high grade battery-type receiver using DC tubes, to discard or trade it—at depreciated value. It is no longer necessary to make an expenditure of \$100 to \$300 or more for a modern "all-electric" radio.

By the simple installation of a pair of these Great Greene AC Power Units—any battery type receiver can be converted, easily and quickly, at substantial money-saving—for Super-AC-Reception—free of the expense of changing tubes.

Batteryless DC-tube type radio, when converted to the AC light-socket operation—the Great Greene way—brings new contentment with enhanced appreciation of musical treasures and



The GREAT
GREENE
 LINE for 1929

SEND THIS COUPON

Attach Your Letterhead

Greene-Brown Mfg. Co.,
 5100 Ravenswood Ave.,
 Chicago, Ill., U. S. A.

Please send full descriptions, and how The Great Greene Line for 1929 can help me make this my most profitable radio year.

Name

Address

Dealer. Jobber. R.R. 828



educational features now broadcast. Reception every evening—will be hum-free, true, unflinching—life-like, sharp and clear. Outside power-line interference characteristic of so many AC-tube receivers, will not bring tone distortion.

These Great Greene Units—never gyped or dumped, will help progressive dealers win loyal, appreciative customers. A nation-wide investigation proves that only the minority—about one in every six set-owners—feel they can afford to buy a new AC radio in 1928. Concentrate your selling effort on a sales appeal to the majority—Super-AC-Reception! And, modernize their present sets. Sales resistance will be lessened. Your profits will be larger. Inevitable!

Send coupon now for full particulars—attach to your letter head—please specify three wholesalers through whom you buy.



The Great GREENE AC SYNCROFILTERS
 Power-Packs Extraordinary

A-B-C power, for conversion by simple rewiring, of any battery-type set to AC-tube operation. Thousands in use. Suitable models available for either RCA, Arcturus, Marathon or other AC tubes of similar characteristics. Provided with 12-contact multiplug or binding posts as desired for connection to receivers. Uses type 280 rectifier tube. Installation may be made inside or outside set-cabinet. Complete rewiring diagram supplied, or sets rewired by us—at nominal charge. Amazing results . . . clarity . . . uniformity!

WRITE FOR COMPLETE INFORMATION

"ALL-ELECTRIC" RADIO
 AT ITS BEST

GREENE
 RADIO "AC" POWER
 CONVERTERS

Address 5100 Ravenswood Ave., Chicago



SELL MORE RADIO FURNITURE WITH THIS GREAT NAME

The new line of Berkey & Gay Radio Furniture offers dealers the biggest opportunity for profits and permanent business existing in the radio accessory field . . . The Berkey & Gay name, advertised for 40 years, makes these cabinets easy to sell—turns the stock many times faster than unknown names and is an assurance of satisfied customers and a permanent growing business.



For full particulars write, wire or phone the H. T. Roberts Co.,
2412 South Michigan Avenue, Chicago, Illinois—Radio Furniture
Sales Division of the Berkey & Gay Furniture Company.

BERKEY & GAY

Radio Furniture

Worthy of the



Standardized by the box, no chance of duplication.

Tune in now on Champion Radio program, broadcast over the following stations: WBZ, Springfield; WBZA, Boston; KDKA, Pittsburgh and KYW, Chicago.

New half million dollar factory owned and occupied exclusively by Champion.



name...

Champion

RADIO TUBES

All AC and DC Types

CRASHING the old "apple" over fences—laying down a string of "birdies" on the links—showing "heels" to competitors in every race—by such performances athletes earn the name CHAMPION.

So it is by consistent effort that CHAMPION skill is attained in the fields of science and industry.

Champion Radio TUBES are the product of an organization with 28 successful years' experience in the manufacture of incandescent lamps and vacuum TUBES.

Thousands of radio dealers have proved to their own satisfaction that Champion TUBES are the finest that money can buy.

Don't Forget—

\$77 Radio sets require TUBE equipment listing at \$22.50—30% of the selling price of the set.

All Champion Tubes are packed individually in unique transparent display packages—six to a carton. It's what you show on your counter that makes for sales.

Make the TUBE sales the most profitable part of your radio sales.

Sets equipped with CHAMPION RADIO TUBES are assured of maximum operating efficiency, and allow suitable TUBE PROFITS for you.

Dealers—Write us for booklet and more information about Champions and the set user's individual guarantee.

CHAMPION

RADIO WORKS, Inc.

144 Pine St., Danvers, Massachusetts



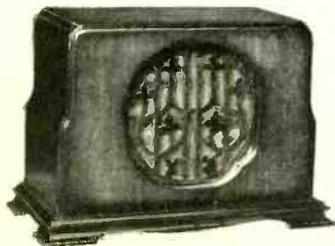
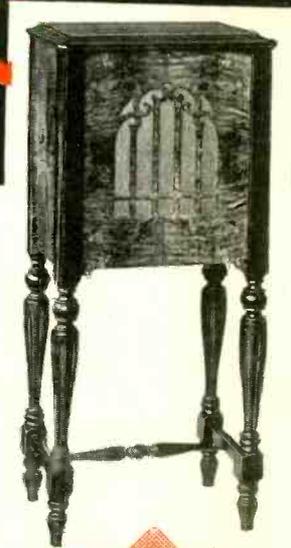
The Guarantee of the Manufacturer Protects you and your Customer

MAGNAVOX *Dynamic* SPEAKERS



Aristocrat Model

Beautiful butt burl walnut cabinet finished in two tones.
 For A-Battery Operation . . . \$70
 For AC Operation \$85



Beverly Model

Gracefully proportioned cabinet finished in light mahogany.
 For A-Battery Operation . . . \$55
 For AC Operation \$70

**"FIRST
 SPEAKER
 FIRST
 DYNAMIC"**

Dynamic realism is radio's newly acknowledged refinement . . . originally sponsored by Magnavox. Every tone rich, full and vivid . . . over entire audible range. A cascade of volume . . . without distortion. America's finest radio sets are made with Magnavox Speakers as built-in equipment.

THE MAGNAVOX COMPANY

Oakland, California Chicago, Illinois

Other floor and table models up to \$175.
 Units only; DC \$35; AC \$50.

Introducing
"the new voice of the skies"

The
EDISON RADIO
and **RADIO-PHONOGRAPH**
COMBINATIONS

The Edison Radio, long awaited, is now a reality! We introduce a complete line of electrically correct Radios and Radio-Phonograph Combinations—beautifully encased as befits their scientific excellence. . . . Here at last is a radio which is a super-selective local receiver, and

at the turn of a switch, a champion long distance performer! The radio with a super-power amplifier, the radio which uses the dynamic speaker with amazing results! In short, the radio you want to know about! The story is inside. Don't miss a word. It's the big news of the year.

"The new
Voice
of the
Skies"

The Edison Radio *and*



Model R-2. Radio with Dynamic Speaker. *Simplicity brought to a new perfection. The cabinet is in blended walnut finish, relieved with burl maple panels. A graceful piece of furniture which reflects credit on the good taste of any householder.*

Size 42½" x 22" x 16"

Price, including Dynamic Speaker,
less tubes: \$260



Model R-1. Radio with Dynamic Speaker. *Charmingly compact, it adjusts itself ideally to the modern home. . . . Blended walnut finish and panels of burl maple attest its handsome quality, in perfect keeping with controls of inlaid maple and trimming of statuary bronze. The doors fold back flat against the sides.*

Size 46" x 22½" x 18"

Price, including Dynamic Speaker,
less tubes: \$315

AS you would expect, the Edison Radio is advanced, foolproof, electrically correct and beautiful. It has many exclusive features which make for an outstanding performance.

FOR local stations, the Edison Radio is a tuned radio frequency receiver of super-selectivity. It is the best receiver that could be designed for local work exclusively. At the turn of a switch its whole character changes. A new power is unleashed. It then becomes a receiver of great sensitivity, and a champion distance-

getter. The Edison is truly the "Local and Long Distance" receiver.

THE Edison Radio has a super-power amplifier using the new R.C.A. "250" tube. It also has an inbuilt new-type, extra size Peerless Dynamic Speaker. As a result the Edison gives superb quality at all degrees of volume, with a startling response on bass notes. It can be tuned down to a whisper or tuned up to full orchestral volume. The Edison way of using and controlling the Dynamic Speaker accomplishes amazing results.

Radio-Phonograph Combinations



Model C-2. Radio and Electric Phonograph. Completely electrified. The cabinet of blended walnut finish, with its ornamental panels of burl maple, fits pleasingly into any interior, harmonizing with other furniture. Its doors fold inconspicuously back, flat along the sides, revealing four gold-embossed record albums.

Size 48½" x 28¼" x 18"
Price, including Dynamic Speaker,
less tubes: \$495



Model C-1. Radio and Electric Phonograph. An exact reproduction of an Italian Credenza, handsomely carved from solid walnut, with rich polychrome motifs. Built-in record containers. Special super-power amplifier using two "250" tubes and two new-type, extra-size Peerless Dynamic Speakers. This model is the acme of sound reproduction.

Size 48¾" x 43" x 20"
Price, including two Dynamic Speakers,
less tubes: \$1,100



ALL models are for A.C. operation, using 3 stages of radio frequency, a detector, and super-power amplifier. All have single dial control and concealed phonograph jack, with change-over switch (from radio to phonograph) on the front panel. Throughout, the Edison Radio is a notable example of advanced design and electrical efficiency.

THE Edison Radio faces a ready-made and nation-wide demand. It is the most asked-for radio in America. To you, as a dealer, this fact is significant. For in a day when so many sets of questionable

quality flood the market, it is reassuring to know that here, at last, is a line of *dependable* sets, sets which the public wants, sets offered by a company whose very name is a guarantee of fair dealing, of stability, and *worth*.

TO tie up with Thomas A. Edison, Inc., is a step urged by common sense, justified by reputation, and virtually impelled by the unsettled state of the radio market. Place your order at once. Communicate with our nearest jobber, listed on next page. Deliveries start in September.

THOMAS A. EDISON, Inc.

*"The new
Voice
of the
Skies"*

Distinguishing Features of The EDISON RADIO and Radio-Phonograph Combinations

... *The Chassis.* Three stages of radio frequency, detector, and two stages of audio. For A. C. operation—using four “226” tubes, one “227” tube, one “250” tube and one “281” rectifier. The chassis is solidly and rigidly constructed, and is insulated against high voltages. Adequate adjustment for voltage fluctuations. The circuit is highly shielded.

... *Super-Power Amplifiers.* All models are equipped with super-power amplifiers, using the new R.C.A. “250” tube. One reason why the Dynamic Speaker gives so remarkable a performance with the Edison Radio and Radio-Phonograph Combinations.

... *Dynamic Speakers Built In.* A nation-wide investigation has shown that the year ahead is to be a “dynamic year.” In the Edison Radio and Radio-Phonograph Combinations the new type extra size Peerless Dynamic Speaker reaches its greatest excellence by the use of a “250” tube and thru our method of control.

... *Long Distance Switch.* The Edison Radio for local work is a straight radio frequency receiver of super-selectivity. When distance is desired, the turn of a switch makes it sensitive to the highest degree. Distant stations which cannot be heard with the average radio frequency receiver can be brought in with fine volume.

... *Tuning Control.* Single Dial with

divisional numbers. Calibrated wavelengths are also shown. Dial is illuminated from the interior.

... *Phonograph Jack on Radios.* A radio to phonograph change-over switch is located on front panel of radio. Consequently, jack does not plug in from the front, but concealed lead-in gives permanent installation. Thus every radio is potentially a combination radio and electric phonograph.

... *Radio-Phonograph Combinations.* Fully electric. Each contains in addition to the Edison Radio an electric phonograph, electrically driven. Has the only electric pickup that plays all types of records—both hill-and-dale and needle-type. A marvel of ingenuity—developed in the Edison Laboratories, the birth-place of the phonograph. The only truly universal electric combination.

... *Cabinets.* Edison Cabinets are made in our own plants, of the finest woods, specially selected for grain. Solidly built and finished to endure, they rank with the furniture of the finest homes.

... *Workmanship.* Only expert electricians of long experience touch any part of an Edison set. The Edison Radio owes much of its quality performance to this high-class workmanship.

... *Inspection.* Every set must undergo numerous inspections under the rigid Edison standards, such as is given all Edison products.

Edison Phonograph Distributing Co.

ATLANTA
155 So. Forsyth St.

DENVER
1636 Laurence St.

ORANGE, N. J.

BOSTON
96 South St.
KANSAS CITY
1215 McGee St.
PITTSBURGH
909 Penn. Ave.

CHICAGO
3130 So. Michigan Ave.
MINNEAPOLIS
608 First Ave. N.
RICHMOND
1204 East Main St.

DALLAS
500 Elm St.
NEW ORLEANS
128 Chartres St.
SAN FRANCISCO
1267 Mission St.

CLEVELAND: B. W. Smith, Inc., 2019 Euclid Ave.
OGDEN: Proudfit Sporting Goods Co., 2327 Grant Ave.

PHILADELPHIA: Girard Phonograph Co., Broad and Wallace Sts.
ST. LOUIS: Silverstone Music Co., 1114 Olive St.

TRADE MARK
Thomas A. Edison

Reorganized▼▼▼ to keep a good name to the front



BACKED by a personnel of successful business leaders, the reorganized De Forest Radio Company has started the manufacture of a standard line of Audions representing the very latest achievements in the field.

*Personnel of the
DE FOREST RADIO COMPANY*

JAMES W. GARSIDE
President and General Manager
A. J. DREXEL BIDDLE, JR.
Chairman of the Board of Directors

BOARD OF DIRECTORS

WILEY R. REYNOLDS,
Chairman of Board,
Reynolds Spring Co.
JAMES I. BUSH,
Vice-President, Equitable Trust Co.
ARTHUR B. WESTERVELT,
Vice-President, American Trust Co.
A. J. DREXEL BIDDLE, JR.,
Trustee, Duke Endowment.
HARRIS HAMMOND,
President, Mexican Seaboard Oil Co.
PERCY A. DEUTSCH,
President, Sonora Phonograph Co.
VICTOR C. BELL,
A. D. Mendes & Co.
ORLANDO P. METCALF,
Metcalf, McInnes, Allen & Hubbard.
JAMES W. GARSIDE,
President, De Forest Radio Co.

Dr. De Forest, known all over the world as the father of Radio, besides personally supervising the production, will also carry on intensive research in the De Forest laboratories. Rigid tests will be made to assure the perfection of every tube bearing his name.

Plans have been approved for giving De Forest Dealers the utmost co-operation to help them capitalize on the greatest name in Radio.

It will be a pleasure to send you complete information.

Write Department 14 for descriptive literature.

§ **DeFOREST RADIO COMPANY** §
JERSEY CITY NEW JERSEY

Balkite is patterned

The Balkite line of AC receivers for 1928-9 is patterned after no existing receiver. It is unique in the field. And scarcely a month after its introduction, Balkite Radio is an acknowl-

ed in
this

unit
radio
the
ing

need of the dealer is not for lower-priced radio, but for radio with fewer service calls.

2. **Balkite Merchandising.** Balkite has always believed that the



The Balkite A-7

Showing the finely carved cabinet with doors closed. A cabinet to meet the taste of the most exacting household—by Berkey & Gay



Balkite A-5

Cabinet by Berkey & Gay. Complete except for tubes and speaker, \$230

trade must make money on its products. The Balkite policy of restricted distribution insures a good profit to every Balkite outlet.

3. **Balkite Advertising.** Balkite has always been one of the two or three most consistent advertisers in radio. As a manufacturer of radio sets it means to maintain its advertising position.

4. **Balkite Service.** Balkite has already one of the most elaborate service organizations in the field. No Balkite product is ever more than a few days from

FANSTEEL
Balkite Radio
Cabinets by Berkey & Gay

after no existing receiver

service. 16 Balkite Service Stations are today in existence. More are planned.

5. **Balkite Reliability.** Balkite has always been one of the most scrupulous manufacturers in radio. In Balkite Radio even the usual Balkite standards have been surpassed. There has simply never been radio like this before.

Balkite Radio meets the trend of the market. It is made by one of the best known and liked of all radio manufacturers. It will sell in large volume. Sell



The Balkite A-7
Cabinet by Berkey & Gay. Includes dynamic speaker. Complete but for tubes, \$487.50



Balkite A-3
For those who want all radio. Housed in a simple but slightly all-metal case. Complete but for tubes and speaker, \$197.50
Prices slightly higher west of the Rockies

Balkite and you'll make money.

See our jobber. Fansteel Products Company, Inc., North Chicago, Illinois.

HAVE YOU
SEEN
THE
BALKITE
SYMPHION



*It is the
finest instrument
in music*

FANSTEEL
Balkite Radio
Cabinets by Berkey & Gay

Hook up with these



All-Electric A. C. Combination

This combination of Model 801-A Receiver with Model 435-A Reproducer attached to the cover is a completely self-contained radio. Six receiving tubes. One rectifier tube. FOUR tuned circuits. ONE dial control. Calibrated wavelength dial, illuminated. Built-in light socket aerial. Price of set, \$94.50, attachable speaker, \$16.50. Price of combination,

\$110.50

without tubes
\$113.50
West of the Rockies

STEWART-WARNER AC All Electric RADIO

NOW starts the greatest radio year. Stewart-Warner invites you, Mr. Dealer, to make it YOUR best and biggest in sales and profits.

Here's the line that will win for you. The marvelous "800" series. This new wonder radio, bringing unmatched realism of tone reproduction, has sensational

features distinctive and outstanding.

Model 801-A with its commanding beauty and many advanced features, is more than merely a new set. It's a new and better type of radio, opening new rich fields of money-making, trade-building opportunity for every Stewart-Warner dealer.

3winners



Model 801—Same as 801-A, but not equipped for attachable reproducer.

\$94.50 ^{Without tubes} \$97.00 West of Rockies

Model 806—Same style as 801, but operated by battery or battery eliminator.

\$67.50 ^{Without tubes} \$69.50 West of Rockies



Model 435—Stewart-Warner Reproducer

\$16.50 ^{\$17.25} West of Rockies

New type magnetic cone speaker with new tone depth and beauty.



Realism *that spells* Profit!

THESE sets are perfected by the exclusive Stewart-Warner "Electric Ear" test, which records minutest sound vibrations of music as broadcast and of the same music re-created by the radio set. Comparing the records, our engineers make adjustments which insure for Stewart-Warner sets an unmatched realism of tone—startling in its trueness.

Tone Realism, beauty, simplicity, super-selectivity; low prices through manufacturing

economies. These qualities in the "800" series give greater selling advantages to Stewart-Warner dealers.

Learn about the New Stewart-Warner Nation-wide Acceptance Plan for Retail Sales. It will help you win new business, with every sale virtually a cash sale for you.

Complete line of approved Console cabinets, made exclusively for Stewart-Warner, by Buckeye Manufacturing Co., of Springfield, Ohio.

Learn about our Franchise. One of the most valuable assets a dealer can own. Don't miss this opportunity. Territories closing fast. Write or wire today.

STEWART-WARNER SPEEDOMETER CORPORATION • CHICAGO

22 years in business—World-wide service—50 million dollars in resources—4th successful radio year

STEWART-WARNER *The Voice of Authority*
in RADIO

The making of a **CeCo** TUBE

PROBABLY no manufacturing process is more exacting or requires greater skill and precision than the making of radio tubes.

First among the exacting steps is the assembling of the grid. Then comes the mounting of the elements on the glass stem, and inserting into the open end glass bulb and sealing the stem to the bulb.

Evacuation of the air and gases within the bulb by a special exclusive CeCo process then follows, and after "flashing" to remove all gases clinging to the sides of the bulb, the tube is "aged" by burning the filament at an abnormal filament voltage, thus "priming" it ready for use.

Finally tubes are tested for all characteristics and the close test limits assure every CeCo Tube being uniform and worthy of bearing the CeCo label.

Type M-26 (226) Amplifier: A 1½ volt, 4 prong, UX base, 1.05 amp A. C. tube for operation on alternating current through a step down transformer.

Price \$2.50

Type N-27 (227) Detector and Amplifier: A 2½ volt separate heater type A. C. tube. While generally a detector tube, it may be used as an amplifier as well. Having 5 prongs its use requires a 5 prong socket and operates from A. C. current through a special down transformer. Price \$5.00

for A.C. Sets



PRONOUNCED
SEE-CO

A.C. TUBES

(Filament and Heater Types)

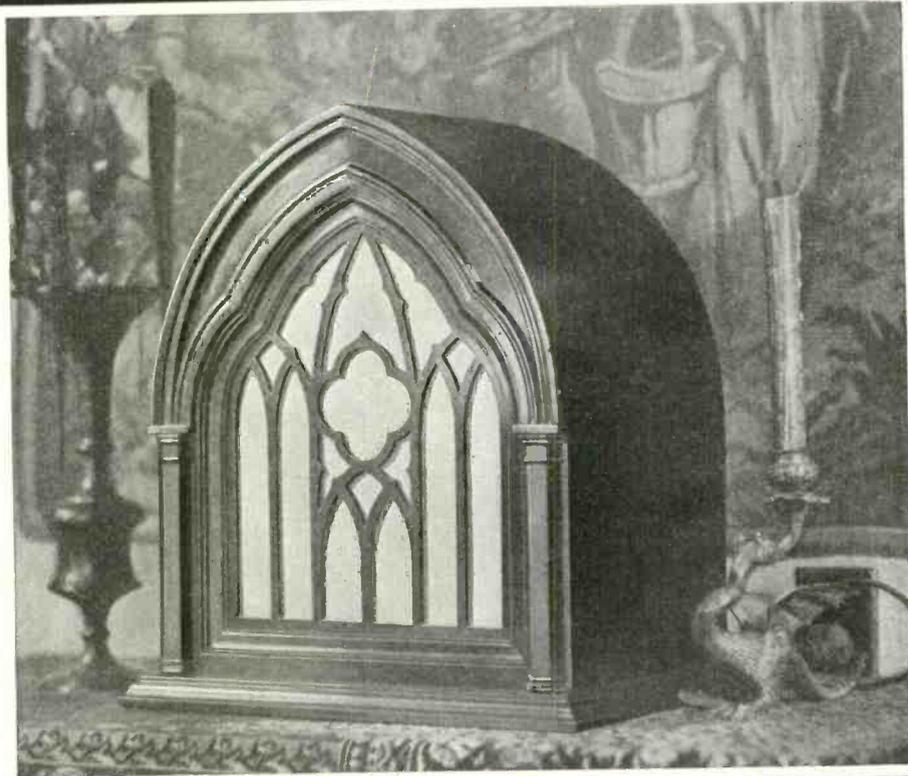
THE POPULARITY of CeCo A.C. Tubes with the radio public is firmly established, gained by their outstanding performance in clarity, sensitivity, volume, absence of A.C. hum and—of prime importance—maximum operating life.

The CeCo line of A.C. Tubes is complete, embracing every existing type.

Write for particulars regarding the CeCo trade proposition and a copy of an unusual folder: "Getting the Most Out of Your Radio."

CeCo Manufacturing Co., Inc., Providence, R. I.

... most beautiful ... An air of serenity hovers about the classic Gothic lines of this new Peerless Dynamic Power Speaker ... In its contour there is a fluid gracefulness that gives unceasing pleasure to the eye of the connoisseur ... In the majestic perpendiculars of its Gothic grill there is poise and dignity and a challenge to perfection



which even its most avid imitators will never be able to duplicate ... In performance it is worthy of its label ... List \$75 ... made by United Radio Corporation, Rochester, New York.

Peerless
DYNAMIC REPRODUCERS
LICENSED UNDER LEKTOPHONE PATENTS

“Radio’s Greatest



*The New
Sparton EQUASONNE
Senior Console*

SPARTON

Forward Stride Since A. C. Reception” The *EQUASONNE*

“The biggest thing in Radio since the transition from battery to light-socket operation” is the verdict of radio experts. “The most impressive instruments of the year” say dealers everywhere. Absolutely new—entirely different—the New Sparton *EQUASONNE*—is a year ahead in sales and profit possibilities as well as in engineering development.

Think what the *EQUASONNE* means to you as a dealer. When a customer walks into your store, you explore for him the amazing field of stations on the lower part of the dial; explaining that for the first time the low wave lengths are just as clear as the favored higher ones.

Then you listen to his comments on the amazing purity and richness of tone. You explain to him the *EQUASONNE* “wave band filter”,

that *PRE-TUNES* the incoming signals, filters interference and outside noises *before* amplification. You tell him about the reception of musical overtones—upon which fullness and resonance depend. These, too, are absolutely new.

Let him look inside of the *EQUASONNE*. Show him its clean-cut simplicity. Tell him how it is only a matter of three minutes to render any necessary service.

Finally, then, there is the biggest sales point of all—Price. Starting at \$149.50, *including tubes*, Sparton offers the *EQUASONNE* in an exquisitely beautiful line of cabinets for every home and every purse. We believe that the values Sparton offers in this New *EQUASONNE* line have never been approached. We invite you to write for the interesting details.

THE SPARKS-WITHINGTON CO., JACKSON, MICH., U. S. A.
Pioneers of Electric Radio without batteries of any kind

(234)

RADIO

ATWATER KENT RADIO

MODEL 40

\$77

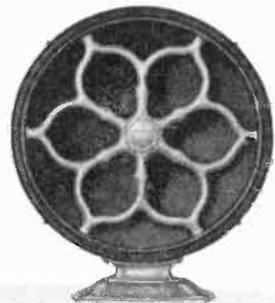
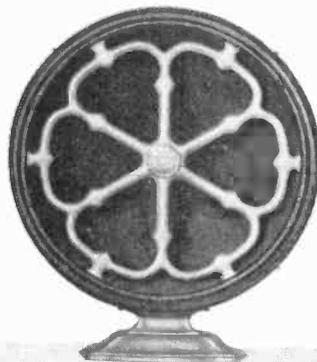
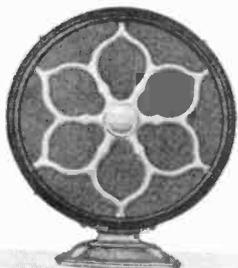
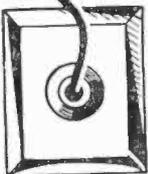
(Without tubes)



the 1929 ELECTRIC SET

MODEL 40 A. C. The 1929 improvement on the famous Model 37. More powerful, more sensitive. New sealed power unit. **FULL-VISION Dial.** Satin finished in dark brown and gold or deep golden bronze and gold. Requires six A. C. tubes and one rectifying tube. For 110-120 volt, 50-60 cycle alternating current. With- \$77 out tubes

Model 41 D. C. set. Requires 5 D. C. tubes and 2 power tubes, \$87 (without tubes).



"RADIO'S TRUEST VOICE." Atwater Kent Radio Speakers: Satin finished—some in dark brown and gold, some in deep golden bronze and gold. Models E, E2, and E3, same quality, different in size.

Each \$20

ATWATER KENT RADIO

Look
below the
surface!

"SET manufacturers seem to have standardized on the appearance of their magic boxes," says R. P. Clarkson, reviewing the R. M. A. Show for the New York Sun. "Fifteen or twenty of them looked just like the Atwater Kent Model 37."

The performance that distinguishes Atwater Kent Radio at \$77, and makes it the best seller and best profit maker, comes from far below the surface. It grows out of experience, out of laboratory and manufacturing facilities, out of the patience of pioneering, out of a determination to make radio always simpler and better, out of *learning how*.

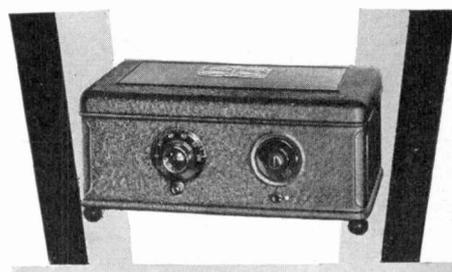
More than 1,650,000 families know at first hand that the name Atwater Kent on a radio set means the same thing as "sterling" on silver. Dealers know it, too. That's why so many dealers have decided to concentrate on Atwater Kent Radio.

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

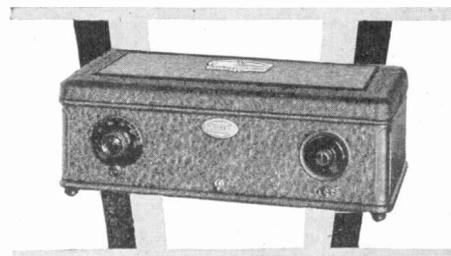
Prices slightly higher West of the Rockies

Write for illustrated booklet of Atwater Kent Radio

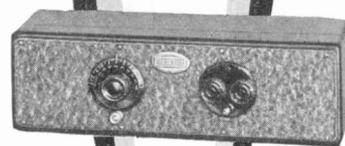
ATWATER KENT MANUFACTURING COMPANY
4733 Wissahickon Ave. A. Atwater Kent, Pres. Philadelphia, Pa.



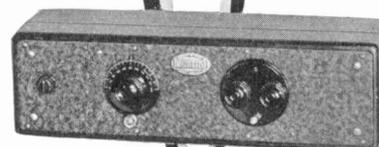
MODEL 42 A. C. Similar electrically to Model 40, with addition of automatic line voltage control. Many refinements in cabinet design—crowned lid, panelled corners, ball feet. FULL-VISION Dial with over-size numbers. Requires six A. C. tubes and one rectifying tube. For 110-120 volt, 50-60 cycle alternating current. **\$86**
Without tubes,



MODEL 44 A. C. Extra-powerful, extra-sensitive, extra-selective. Crowned lid. Panelled corners. Ball feet. Automatic line voltage control. Local-distance switch. FULL-VISION Dial with over-size numbers. Requires seven A. C. tubes and one rectifying tube. For 110-120 volt, 50-60 cycle alternating current. **\$106**
Without tubes,



MODEL 48 battery set. Solid mahogany cabinet. FULL-VISION Dial. Six tubes required. **\$49**
Without tubes or batteries,



MODEL 49 battery set. Solid mahogany cabinet. FULL-VISION Dial. Antenna adjustment device assures unusual selectivity. Six tubes required. **\$68**
Without tubes or batteries,

Everybody likes a Shamrock

The one thing the whole family agrees on!



"I'm glad Daddy got a Shamrock. It's so easy to operate."

"I never was this popular before. I guess it must be that the crowd likes the new Shamrock up at our house."

"I'm getting acquainted with my own children again, now that Shamrock keeps them home in the evening!"



**JUST
PLUG IT IN
YOUR LIGHT
SOCKET**

List Price

\$95.

NOW

**THE DYNAMIC
ELECTRIC**



Shamrock Cabinets are available in finishes to accord with every color scheme—Antique Walnut, Chinese Jade Green, Mandarin Red, Ebony, and Gold and Ivory. Their beauty of design and decorative hand-carved wood panel make them effective on any type of table, cabinet, or console, yet they are modestly priced at only \$95 list.

Nationally Advertised!

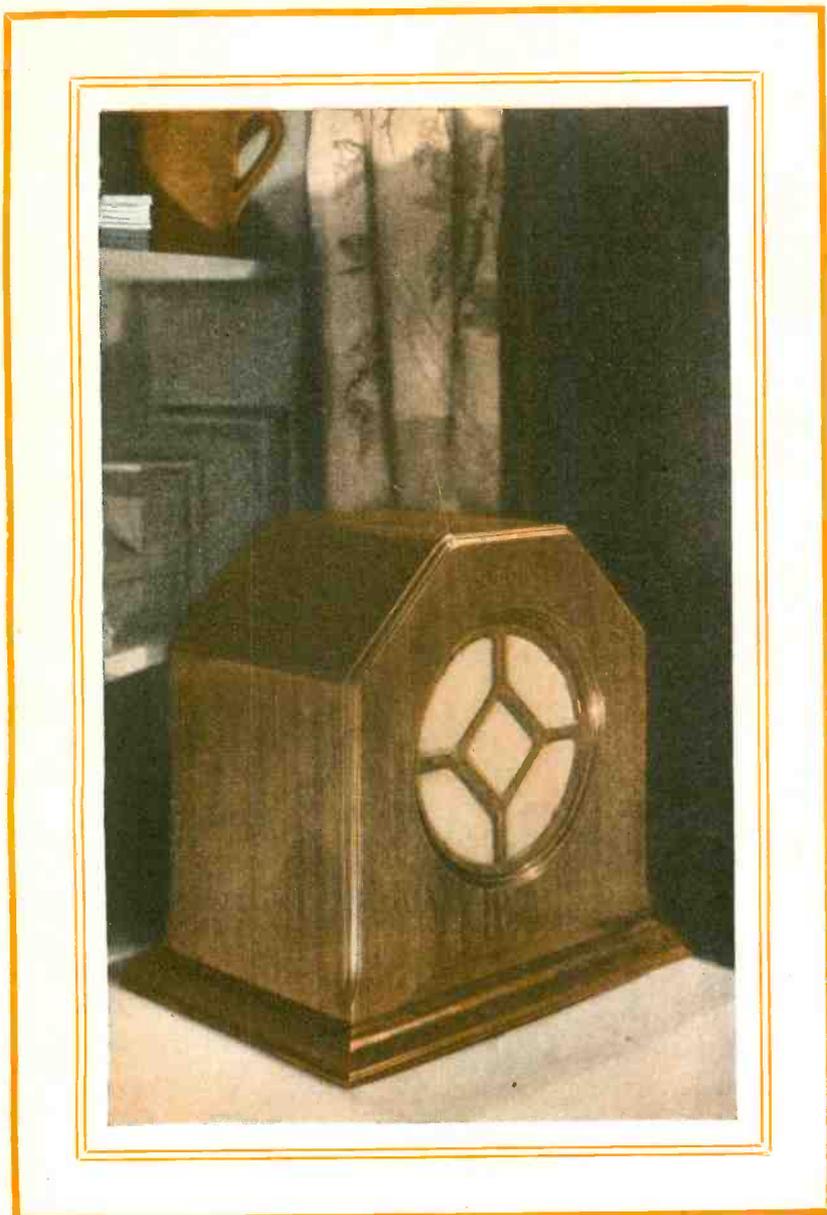
SHAMROCK
DYNAMIC ELECTRIC

SHAMROCK MANUFACTURING CO.
152 Summit Street, Newark, N. J.

"THE one thing the whole family agrees on." That's what we said when we introduced the new Dynamic Electric. Frankly we had a hunch it would also prove the one set the *dealers* agreed on—and, sure enough, it's proving to be just that!

Wherever this set has been heard it has aroused the most enthusiastic comments. It fully lives up to the reputation of the organization which developed it—the organization that pioneered the one dial set and ever since has maintained its position of leadership in radio engineering genius and manufacturing efficiency.

The new Shamrock Dynamic Electric will vindicate all claims made for it. Test it yourself for distance, volume, selectivity, tonal value. Hear it! It will convince you by *performance!*



NOT just another "speaker" in the accepted sense of the word, but a new reproducer built upon the finest Dynamic Chassis known to radio science—a reproducer that is rapidly being accepted as the undisputed leader in its class—a reproducer that is finding favor with thousands who seek a rich dignity of design which reflects good taste and harmonizes with well-appointed interiors—a reproducer that is winning the endorsement of music-lovers who seek undistorted reception of the splendid programs now current among the nation's key broadcasting stations. In the MARCO DYNAMIC REPRODUCER a new leader is born that will make both friends and profits for the radio trade.

The New MARCO DYNAMIC is made in three models, which list at \$65.00, \$67.50 and \$75.00, respectively. Standard trade discounts. Literature sent upon request.

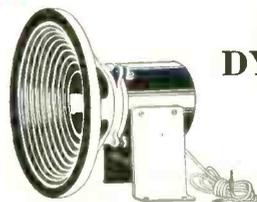
The MARCO DYNAMIC REPRODUCER

MARTIN-COPELAND CO.
PROVIDENCE, R. I.



Radio Products

ESTABLISHED 1880



The MARCO DYNAMIC CHASSIS

Type DU-110 (110-volt
-60 cycles). List - \$50

Type DU-90 (110-volt
D.C.) List - - - \$40

For radio and phonograph installation; sold without case. Type DU-6 (6-volt
D.C.) List - - - \$35

Neptron



Permanent Profit for the Dealer

Neptron recognizes that most set users buy the tube that the dealer recommends.

As purchasing agent of radio tubes for the set users of his community, the dealer can make the most satisfactory and permanent profit by selling a tube of the highest quality which he can recommend enthusiastically and back to the limit.



Neptron Corporation
Salem Mass

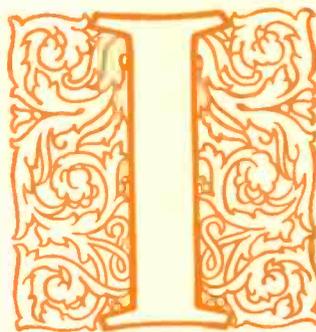


FRESHMAN
YOUR ULTIMATE RADIO



“FOR THE PERFORMANCE OF
THESE PROMISES ... HOLD ME
PERSONALLY RESPONSIBLE”

C. A. EARL, *President*, CHAS. FRESHMAN CO., *Inc.*



DON'T profess to know much about radio. But in the management of one of the largest automobile enterprises in the country I have learned the one rule on which all business success must be founded:

“An Immediate Sale is a Temporary Advantage, but a Satisfied Customer is a Permanent Asset.”

We want every Freshman dealer and every Freshman user as permanent assets. And to that end we propose to protect the *dealer's* interest, first, last and always.

We are prepared to give you and your customers a good product at a fair price, sponsored by an organization, morally and financially responsible.

I am a stranger to many of you. But my associates need no introduction to the radio trade. I shall let these gentlemen outline for you the policies of the Freshman organization: Mr. Harry A. Beach, General Sales Manager; Mr. George Eltz, Chief of Engineering and Mr. W. J. Keyes, Treasurer.

What these gentlemen promise I personally guarantee shall be carried out.

— C. A. EARL

**“AN IMMEDIATE SALE IS A
TEMPORARY ADVANTAGE—
BUT A SATISFIED CUSTOMER
IS A PERMANENT ASSET”**



FRESHMAN
YOUR ULTIMATE RADIO

“CHARACTER AND BUSINESS ABILITY AS IMPORTANT AS FINANCIAL RESPONSIBILITY”

W. J. KEYES, *Vice-President and Treasurer*

THE Freshman organization is building for the future as well as the present.

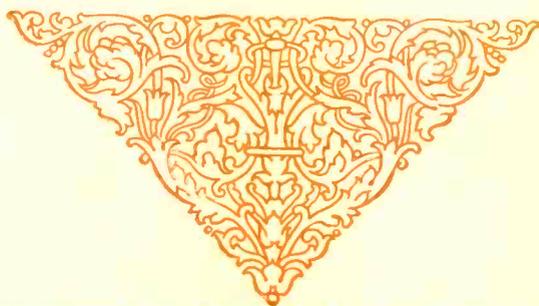
New dealers are being selected with care, and by no means on a basis of financial responsibility alone. While, of course, such responsibility is essential, even more important is character and business ability.

To the public the Freshman dealer is more than a mere distributor. He is the representative of the Freshman Company in his community. The public's estimate of the Company and its products is based largely on the dependability, the honesty, the conscientiousness of the service rendered by that representative.

The Freshman Company desires to be represented, not necessarily by the largest, but the *best* dealer in each community.

The Freshman franchise is a valuable piece of property. It shall be our constant endeavor to make it ever more valuable. —W. J. KEYES

CHAS. FRESHMAN CO., INC.
NEW YORK · CHICAGO · LOS ANGELES



“AN IMMEDIATE SALE IS A TEMPORARY ADVANTAGE BUT A SATISFIED CUSTOMER IS A PERMANENT ASSET”



Model DC 507—Equipped with our dynamic unit. Finished in a beautiful two-tone walnut to match the popular sets. Small in size, 13 1/4-in. high by 12 1/4-in. wide by 11 1/2-in. deep. Operates from 6-volt storage battery or 6-volt battery eliminator. List, \$50.00.

Model A 506—Same cabinet as above. Ready to operate from any A.C. 110-volt, 60 cycle lighting circuit. List, \$60.00.

Model A 508—Like above, except that it's made to operate from a D.C. lighting circuit. List, \$50.00.



Model DX 505—Fitted with our dynamic speaker, equipped with a standard dry disc Rectifier and powerful transformer for operation from A.C. 110 volts house current. No other auxiliary apparatus required, \$65.00.



Dynamic Unit Chassis

AC Model A 510—For A.C. light socket operation equipped with dry disc rectifier and powerful transformer 110 v. 60 cycles. List, \$45.00. In Baffle Box, \$2.50 extra.

Blue Bloods in the Speaker Line

NOT merely an apt phrase to describe O'Neil Dynamics but a reality! O'Neil Dynamics have been developed naturally just as you would expect by a pioneer in the manufacture of radio reproducers. One who has been making especially good radio speakers since the early days of radio broadcasting and kept pace with the trend of present day development.

In the new O'Neil Dynamics are the qualities that have made the entire O'Neil line such a sure fire and rapid selling one. Faithful reproduction throughout an entire broadcast with unusual fidelity to the artist. You get the breath taking pauses of the vocalist, the soft tonal shadings of the instrumentalist—all these come without distortion or rattle. Exceptionally high quality cabinet work give them an "eye-appeal"

that is of immediate sales value. And volume sales are further assured by an unusually moderate price.

The Model DX 505 is a good one to use as your leader. With it you will attract a continuous volume of sales—and profits. It can't be helped as people insist on buying quality and O'Neil speakers are those that will appeal to the discriminate.

If you are interested in making money by handling quality products you will be interested in "the famous O'Neil Speakers." We should be pleased to send you a copy of our *Illustrated Catalog* describing the complete line of O'Neil magnetic and dynamic speakers. They list from \$14.75 upwards. Better write today—there is a jobber near you to supply your needs.

O'NEIL MANUFACTURING CORPORATION

—the famous O'NEIL Radio Speakers
West New York, N. J.

O'NEIL
DYNAMIC SPEAKER

O'NEIL speakers are licensed under the Lektophone Patents—Nuff sed.

BOSCH

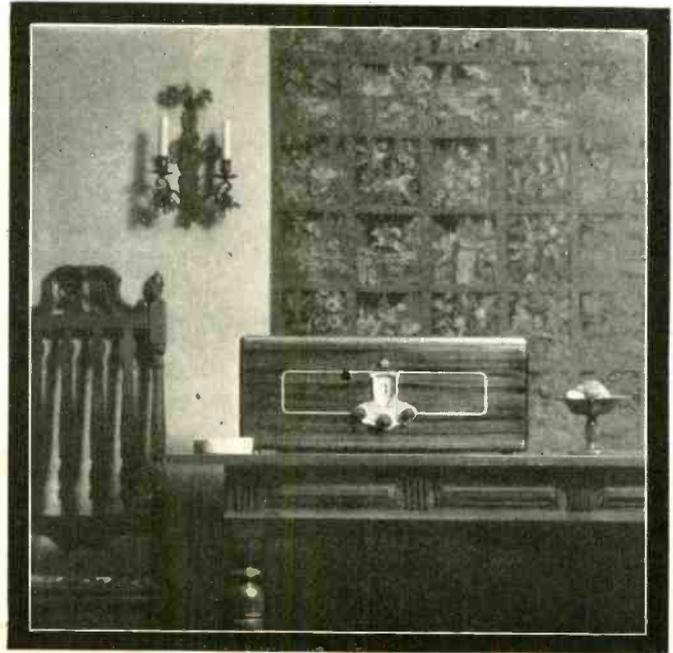
19

Dealer acceptance of the new Bosch plans is verifying our assertion that the Bosch Radio contract will be the outstanding money-maker this year. The Bosch contract is based on sound merchandising principles and provides profits and advantages not to be had in any other contract.

A wider selling range, a strong price advantage, a more flexible inventory investment are prominent features of the Bosch Dealer contract. The new Bosch Receiver is far ahead in performance and appearance—it is backed by the Bosch traditions of precision workmanship and Bosch national advertising. A request will bring you the interesting details. Write our main office or our nearest branch today, if you want to be included in our plans.

AMERICAN BOSCH
SPRINGFIELD - - - MASS.

Prices are slightly higher west of Rockies and in Canada.



Bosch Radió Model 28 — for 110 volt AC operation using seven alternating current tubes and one power rectifying tube. Single tuning dial electrically lighted, solid mahogany cabinet. Price \$132.50 less tubes.

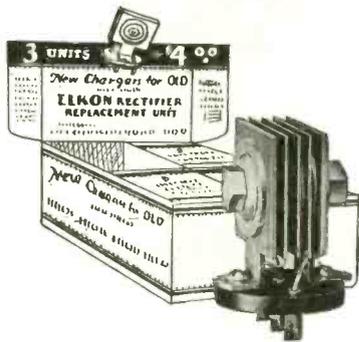
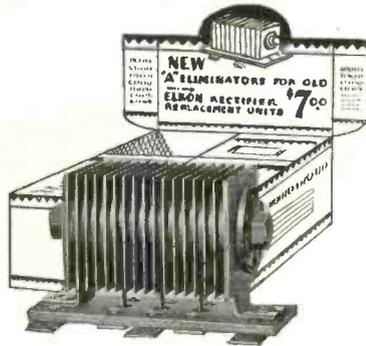
in Display Cartons that Sell

ELKON REPLACEMENT UNITS FOR "A" ELIMINATORS

Elkon rectifiers are factory equipment on the following "A" Eliminators:—

BERNARD	ELKON	MAJESTIC
MAYOLIAN	FADA	WEBSTER
SENTINEL	METRO	PHILCO
KNAPP	GENERAL INSTRUMENT	

Hundreds of thousands of these Eliminators have been sold. Many of their rectifiers will have to be replaced this season. Display cartons remind the customer to replace his rectifier when he is in your store.



ELKON REPLACEMENT UNITS FOR TRICKLE CHARGERS

Elkon Type V-4 rectifiers are factory equipment on the following Trickle Chargers:—

ELKON	ACME	CLEVELAND
NATIONAL	BERNARD	PRECISION

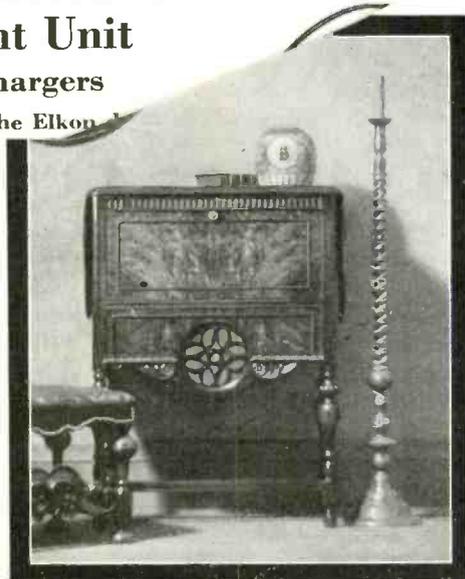
Elkon Type V-4 rectifiers are in every one of these chargers. The replacement units are packed in cartons containing set of three and six cartons are in each display box.

Elkon, the Authorized Replacement Unit for Balkite Chargers

Take off the acid jars, snap the Elkon



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 for . . . \$295.00.



Authorized Bosch Radio Dealers are now showing Model 28A console illustrated, specially designed for them with the standard Bosch Radio Speaker. Console has fine selected and patterned woods, richly carved beautifully finished. Bosch Radio Dealers are offering the console 28A with Bosch Radio Speaker and the Model 28 Bosch Radio Receiver for . . . \$197.50.

The La Salle 280



*Made and guaranteed by the
La Salle Radio Corporation*

LASALLE 280 is an effective full wave rectifying tube, made with our special process filament. It gives high emission with low power input. For use with power packs and A, B, and C eliminators.

The La Salle 280 will prove its superiority to you and pay you a worthwhile profit. Let us send you full details.



The La Salle 280 is a standard rectifying tube which has proved its performance quality in every type of AC operated set

LA SALLE High-Vacuum Tubes have made good through performance. Their quality—their dependability—their uniformity—is now a matter of record with the radio public, dealers and jobbers everywhere.

Some of the finest testimony of La Salle High Vacuum quality has come to us from set manufacturers. All of which simply means that the radio industry itself verifies the remarkable performance of La Salle High-Vacuum Tubes.

Jobbers and dealers who are interested in quality merchandise should give La Salle High-Vacuum Tubes a fair and thorough test. The tube itself will do the rest.

Jobbers—If you are not familiar with our selling policy for jobbers, let us tell you why it is answering one of your important problems today.

Manufacturers

LA SALLE RADIO CORPORATION

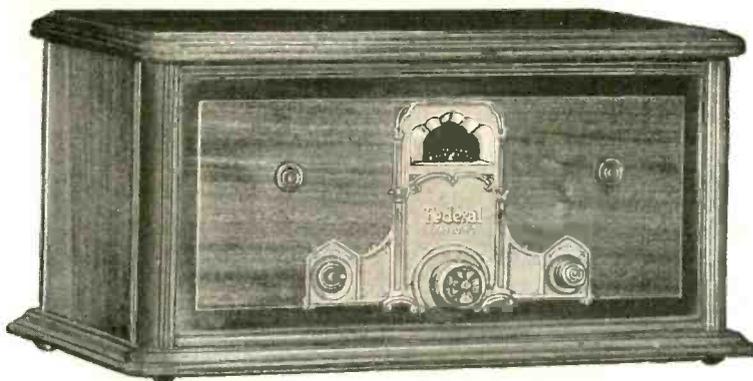
149 West Austin Avenue Chicago, Illinois

Sole Distributors

MATCHLESS ELECTRIC COMPANY
143 West Austin Avenue Chicago, Illinois

La Salle
HIGH-VACUUM TUBES

ONLY FEDERAL



OFFERS
REALLY FINE
QUALITY

AT

\$130



FEDERAL'S new A. C. models are built with the same care and precision that has maintained Federal's reputation for reliability and performance during the entire course of development of the radio industry.

This remarkable little set offers retailers the greatest combination of sales features found in any one radio today—seven A. C. tubes (including rectifying tube)—all metal chassis—all self-contained—fine wood cabinets—push-pull amplification—remarkable two-way select-

ivity—single dial, electrically illuminated—ease of adjustment to line voltages of from 100 to 130 volts—full Federal Ortho-sonic tone—unusual compactness—tremendous volume, with perfect gradation—vernier tuning control, exceptionally sensitive to weak signals.

Prices—without tubes

Table Model—60 cycle \$130, 25 cycle \$140

Console Model with built-in speaker—60 cycle \$220
25 cycle \$230

(Slightly higher West of Rockies)

May also be had for battery operation

This is going to be a big radio year. It will be even bigger if you handle Federal. Phone, wire or write for details.

FEDERAL RADIO CORPORATION, BUFFALO, N. Y.
OPERATING BROADCAST STATION WGR AT BUFFALO
Federal Ortho-sonic Radio, Ltd., Bridgeburg, Ont.

Federal Radio

ORTHO-SONIC*

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

* Federal's fundamental exclusive development making possible Ortho-sonic reproduction is patented under U.S. Letters Patent No. 1,592,170

FEDERAL RADIO CORPORATION,
1738 Elmwood Avenue, Buffalo, New York

Please send me complete details of the Federal proposition.

Name

Address City



Jensen

DYNAMIC SPEAKER



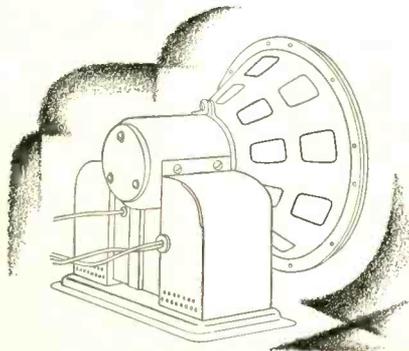
New Jensen Model 6 Cabinet

New Model

Jensen Dynamic Speakers

D-4	Jensen Dynamic Speaker Unit for 6 volt Operation - - - -	\$40.00
D-5	Jensen Dynamic Speaker Unit for 90 to 180 D.C. volt Operation - - -	43.00
D-4AC	Jensen Dynamic Speaker Unit for 110 volt A.C. Operation - - - -	55.00
D-64	Jensen Model 6 Cabinet with D-4 Dynamic Speaker Unit - - - -	55.00
D-65	Jensen Model 6 Cabinet with D-5 Dynamic Speaker Unit - - - -	58.00
D-64AC	Jensen Model 6 Cabinet with D-4AC Dynamic Speaker Unit - - - -	70.00
D-74	Jensen Model 7 Console with D-4 Dynamic Speaker Unit - - - -	75.00
D-75	Jensen Model 7 Console with D-5 Dynamic Speaker Unit - - - -	78.00
D-74AC	Jensen Model 7 Console with D-4AC Dynamic Speaker Unit - - - -	90.00

(Licensed under Magnavox patents)



Jensen D-4AC Unit

A YEAR ago the Jensen Dynamic Speaker inaugurated a new era of radio reproduction. Today the market is flooded with quickly designed and hastily assembled dynamic speakers, but Jensen holds undisputed leadership. No single event in the radio industry holds such significance as Peter L. Jensen's development of the dynamic speaker and we predict no other manufacturer can duplicate such established supremacy without years of research and manufacturing experience in the dynamic speaker field.

The new Jensen models recently announced introduce an entirely new vogue of cabinet design. A new perfection of beauty has been attained surpassing all previous standards of radio furniture design. These new models are equipped with a small toggle switch instead of a clumsy feed-through switch, and the cords are silk covered to match the cabinet finish. These and all the other distinctive Jensen qualities and exclusive features are possible because Jensen Dynamic Speakers are built to a quality standard with price a secondary consideration. Volume production and manufacturing experience account for their moderate cost.

Public acceptance of Jensen Dynamic Speakers has been assured for the past year. Dealers and jobbers are finding a ready market for them. We advise writing or wiring at once for complete information regarding wholesale or retail distribution in your territory.

Jensen Radio Manufacturing Company
338 N. Kedzie Avenue CHICAGO, ILLINOIS

212 9th Street, Oakland, California

Jensen Dynamic Speakers are made in types to operate with 110 volt A. C. house current, 6 volt storage battery, "A" eliminator or trickle charger, 110 volt D. C. house current and 90 to 180 volt D. C. current as provided by many of the late model radio sets.

Line Up *with* Ken-Rad

FOR BIGGER TUBE SALES THIS YEAR

THE Ken-Rad proposition . . . one of the most comprehensive and progressive sales plans ever built . . . gives the dealer every feature he has always wanted. It is designed to make more customers for you . . . hold them . . . keep them satisfied. It will bring you bigger and more profitable tube sales . . . Line up with the rest of the live Ken-Rad dealers *now*. Get your share of the real tube business that's on the way. You *can* with Ken-Rad Archatrons, the *standard quality* radio tubes.

Look What It Means to Be A Ken-Rad Dealer

You can offer a complete line of *standard quality* radio tubes — each tube individually tested — each tube *completely* degasified.

You'll enjoy a broad adjustment policy that protects you 100%. The customer *must* be satisfied.

You'll get profitable discounts — protection against price declines

and stock obsolescence . . . Your own selling effort will be backed up by a well-rounded program of national advertising and effective merchandising helps.

Do the most satisfactory tube business in your history this season — the Ken-Rad features you've just read will help you. Get all the details from your jobber.

The KEN-RAD CORPORATION (Incorporated)
Owensboro, Kentucky

one of the

3

oldest tube
manufacturers
in business

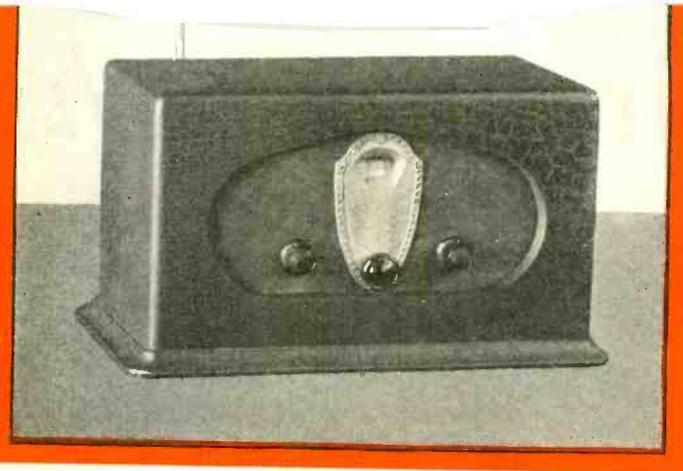
KEN-RAD

ARCHATRONS



THE SET THAT SELLS
THE MILLIONS

\$ **65** list
complete
with tubes



HERE it is, the set that's got them talking—the set that's got them buying—the set the millions have been waiting for.

They sell fast because they appeal to the pocketbook—to the radio bug—to the artistic eye. No batteries—no fuss—no hooking up—just plug into any light socket. Perfect reception, sharp tuning. Illuminated, single dial control—and a set that is really attractive.

This new ACME has been tried, tested, proved. It's built to sell and stay sold—to be a big profit maker. Start today to sell the millions—to make real profits on a big scale. Use the coupon or wire for details. Order a sample set today.

[[Bulletins No. 100 to 104 describe the complete line of ACME power units. Write for it today.]]

There is a special ACME set for distant stations, using A.C. tubes. \$65.00 list, less tubes. Write for complete information.

THE ACME ELECTRIC & MFG. COMPANY

1446 Hamilton Ave.
CLEVELAND, OHIO

Representatives in principal cities.
Established 1917 Member R.M.A.

The Acme Electric & Mfg. Co.,
1446 Hamilton Ave., Cleveland, Ohio

Send me complete information on the new ACME set, and reserve a sample set. AC-4. AC-7 for me. Check square for set wanted.

Name

Street

City

State



THE far corners of the earth are searched for rare and beautiful woods for Radio Master Cabinets. The best furniture designers—the most highly skilled workmen—a modern factory—all are employed to make for you Cabinets superlatively beautiful, superior in every quality.

We make them for every sort of set. Illustrated is a cabinet suitable for any standard type, including Atwater Kent, Fada, Crosley, King, Apex and Steinite. Beautifully matched diamond, walnut doors inlaid with carpathian elm. Doors fold back. Interior panel will be furnished mortised to fit any set if so ordered. Set may then be dismounted from original cabinet.

Send for our new, beautiful catalogue — see the complete line!

RADIO MASTER CORPORATION
Bay City Michigan

Cabinet by
RADIO MASTER
ONE OF THE WARD INDUSTRIES

Again
we repeat—

the

SPLITDORF FRANCHISE

- ① with Duplex Receiver
- ② with Phonograph Jack
- ③ with Power Amplifiers ("250" tube)
- ④ with Dynamic Loud Speakers
- ⑤ with Beautiful Cabinets - **and**
the biggest discounts!

- is the most profitable **FRANCHISE**



- Did you get your copy
of the new **Splitdorf** broadside?
— write for it today —

SPLITDORF Radio CORPORATION
Subsidiary of Splitdorf-Berblehem Electrical Company

NEWARK



NEW JERSEY

SCIENTIFICALLY CORRECT

This *FOLLY—*

THERE is a growing competition among radio manufacturers to see who can make and sell table models the cheapest. Dealers have seen the price level of sets listing in the neighborhood of \$100 steadily decline through the past few seasons and regard the coming season with apprehension for fear that this trend is drifting into a destructive price war where everybody suffers.

In the face of the casualties of 1927—a year notorious for its lack of profits in spite of increased volume—the manufacturing industry seems to be determined to slash prices still further and that means, naturally, slashing profits. And it means destruction to profits all along the line and loss to retailer and distributor as well. The situation does not concern the manufacturer alone.

Radio retailers and distributors are outspoken in their condemnation of this price-cutting war between manufacturers. Certainly, further curtailment of their already limited profits is going to be vigorously opposed by these two branches of the trade—especially at this time when all other factors point to an exceptionally good season for sales and profits.

ADMITTEDLY, radio selling is becoming increasingly competitive. And as time goes on the competition will become still keener. Yet the retail trade has learned to its bitter sorrow that price-cutting is not the answer to competition. To increase volume by cutting prices has already been proved utter folly by our own retail experience.

The public may appear to benefit temporarily. But

when radio equipment is handed out on a silver platter at the expense of the trade, the retailer becomes the principal victim of this misguided industry policy.

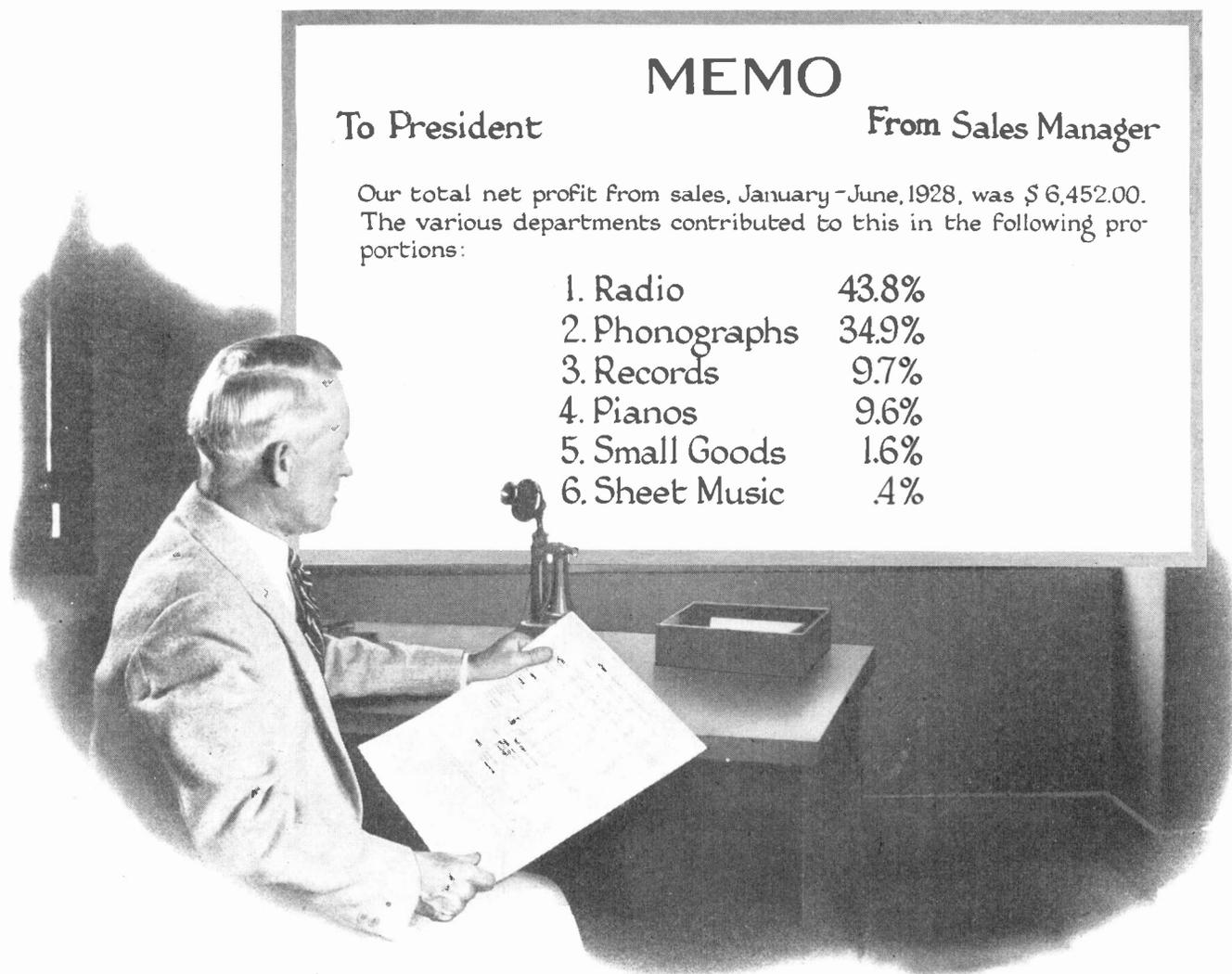
Why should manufacturers now adopt the same merchandising tactics which have already been discarded by the better retailers because they have been found unsound? The trade is asking just where this policy is going to lead to and what the outcome will be.

IT WILL lead us into a further aggravation of the present undesirable situation where everybody does a lot of business but nobody makes money. The trade experienced that condition acutely last year and has battled with it more or less ever since the industry started. The need is for relief by upward revision of prices. Continued “donations” of radio equipment to the public at still lower prices will only intensify the trade’s distress.

For, if the experience of older and wiser industries means anything, such practices lead only to a demoralization of business which will involve every branch of the industry. And, naturally, the outcome is bound to be another era of suspicion, distrust and “profitless volume.”

It is not too late to stop this price war. Let the actual costs of manufacturing and distribution, plus a normal profit, determine the price of merchandise. Manufacturers who base their prices on some other manufacturer’s price will find out when it is too late that they have been building a business on quicksand. If there is money to spare at present prices, far more will be accomplished by putting it into better tone quality.

Departmentalization



MEMO

To President

From Sales Manager

Our total net profit from sales, January-June, 1928, was \$ 6,452.00. The various departments contributed to this in the following proportions:

1. Radio	43.8%
2. Phonographs	34.9%
3. Records	9.7%
4. Pianos	9.6%
5. Small Goods	1.6%
6. Sheet Music	4%

IS RADIO a profitable proposition for you? Are you losing or making money on pianos, records, sheet music, phonographs?

If so, how much? How does volume, operating costs and net income compare in each of these major activities?" These are the vital questions any live radio-music dealer should be able to answer, almost instantly, and with a fair degree of accuracy, at least every three months. Yet, how many merchants keep such records? Speaking from my experience of having personally interviewed over 1,100 proprietors of radio-music stores I would say *less than one-half of one per cent.*

The reason is not hard to find. It takes time, and a little money, not much, however, in proportion to the results, to set up and operate such a system. Yet other types of business have been doing this very thing for years. The department store is an outstanding example. And department stores are recognized as astute merchandisers.

By Ray V. Sutcliffe

The Poppler Piano Company, Grand Forks, N. D., is also recognized as one of the outstanding merchandisers in the great Northwest by virtue of its consistent record for volume sales, aggressiveness and management. Last year it grossed over \$150,000, and this in an immediate trading population of less than 35,000 people—a real achievement in store management.

When radio appeared over the horizon, J. A. Poppler, president of this concern, was quick to recognize its merchandising possibilities and each year there have been many positive indications of a healthy growth in the business of this department. But, Mr. Poppler wanted to know more in actual facts, about the profits that this department was apparently contributing to the total net profit of his concern so at the beginning of this year Mr. Poppler departmentalized his business.

Last month the writer discussed this subject with Mr. Poppler. His enthusiastic comments confirmed my

—the Key to PROFITS

Individual records of each department of its radio-music business tell the Poppler Piano Co., Grand Forks, N. D., which ones are producing results

Merchants
who have
made radio
pay—
No. 19

Statement of Departments for First Six Months, 1928								
	Pianos	Radios	Phono- graphs	Small Goods	Sheet Music	Records	Total	Net Profit
Sales	\$25,118	\$16,063	\$11,725	\$10,191	\$5,210	\$4,656	\$72,963	
Cost of Merchandise	16,769	9,538	7,155	7,910	3,089	2,923	46,384	From
Operating Expenses	8,726	5,701	2,322	2,178	2,097	1,103	20,127	Departments
*Net Profit	\$ 625	\$ 2,824	\$ 2,248	\$ 103	\$ 24	\$ 630	\$ 6,452	*\$6,452 (8.84%)
Net Profit by Per Cent of Gross Sales	.85%	3.87%	3.08%	.15%	.03%	.86%	8.84%	
Operating Expenses Itemized							Total	
**Store Operation	\$ 1,298	\$ 424	\$ 384	\$ 519	\$ 454	\$ 324	\$ 3,403	
Rent	542	95	85	137	119	85	853	
Salaries	1,050	840	815	815	815	475	4,810	
Commissions	1,732	1,103					2,835	
Misc. Selling	1,014	276	275		198		1,762	
Autos	488	181	162	81			912	
Advertising	500	425	185	200	175		1,425	
Tuning and Servicing	754		84				838	
Drayage	371		124				495	
Insurance	255	46	46	70	46	23	464	
Taxes	282	52	52	78	52	26	522	
Administration	682	270	170	278	238	170	1,808	
Total Expenses	\$ 8,726	\$ 2,097	\$ 2,178	\$ 2,322	\$ 3,701	\$ 1,103	\$ 20,127	
Other Income and Expenses								
Income:								
Interest Earned on Time Paper						\$1,144		
Purchase Discounts						729		
Miscellaneous						13		
						\$2,154		
Expense:								
Interest Paid						\$1,144		
Pledged						16		
Piano Underwriters						26		
						\$1,186		
						\$ 1,186		From
						\$ 968		Miscellaneous
						\$ 968		Income
								968 (1.32%)
								Total Net Profit \$7,420 (10.16)

*Net Profit is cost of merchandise plus operating expenses deducted from sales.
**Includes telephone, telegraph, wrapping materials, heat, light and depreciation of equipment.

Table I
Statement of Expenses and Profits, by Departments, of the Poppler Piano Company

opinion that here is a matter which now warrants the earnest consideration of every music dealer in the country, especially if he is pushing radio goods. "It is high time," Mr. Poppler claims, "that the radio-music merchant put himself in a position to obtain a true picture of the relative worth of each of his many activities. The retail music business," he declares, "is composed of not less than six separate lines. Any one of these may make, or wreck, the dealer. In view of the vast amount of pertinent information an expense and income allocation system, such as the one I am using, will bring to light I now marvel that so few are being kept. I hope that any information that I may be able to contribute on my system will inspire others to build their business on a foundation of fact—not fancy."

THE corner stone of Poppler's business analysis structure is the profit and loss statement by departments. Operating such a system resolves itself into three elements: setting up the machinery for getting

these records: analytical objectives; and corrective action.

The logical departments for the average music house are: Pianos; Sheet Music; Small Goods; Phonographs; Radios; and Records.

All the expenses must be pro-rated for these departments. In some instances, such as rent, advertising, interest, taxes, insurance, and administrative expenses, percentages must be employed. While these, at best, must be approximations, this is infinitely better than no segregation whatsoever. Commissions, drayage, and special expenses must be carefully recorded and charged daily or weekly to the originating department.

The regular bookkeeper, with the assistance of an experienced accountant, and departmentalized cost sheets can find the time for these entries. Much of this work is already being done under existing, but less informative, methods.

The first of every month a separate journal page is opened for each of these six major activities. The ex-

Table II—DOLLAR Distribution of Expenses and Profits

by Departments and Major Items

ITEM	PIANOS	RADIOS	PHONO-GRAPHS	SMALL GOODS	SHEET MUSIC	RECORDS	TOTAL
1. Fixed Overhead.....	\$1,887	\$1,023	\$998	\$1,100	\$1,032	\$609	\$6,649
2. Fluctuating Overhead.....	2,911	605	754	500	454	324	5,648
3. Selling.....	3,246	1,803	400	200	373	000	6,022
4. Administration.....	682	270	170	278	238	170	1,808
Expense.....	\$8,726	\$3,701	\$2,322	\$2,178	\$2,097	\$1,103	\$20,127
Profit.....	\$623	\$2,824	\$2,248	\$103	\$24	\$630	\$6,432

Table III—PERCENTAGE Distribution of Expenses and Profits

by Departments and Major Items

ITEM	PIANOS	RADIOS	PHONO-GRAPHS	SMALL GOODS	SHEET MUSIC	RECORDS	TOTAL
1. Fixed Overhead.....	9.4	5.0	5.0	5.4	5.0	3.0	33.0
2. Fluctuating Overhead.....	14.5	3.0	3.7	3.0	2.2	1.6	28.1
3. Selling.....	16.2	9.0	2.0	1.0	1.9	0.0	29.9
4. Administration.....	3.4	1.4	0.8	1.3	1.3	0.9	9.0
Expense.....	43.5	18.4	11.5	10.7	10.4	5.5	100
Profit.....	9.6	43.8	34.9	1.6	0.4	9.7	100

1. Rent, taxes, insurance, salaries.

2. Autos, tuning and servicing, drayage, store operation.

3. Commissions, advertising, selling.

4. Executive salaries not chargeable to miscellaneous selling.

pense items are written across the top of these sheets. The left-hand margin carries a vertical column of numerals corresponding to the days of the month. Fixed expenses are pro-rated and entered under these respective subjects. Let us consider these items first.

Rent, or the rental rate, in case the building is owned by the company, is broken down according to the sales value of the number of square feet occupied by each department. This applies also to storage and administration space. Once this calculation has been completed it is a simple matter to make whatever slight corrections are necessary, from month to month, to allow for any redivisions of space. Windows should be figured at 25 per cent of total store rent, and then apportioned to each department according to the annual window trim schedule. If there is a second floor write its value at 25 per cent. This leaves 50 per cent for the main show room.

Referring to Poppler's itemization, it will be seen that he has charged approximately 40 per cent to pianos, 14 per cent to sheet music, 16 per cent to small goods, and 10 per cent to phonographs, radio and records respectively. Insurance, taxes, interest and administrative expenses are generally apportioned the same as rent.

Salaries and general store expenses also follow this same division with the exception of those obligations directly chargeable to a specific departmental activity.

Advertising, selling expenses, truckage, tuning and servicing, should be broken down and entered on the department sheet to which they properly belong.

ONCE the theory of expense allocation has been grasped, and the calculations applicable to one's own business have been made, the rest of function one, keeping the records, becomes a matter of routine. It is function number two—analyzing these figures, constructively—that calls for executive ability. Yet if this is not done the system had better never have been started.

The figures used in Table I have been, by request, arbitrarily chosen. They do not represent Poppler's exact volume and profit for the period stated but they are in proportion to the figures as Mr. Poppler found them. The three tables on this page are based on this key table. They represent a condensed tabulation, by percentages as well as dollars, of the salient features of the retail music business. Table III, departmental costs compared to net profit, is particularly illuminating. It mirrors the ultimate objective of such a cost keeping system. Let's look at this table. What do we find?

We find in Table III that Poppler's radio department cost him 18.4 per cent of total expenditures, to operate and that it was responsible for 43.8 per cent of his total net profit—and this includes the tail end months of April, May and

June. Does J. A. Poppler need to wonder whether or not he should push radio?

We find that phonographs were also well worth while during the first six months of 1928.

We find that it cost this firm as much to sell sheet music as it did the smaller musical instruments—yet the latter returned four times the profit of the former.

We note that the piano department is the most expensive to maintain, but that net profit justifies this expenditure. Records also, in proportion to selling costs, are good profit producers.

Searching for the reasons for these results we find the answers in the "Fluctuating Overhead" and "Selling" expenses plus, referring to Table I, the gross margin allowance on these various lines.

Profiting by this knowledge, the first definite revelation of the actual facts concerning the relative standing

(Please turn to page 115)

Table IV—Percentage Analysis of All Expenses

(Based on last column of Table I.)

	OF TOTAL EXPENSE	OF GROSS SALES
Store operation.....	17.0	4.6
Rent.....	4.2	1.2
Salaries.....	24.0	6.6
Commissions.....	14.1	3.9
Misc. Selling.....	8.7	2.4
Autos.....	4.5	1.2
Advertising.....	7.1	2.0
Tuning and Servicing...	4.2	1.1
Drayage.....	2.4	0.7
Insurance.....	2.3	0.6
Taxes.....	2.5	0.7
Administration.....	9.0	2.4
	100.0	27.4

Industry Voices Approval of "RADIO in Every Office"

Opens Up New Market

BY OSCAR GETZ
Vice-President, Steinitz Laboratories Co.

I am confident that you have opened up an entirely new and untouched market for radio sets. That you were the first to see the possibilities of such a plan for merchandising is evidence that you are a very constructive contributor to the progress of the radio industry.

The farmer has benefitted greatly by receiving up-to-minute market reports by radio and there is no reason why the business man should not have brought to his very desk, by radio, the latest information on important news events in connection with Industry and Commerce.

That the idea is practical goes without saying and if you can be instrumental in gathering together the various agencies that will put such a plan into execution, you will be doing both the business world and the radio industry a tremendous amount of good.

Such a progressive program as you have suggested deserves the wholehearted co-operation of every radio executive.

If I may be of any assistance to you, please call upon me.

Federated Approves

BY HAROLD J. WRAPE
President, Federated Radio Trade Association

I was very much interested in the article appearing in the July issue of *Radio Retailing* advocating the installation of a radio set in every office.

I think the plan is certainly an original one and has much merit. Am sure if an effort will be made on the part of the retailers to cover this field, they will be surprised at the number of sets that could be sold. As far as the broadcasting end is concerned, I know the broadcasters would welcome an opportunity to co-operate along the lines suggested in this article.

This is a fine idea. Let's put it over big. We will do everything we can to give this article the greatest possible publicity through the means of our association.

"Well Worth While"

BY LOUIS B. F. RAYCROFT
Vice-President, National Electrical Manufacturers' Association

It seems to me that the vital point in Mr. Kobak's suggestion is that there should be a business man's news broadcast service as a regular part of the set-up in every substantial station. The benefit to the radio manufacturer would follow as a matter of course.

The establishing of such a service is not as simple as it might be. More or less of that sort of thing has been attempted in the past, with more or less success. The first failure has been to recognize as definite a place and need for a business program as for a farm program, recognizing, of course, that a farm program is one kind of business program.

Co-operation of the newspapers and press services may not have been as whole-hearted in the past as necessary to a successful program. The planning of such a program has lacked that expert touch found so essential to other forms of program. Another exception, which forms an excellent example of lack of expert study, is the broadcasting of baseball scores. Baseball scores generally are read from copy prepared for newspapers and not for broadcasting, that is to say, for reading and not for listening. The result is "not so good."

A business program to be a broadcasting success must be prepared and delivered for the ear so that it may be listened to as a clear-voiced, easily understood and easily followed statement of fact or opinion. Anything less will fail in its appeal to the business man.

Bear in mind, too, that such a service would have a broader appeal than to the business man in his office. The business world is no longer stratified in exact layers. Interest in the daily and hourly progress of business is universal in these days of wide-

spread stock ownership, huge transactions on the stock market and of nation-wide business training schools and colleges.

It is my opinion that Mr. Kobak has started something well worth while.

Music Merchants Urge Plan Be Carried Through

BY IRWIN KURTZ
President, Talking Machine and Radio Men, Inc.

I have read with great interest the article entitled, "A Radio Set in Every Office." It presents a very interesting possibility from many viewpoints.

First—I can see where it would be distinctly worth while for firms who, in their advertising, desire to reach the business man and would thus be able to reach him at a time when his mind is full of business and he is not disturbed by the chitter-chatter of the home folk. Such a firm should sponsor the various news items which would make up the programs which could be sent out through the day.

Second—The failure of the business man to note what is going on during the day, in most instances never becoming aware of it until he reads his evening paper at home, has often resulted in tremendous losses to him and he would undoubtedly welcome an opportunity to provide himself with a radio set if he knew he could get service through it.

The beauty about the proposition from a radio standpoint is that if the business man puts in a set he must make it conform to the rest of his office furniture and cannot afford a cheap model.

Urges Co-operation of R.M.A.

BY HAROLD J. POWER
President, Harold J. Power, Inc.

I have read with much interest the article by Mr. Kobak. I am sure that his idea is sound and if properly executed would open a new and vast market for receiving sets.

I suggest that you get the Radio Manufacturers' Association actively behind this idea.

"Idea Is Extremely Valuable"

BY N. P. BLOOM
President, Adler Manufacturing Co.

I believe the idea an extremely valuable one. The great difficulty would be in putting on the air information that would be of interest to all business men and great care would have to be used to boil down detail news so that it would fit under a few basic heads and for the information to come out regularly each day, according to a set schedule.

I do not think that I could suggest the means of accomplishing this. Rather let that part of it be worked on by experts, such as the National Broadcasting Chain.

Has Made Installations in Several Offices

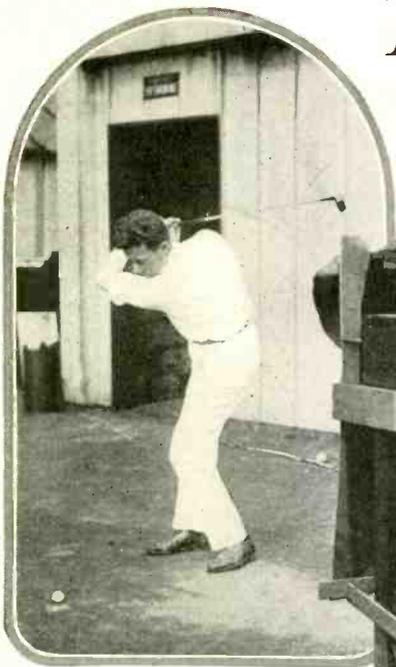
BY E. H. LEWIS
A. C. Lopez Co., New York City

It seems to us that a radio broadcast service of this nature should prove of real value to business men, and should provide a solid basis for an intensive radio trade campaign, especially by the dealers, to sell radio receivers for use in business offices.

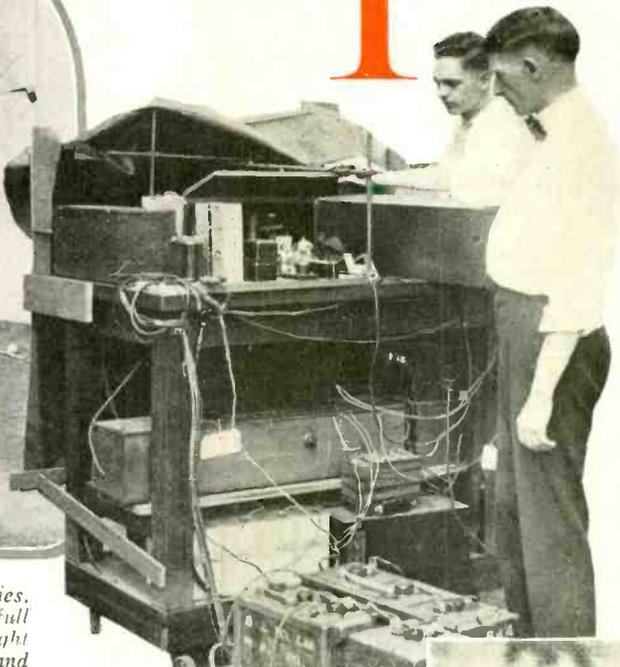
About three or four years ago, we were in the radio service and installation business on a wholesale scale; and came in contact with opportunities to sell radio installations of this kind. We made many such installations, although at that time there was no service of the type Mr. Kobak's editorial suggests. However, there was an attempt being made to broadcast stock quotations, and that service appealed to many of the business men for whom we made installations.

The **T**RUTH

About



Last month the Bell Laboratories, New York, "televised" a full length moving figure in daylight for the first time. The expense and bulkiness of the apparatus make it far from the commercial stage.



The present status of radio pictures explained—what it is, what the various systems are — its merchandising possibilities at this time

THE eagerness with which anything pertaining to the visual transmission and reception of images was examined by the radio trade during the R.M.A. show in Chicago is but a reflection of public interest in this new field. The public has already purchased tens of thousands of dollars worth of scanning discs and neon tubes without any assurance of practical results. The American urge to experiment and pioneer is readily capitalized, but there is enough shrewdness in the buyer to make him study the product before risking his dollar. The dealer must know what he is selling and what it will accomplish before he can face the customer successfully.

That there are pitfalls as well as profits in the new field is clearly apparent from a review of the progress of television in England. Selfridge's, a leading London department store, fired the opening gun by announcing a sale of "television" receivers at \$32.50. Buyers flocked, sought information and awaited demonstrations. Information came to them in the form of a magazine, the first issue of which was eagerly purchased. Dealers, following the example of the London store, stocked scanning discs, selenium cells and neon lamps. Television made news and the press supported it liberally at the start.

Within two months, however, a leading British trade paper reported "the television flurry is over." The public had examined and passed its judgment. Some dealers had lost friends by selling goods which did not give satisfaction. A trade publication, as a warning to dealers, had offered a \$5,000 prize for a satisfactory demonstration of the television devices



Typical still pictures—NOT Television—which it is possible to receive by means of the Cooley Rayfoto recorder. Several minutes are required to receive one photo.

and the challenge had been unheeded. The progress of television has been set back seriously in England by the premature appearance of equipment unsupported by broadcasting and unable to sell itself by demonstration. Dealers had stocked on faith instead of upon actual results.

In Boston, they are having a television flurry and another may be expected any time now in Chicago. A careful survey in Boston reveals that no dealer has been able to show bona fide television images to prospective customers. Unless dealers can do so soon, the television flurry will be over in Boston too. The experimenter market

knows its radio and it doesn't rent telescopes to look at the moon on cloudy nights.

All kinds of radio image equipment are now being offered to the radio trade. A host of manufacturers is

TELEVISION

By Edgar
H. Felix

jumping into the field, getting all set to be in on the mushroom market when anything pertaining to television sells. Many of them are making meritorious products which do what is claimed for them. While there is a seller's market and the public is clamoring for goods, no live dealer wants to overlook opportunities because that is when big profits are made. As long as one simple rule is followed—know your goods and represent them accurately—the television market is an opportunity. By observing that simple maxim, you may avoid the poisonous mushrooms, and profit from the sale of wholesome ones.

The principal radio vision products now being offered are scanning discs, neon lamps and still picture recorders. To sell a neon disc in any given territory, there must be available a television signal and a means of synchronizing with it which can make a recognizable image with the particular disc being offered. It must be possible to set up a demonstration in your store or laboratory so that you can show the experimenter just what kind of an image he may expect to receive. A 24-hole scanning disc is useless in a territory where only a signal intended for a 36-hole scanning disc is available.

It must be remembered, also, that absolute synchronization must be maintained between the transmitter and the receiver. This is accomplished by means, usually, of synchronous motors at each end, but unless both the transmitter motor and the receiver motor are on the same power line, absolute synchronization is almost impossible to attain, due to the differences between frequencies of the various power companies. In the majority of cases, of course, the television receiver will be on power lines far removed from the broadcasting station. In these instances, synchronization is maintained by hand manipulation of a variable rheostat connected with the receiving motor, keeping it in time with the impulses received.

Advances in the art will undoubtedly correct some of these details. At present, however, they must be taken into consideration.

The fundamental principles of all image transmission

Television Schedules

The present undeveloped condition of television broadcasting is shown by the following schedules,—the only information obtainable after contacting all stations known to be experimenting with television.

STATION	LOCATION	WAVE-LENGTH IN METERS	NUMBER OF HOLES IN SCANNING DISC	R.P.M. OF MOTOR	SCHEDULE OF TRANSMISSION
WGY	Schenectady, N. Y.	379.5	24	1260	Tues.-Thur.-Fri. 1:30-2 P.M.
2XAF	Schenectady, N. Y.	31.4	24	1260	Sun. 10:15-10:30 P.M. E.D.S.T.
2XAD	Schenectady, N. Y.	21.96	24	1260	
3XK (Jenkins)	Washington, D. C.	46.72	48	900	Mon.-Wed.-Fri. 9 P.M. E.D.S.T.
WRNY	New York	Unknown	36	600	Irregular
1XAY WLEX	Lexington, Mass.	62.5	48	Unknown	Irregular
WCFL	Chicago, Ill.	61.5	45	900	Irregular

NOTE—R.P.M. of motor divided by 60 equals number of pictures sent per second. Also the number of holes in the scanning disc spiral correspond to the number of lines scanned per picture.

are simple and, while the dealer is facing the technical buyer, he must be qualified by definite knowledge to answer the experimenter's questions.

The broadcasting of visual images is similar to tonal broadcasting in the means used for radiation and reception, but fundamentally different in the method by which the signals are collected at the transmitter and restored to their original form at the receiver. A device, consisting usually of a photoelectric system, responds to variations in intensity of light, converting them into electric currents. These variations are combined and radiated, received and amplified, and then converted back into light impressions so that they may be seen by the eye.

The transmission of visual images is somewhat more complex than sending tonal impressions. The eye responds to an infinitely greater number of impressions in a given time than does the ear. We cannot easily gather the impressions perceived by the eye into a single electrical current because of their vast number. Air wave impulses, sufficient to give us a complete musical reproduction, are a composite of many different frequencies, all of them compressible within a band of 0 to 5,000 cycles. This relatively narrow band covers from the lowest to the highest of the fundamentals and all the necessary overtones to enable a listener to distinguish any musical instrument. The total number of sound impulse impressions responded to by the ear in a second numbers only in the thousands. (Please turn to next page)

The eye responds to millions of impressions every instant and makes an impression of them upon the brain through the telegraphic nerve system. Examining a 4x5 photograph, you look over its entire surface in an instant. If it is of 133 screen, such as is used in high grade magazines, a 4x5 picture consists of 353,780 separate dots. A cheaper magazine uses a hundred screen, requiring 200,000 dots for a 4x5 picture, while even the poorest of newspaper reproductions have a screen of at least 45 and therefore consist of 40,500 dots in a 4x5 size.

For the transmission of such images by wire or radio, a separate electrical impression of the intensity of light and shade on each spot must be transmitted and reproduced at the receiving end. The eye comprehends these numerous impressions at one glance, but the eye of radio, the photoelectric cell, makes an impression of but one spot or area at a time. The transmission of the poorest kind of newspaper picture, 4x5 size, consists of sending 40,500 separate messages, each an electrical impression of the intensity of a single spot.

To secure the impression of motion, or television, the complete picture must be repeated at least sixteen times per second so that, the lagging effect of the eye gives the subject continuity. Therefore, to reproduce the crudest 4x5 picture, an electrical impression of 648,000 dots must be sent each second, as compared with the requirement of sending 5,000 impressions, the maximum necessary for tonal transmission. Consequently, assuming a 4x5 picture of the crudest newspaper screen as the minimum standard of an image having entertainment value, 125 times as much ether space is required for its transmission than is used for sending a complete musical program. This required ether space amounts to double the entire present broadcasting band!—Obviously, an impossible procedure at this time.

Any sacrifice from this standard, admittedly a low one, is attained by subtracting from the clarity or stability of the image. For practical purposes, it is difficult to conceive of any widespread system of radio visual transmission which can be accommodated on a conventional broadcast channel. Short waves are satisfactory for experimental purposes, but the public at large cannot be served on short waves because, first, they are not available, being required for much more important national and international communication; second, they require a new and separate receiving set for reception; and third, fading and skip distance effects make their reliable reception over large service areas impossible.

Assuming a maximum modulation of 5,000 cycles and considering that sixteen complete pictures must be sent each second for television, 312 is the maximum number of image areas of which a television picture sent on a broadcast channel may consist. If we reduce the size of such a picture to one square inch, that is to 1x1 inches in size, it would be equivalent to 17 screen, or about one-third the clarity of the poorest kind of newspaper picture. Furthermore, this assumes that no means of radio synchronization is employed which would require additional ether space. Obviously, such an image leaves much to be desired from the standpoint of entertainment value.

In spite of these difficulties, practical television is as certain as safe commercial aviation. But television must await the discovery of a simple, inexpensive means of sending more than one visual image impression at a time. So long as we must send impressions of the subject point by point in a series progression, television will remain only an experimental art, conducted for the scientist and inventor rather than for the home user.

HOW TELEVISION IS NOW CONDUCTED

THE television signals, now being radiated, are obtained by setting a subject before a bank of flood lights. A scanning disc is used at the transmission point which reflects light from the subject point by point in a regular, predetermined order to a photoelectric cell. The photoelectric cell may first "look" at the upper right hand corner of the subject as impression number one. Light is reflected on a photoelectric cell through a tiny aperture from that point in the image. As a result, an electric current, proportionate to the intensity of light

reflected from that point, flows through the photoelectric cell. The disc scanning hole then moves slightly to the right, making a second impression, and so on, point by point, an electrical impression is made of the top line of the picture. Where the subject is black, little light is reflected and little photoelectric current flows; where it is white, such as in a white background, much photoelectric current flows, producing maximum modulation.

Having swept across the upper line of the subject, the second hole of the scanning disc falls into line and makes a series of impressions immediately underneath the first. This is continued for as many "sweeps" of the subject as the scanning system contemplates. For example, WGY is radiating signals for a 36-hole disc so that there are 36 sweeps of the subject for one complete impression; the Jenkins system, using short waves, is making 48 lines.

FUNDAMENTAL LIMITATION TO THE ENTERTAINMENT VALUE OF TELEVISION

INASMUCH as all of these systems (there are no exceptions to this rule) depend upon reflecting a beam of light from the subject to a photoelectric cell, the range of the "eye" of television is

necessarily limited. The subject must be sufficiently close so that a beam of light reflected from it will cause a change of electric current through the photoelectric cell. For a standard potassium photo cell, this range is limited to about one foot and this fact is the reason that so far only faces have been "televised" with its aid. The public imagines football games and prize fights coming before its eyes through television scanning discs, but the most we can hope for, at the present time, is profiles and full front views of single faces. If we attempt to crowd two faces before a television scanning disc, the number of images gathered is so few that the faces become unrecognizable.

A FEW weeks ago, the Bell Laboratories showed an improved photoelectric cell which permitted, for the first time, the scanning of a full size human figure. This was used in connection with the same television transmitter and receiver which had been shown with such acclaim to the world nearly a year and half previously. Among the elements of the reproducer are synchronizing devices, a neon tube with 2,500 pairs of elements and a room full of control instruments. At the recent demonstration, the statement of Walter S. Gifford, president of the American Telephone and Telegraph Company, which was originally made nearly two years before, was again given out stressing the fact that television is far from the point where it may be introduced into homes. "The elaborateness of the equipment required," says Mr. Gifford, "by the very nature of the undertaking, precludes any present possibility of television being available in homes and offices generally." All of the limitations of channel shortage and lack of detail, more fully described in subsequent paragraphs, apply to television transmission with the more sensitive cell.

One by one these problems may be overcome, but to the engineer who understands them, it looks like a matter of many years.

“. . . the American urge to experiment and pioneer is readily capitalized, but there is enough shrewdness in the buyer to make him study the product before risking his dollar . . . the dealer must know what he is selling and what it will accomplish before he can face the television customer successfully . . .”

At the receiving end, we obtain an electric current similar to that flowing through the photoelectric cell at the transmitting point, through the usual transmission and reception processes. When these currents are sufficiently amplified, they are applied to a neon tube. The intensity of the light of the neon tube then varies exactly as the light reflected on the photoelectric cell through the scanning system. Considerable amplification is required to cause the neon tube's light output to fluctuate visibly in this manner and no system has yet been demonstrated which does not need at least a five-stage audio amplifier to make even a powerful television signal cause the neon tube to fluctuate sufficiently to make a visible image reproduction.

But this is not the most important problem. Experimenters can make five-stage audio amplifiers work. The image is reconstructed at the receiving point by watching the neon tube through a series of pinhole apertures in a revolving scanning disc. The receiving scanning disc must be precisely similar to that used at the transmitter to set up the image. If an attempt is being made to reproduce the face at the transmitting end in 1x1 size at the receiving end, the scanning disc consists of a spiral of holes an inch apart. The neon tube at the receiving end should have a plate of at least 1x1 size so that the image can be reproduced.

At the precise instant that the upper left hand corner of the subject at the transmitter is being "examined" through the hole in the scanning disc by the photoelectric cell, the scanning disc at the receiving end must also be "looking at" the upper left hand corner of the plate of the neon tube. Both discs must then sweep across the top line of the picture in exact synchrony, the receiving disc completing its one inch trip across the plate of the neon tube at the same rate that the scanning disc at the transmitting end makes its sweep of the top of the subject. The neon tube at the receiving end fluctuates in intensity with the shading of the picture. This perfection of synchrony must obtain while 24, 36 or 48 apertures pass over the subject at the transmitting end and over the plate of the neon tube at the receiving end each sixteenth of a second.

The importance of perfect synchronization cannot be overestimated. The most advanced public demonstration of television, so far given, was that made by the Bell System two years ago. This made a picture of 50 screen, one inch square, or a total of 2,500 image points per picture. The impression was enlarged to motion picture screen size by means of a neon tube consisting of 2,500 pairs of elements. Each of these was mechanically switched in, one at a time, sixteen times per second, by a rotary contact switch. This amounted to a total of 40,000 contacts per second and each contact had to be accurate within a forty-thousandth of a second so far as time is concerned. This remarkable result was obtained by using two separate synchronizing signals sent on short wave channels.

The difficulties of manual synchronization, which is being attempted by television systems having no specific means of synchronization, can best be appreciated by imagining what the result would be if the motor used at the Bell System demonstrations were slightly off speed. At correct synchrony, let us suppose, the motor operating the 2,500 contacts revolves at 2,000 revolutions per minute. It makes 2,400,000 contacts per minute, each at the correct instant. Suppose the motor ran off speed five parts in ten thousand, which would make the motor turn 2,001 r.p.m. instead of 2,000. Every sixteenth of a second, then, 2,512 contacts would be closed instead of 2,500 and the second picture would already be 33½ per cent off synchrony so that the image would not be recognizable for more than one sixteenth of a second. Those now experiencing difficulty in the hand operation of a d.c. motor by means of a rheostat, must appreciate they are attempting manually to stabilize the speed of a motor within ten thousandths of a per cent.

SOME systems contemplate the employment of sixty cycle alternating current with power lines as the means of synchronizing. This may be satisfactory when the listener is on the same power line as the broadcasting station radiating the television signal. In that case, both transmitter and receiver use synchronous motors, operating from the same power source. Where there are rural and d.c. districts involved, or non-interconnected and non-synchronized power lines, synchronization by this method is uncertain. The claim is made by some, however, that

current from independent power systems is sufficiently close to rated frequency to permit the synchronization of television from any sixty-cycle line.

Electric clocks are simply small synchronous motors, operating from sixty-cycle a.c. It is the practice of power houses to check the time with Western Union each hour and to speed up or slow down the alternators so as to make up for the loss or gain in cycles experienced. Since we require accuracy of one part in 10,000 to hold a reasonable image for a fraction of a second, it is obvious that there is considerable variation in "60" cycles. Only if special arrangements were made among alternating current power systems to maintain absolute synchrony, a condition not yet obtaining, can there be any widespread use of a.c. synchronization for television.

In the New York area, for example, there are, within twenty miles of the metropolitan district, at least six unsynchronized alternating power systems and two important direct current areas, each of which would require special broadcast transmission which would not be interchangeable with the other districts. Practical and widespread television is not attainable until synchronizing

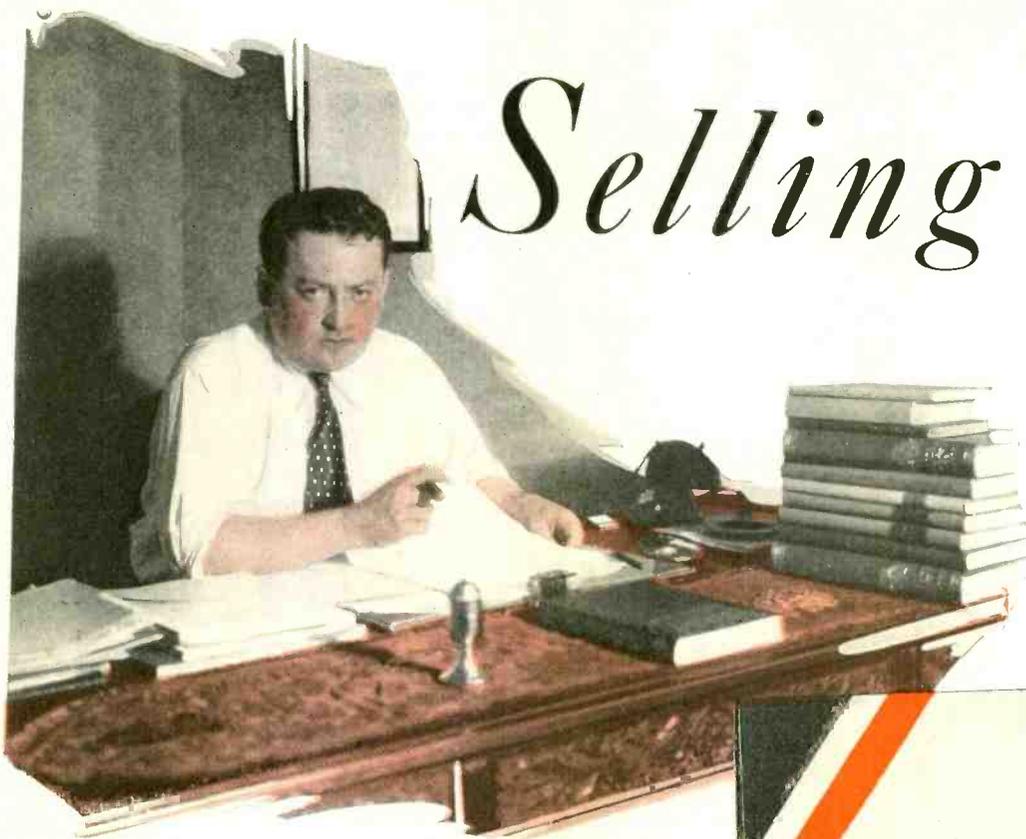
signals are radiated with the television transmissions or crystal oscillators of sufficient stability to be accurate to one part in a million are available at low cost.

The next point to consider is the availability of channels for television reception. The ideal would be to transmit television occasionally through ordinary broadcasting stations so that the ordinary receiver could be used and so that the television program could be associated with musical entertainment. Our broadcasting structure has been designed for a maximum modulation of 5,000 cycles, making possible the arrangement of a spectrum with ten kilocycle separation. Most of the television promised in the broadcast band does not fit within these channel limitations.

It is easy to calculate the frequency band required by a television transmission using the usual scanning disc having a single spiral of apertures. These discs usually rotate at 960 r.p.m., that is, one revolution each sixteenth of a second. The maximum number of impressions made by a single sweep of the subject is usually equal to the total number of holes in the disc. Thus, with a 24 hole scanning disc, which is the fewest number of sweeps of the subject to which even the simplest profile can be reduced, each sweep of the subject makes 24 image impressions on the photoelectric cell and the entire subject therefore consists of 24x24, or 576 impressions. With the meagre illumination afforded in the five hundredth of a second or less that the subject is illuminated at the receiving point, eighteen or twenty images per second should be used rather than the usual sixteen used in motion picture practice, where every detail of the reproduction remains illuminated on the screen for at least one thirtieth of a second. The total number of impressions per second is the product of the number of holes on the disc and the number of revolutions per second. In the case of a 24 hole disc making sixteen revolutions, 9216 images per second are sent. Since there are upper and lower side bands in transmission, a frequency space of twenty kilocycles is required for modulation, infringing upon at least three broadcast channels. With a 48 hole disc, revolving at 16 r.p.s., about seven broadcasting channels are used.

SEVERAL attempts to circumvent the carrier channel difficulties have been made by ingenious inventors. Senabria, co-operating with WCFL of Chicago, uses a scanning disc with three sets of spiral apertures so that his disc revolves at one-third the usual speed. He makes a fifteen line picture, each picture consisting of a scanning of only one-third of the subject but, by slightly

(Please turn to page 115)



“ Selling ” The

Seven volumes on furniture design are always on Chester Abelowitz' desk—a permanent part of his radio sales organization

EVERY city has its “Fifth Avenue” and every city has its “best people.” That’s why the unusual story of the “Brunswick Salon, Fifth Avenue, New York City,” should prove decidedly valuable to everyone who sells radio.

Contrary to expectations, the Brunswick Salon has no connection whatever with the Brunswick company. It is owned, operated and managed by Chester Abelowitz, probably one of the best known names in the music trade.

The title of this story might just as well have been, “Turning a Lemon Into a Million Dollar Business.” Prior to 1924, the store was operated by a phonograph manufacturer as a retail outlet. It flopped. Twenty-four hours after the store was vacated, Abelowitz moved in and started from scratch to build up a complete new business.

How it was done forms the basis of an extraordinary “success story.”

The sales methods of the Salon are complete and comprehensive. It has, first, adequate stock of quality radio cabinets, especially selected to appeal to “the best people.” Then it goes out after hand-picked prospects in an orderly and thorough routine. Abelowitz “dresses up” his sets and radio-phonograph combinations in cabinets that range in price from \$200 to \$5,000—then he concentrates on the people who can afford to pay those prices.

Membership lists of society’s best clubs are obtained as soon as they are published by the club. These are thoroughly scanned and likely prospects marked for attention. Individual, personal letters are then written to each prospect, explaining what the Salon is, what it sells and how it can be of service. No form letters are used. A personal letter gets attention. Form letters, particularly to the “best people,” are thrown away. The society “Blue Book” is also used to good advantage in getting names.

The list of marriage licenses is obtained from the



Service card sent out by the Brunswick Salon suggesting that customers have their sets in good order to hear some outstanding program. And, sh—don't faint—the service charge is \$5 per call.

License Bureau every day and prospects noted. Newspapers are watched for notices of weddings and engagements. Contacts have been established with real estate dealers so that every time a new family takes up its residence in the neighborhood Abelowitz knows about it. Ten per cent commission is paid the real estate men when a sale is closed from one of their leads.

LIST-BUILDING—obtained prospects—is the nucleus of any business, Abelowitz says. First of all you’ve got to have the people to sell to; then you need the merchandise to sell them. Abelowitz has the merchandise—in the form of exquisite period furniture—and he leaves no stone unturned to get the prospects.

He has also found interior decorators a prolific source of sales. When a new house or apartment is to be decorated, or an old one refinished, Abelowitz knows about that, too. And the decorator gets ten per cent for recommending one of the Salon’s period cabinets.

The “best people” all over the country, and in Europe as well, have purchased radio sets or phonograph combinations from Abelowitz. And he capitalizes the fact by publishing a tastefully gotten up folder, the second page of which is devoted to a list of the prominent people who are numbered among the Salon’s contented customers. H. R. H. the Prince of Wales is modestly listed

THE red menace that spells disaster to the music dealer's profit in radio lurks in every trade-in

deal which besets his peace of mind. More than any other dealer in radio he is vulnerable to the dangers of the trade-in, even with his long experience in trading in pianos, phonographs, etc. First of all, his customers expect him to give more consideration to trade-ins than they expect of the department store, the furniture dealer, or the radio shop. Secondly, he is selling a higher average-priced set than other radio dealers; his customer is

By C. L. Dennis

Formerly Manager, Merchandising Service Bureau,
Music Industries Chamber of Commerce

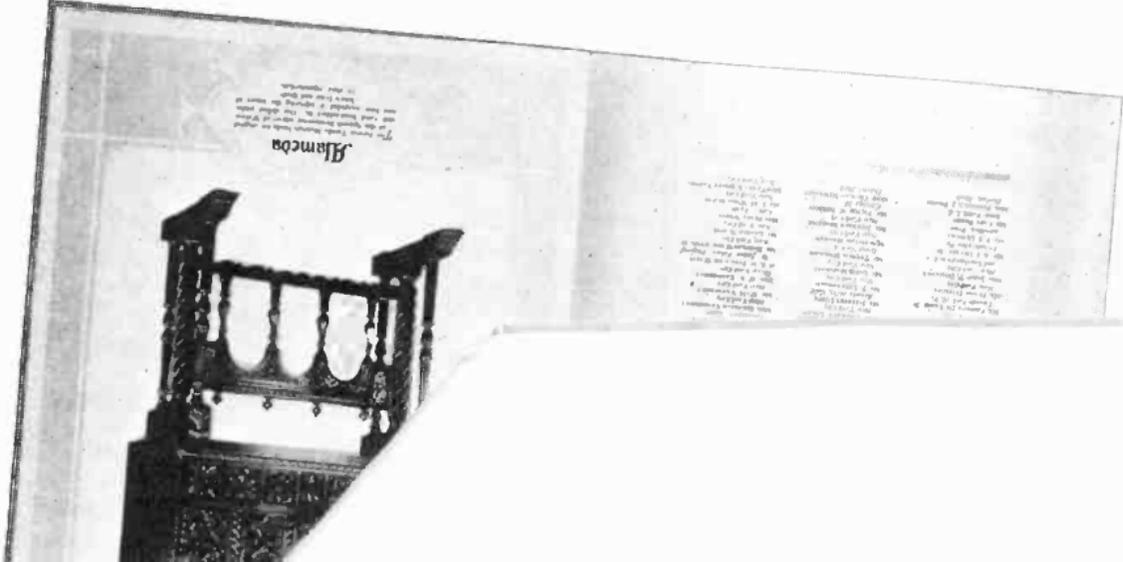
more likely to have a cheap old "cluck" to trade in. There is no help for it; it is "just too bad," but the music dealer's customer looks at it that way. Therefore the music dealer must be on the lookout for danger signals in his radio trade-in business.

Fortunately, the music dealer, better than any other class of dealer handling radio, knows how to meet the trade-in problem. He has been through the mill with pianos and phonographs. He has had to take in trade the old square piano or the straight upright, for the

their radio sets from the same place
the Prince of Wales buys his? And
how!

There isn't a town in the United States that hasn't got a comparative situation. The "best people" can afford to buy the best products and they must buy somewhere. Their names, capitalized as your clientele, will lead many ordinary sales right up to your counter.

Fine furniture is the bait that hooks the sales to those who consider themselves "a trifle superior" and therefore must have a radio set in the same class. Abelowitz



(Please turn to page 101)

believes the housing of the set is its most important part. It must harmonize with its surroundings. Four years ago he got the first glimmerings of the idea and

to Trade-ins ?

newer types of player pianos and reproducing grands. He has had to tie up a lot of his profits in used instruments of doubtful value. He is, therefore, a wary bird. His hide was saved in the phonograph business, when the trade-in problem became most pressing, by the rapid change from the old style machine to the remarkable new reproducing mechanism of today. He could easily point out to a customer what slight selling value the old machine possessed, if he took it into stock to apply on the price of a new type instrument.

With radio it is different. The music dealer has never had to consider as fast-changing a line of merchandise as radio. Old models have given way to new improvements with bewildering rapidity. Even his own stock becomes obsolete on his hands, if he does not watch it carefully, and sometimes when he does.

What can he do about it, so far as this trade-in demand is concerned?

Radio Retailing's recent survey of the music trade showed us that the music trade in general has avoided the evils of a large volume of trade-in business in radio. A large majority of radio-music dealers kept their trade-ins under ten per cent, although the few dealers reporting as high as 50 and 60 per cent, brought the general average up to 14.8 per cent.

LET us consider the horrible example of those radio dealers of the music trade, fortunately few in number, who reported that half or more of their radio sales included trade-ins. One of them even reported that 90 per cent of his sales were so burdened. Think of it!—Nine out of ten of his radio customers sold him back an old set.

Out of this group of unwise dealers reporting 50 per cent or more of their radio sales to include trade-ins, not one reported that he could dispose of the trade-ins profitably. Nor could one of them show a profit on his radio business as a whole. Some of them could give no analysis of their cost figures. Either they did not know, or they showed an actual loss. The probability is that every one of these dealers is losing money on his radio business. It is significant that several of them joined in the cry for greater trade discounts.

What do we learn from the experience of the wise dealers who kept their trade-ins under ten per cent, and the unwise ones who let fully half their customers sell them old sets in part payment for new ones? The answer is obvious:

When a dealer lets his trade-ins run above ten per

cent, he is inviting a red ink entry in his profit and loss column.

Out of the entire number of radio-music dealers reporting on trade-ins, the survey showed, 65.5 per cent had losses on their trade-in business. Most of the remaining 34.5 could only break even on their trade-ins, at best. Yet the music dealer is an old hand at this sort of thing. If the music dealer cannot make money out of the trade-in, it is proof positive that it is a dangerous item in radio selling.

All reports indicate that the trade-in is a growing factor, however; it is a necessary evil, and the only course is to reduce it to a minimum. The high average price of \$218.40 per radio set installation by the music dealer, unquestionably invites a larger percentage of trade-in deals to the music store than to other radio stores. The radio fan whose desire has been aroused for a better radio set is pretty sure to have a cheaper one he would like to dispose of. It is old and obsolete, yet it represents a real value to him. Naturally he wants to dispose of it, and just as naturally, he turns to the dealer who is eager to sell him a new, high-priced set.

The music dealer must be wary. His customer regards him differently than he does the furniture dealer, whom he does not expect to take back an old dining-room set in exchange for a new one; differently from the department store, which is not regarded as a parking place for second-hand merchandise. The music store customer has a different state of mind toward his deal, and the music dealer must create his own psychology as to the marketability of the used set taken in

trade. Tactfully he explains to the customer just how little the old set is worth to him as a selling proposition. It is fortunate for the music dealer, perhaps, that his natural liking for the self-contained electric set enables him to look upon the old style sets with something of the same disdain that he looks upon the old style phonographs, when they come to him to apply as down payments on the modern type of machine.

The dealer taking a set in trade becomes the pursued, rather than the pursuer. He must exercise the same caution, or greater caution, than he would in buying new merchandise. His merchandise cost is 62.7 per cent of his retail selling price, and he must think of it when he takes used merchandise into stock. Moreover, he must think of the slowing up of his turnover, because used sets do not move as rapidly as new sets.

Think of the profits that are tied up in second-hand

(Please turn to page 101)

“TRADE-INS,” *Mr. Dennis* says, “should be held to a maximum of ten per cent.”

Yet how can they be avoided, and, once accepted, how can they be disposed of profitably?

Let's have your own contribution to this puzzling dilemma.

An important message to RCA Radiola Dealers

Two out of three families in your market are still without radio in their homes. Most of them are now debating what will be their first radio set.

That is a big market for you.

Nine out of ten families in your market already owning radio sets are still fussing with batteries or with obsolete receivers and speakers, and would like to trade in their old sets for modern A.C. operated instruments.

That is another big market for you.

Radio is sold on prestige, performance and price.

Radiolas are the biggest and easiest sellers because of their outstanding prestige, their acknowledged superior performance, and their big value.

They are the recognized standard of the industry.

Radiola sales this year have set new records. The fall demand for Radiolas from new buyers will be the greatest in the history of the industry—and the "trade-in" market should be even larger.



*This sign marks
the leading dealer
in every community.*

RCA factory production schedules and sales promotion plans for the next few months are on a scale to give RCA Radiola Dealers full opportunity to cash in on the biggest market ever seen in radio.

RADIO CORPORATION OF AMERICA NEW YORK CHICAGO SAN FRANCISCO

RCA Radiola

MADE BY THE MAKERS OF THE RADIOTRON

To help you get your full share of the big fall market

No merchandise sells itself—no matter how good it may be.

It has to have behind it—every day—aggressive sales promotion by the manufacturer and the dealer.

The Radio Corporation of America is backing its dealers with the kind of sales promotion that makes sales easy for the aggressive dealer, with a bigger volume than ever before.

Here are some of the big things that are on the schedule:

NATIONAL MAGAZINE ADVERTISING

Color pages and black-and-white in the "best sellers", including the four great weeklies—*Collier's*, *Liberty*, *Literary Digest* and *Saturday Evening Post*.

FARM JOURNAL ADVERTISING

Special color and black-and-white pages in farm papers featuring RCA merchandise specially adapted for best results in unwired homes.

NEWSPAPER ADVERTISING

City dailies all over the country will carry still more of the big RCA copy that has been the sensation of radio advertising.

RCA BROADCASTING

Two big hours on the air over the National Broadcasting Company network:

1. The Friday morning RCA-Damrosch Hour of Music for the schools, beginning in October.
2. The Saturday afternoon RCA Demonstration Hour—every week, to provide the best music for RCA Radiola dealer demonstrations.

DEALER SALES HELPS

Sales-pulling Window Displays for every-day merchandising and special sales drives.

Direct-by-Mail campaigns to bring in new customers and keep old ones on the books for replacements and "trade-ins."

Illustrated booklets to be used as mail "stuffers" and counter "pick-ups."

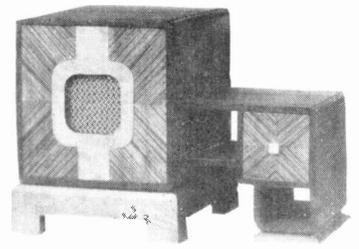
Advertising mats for use in home-town papers with dealer's own signature.

RADIO CORPORATION OF AMERICA NEW YORK CHICAGO SAN FRANCISCO

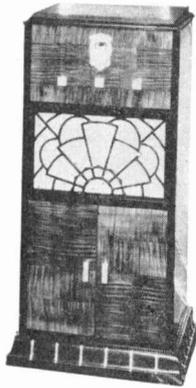
RCA Radiola

MADE BY THE MAKERS OF THE RADIOTRON

ART MODERNE⁹ as Applied to RADIO



(ABOVE—RIGHT)
*Watson Table &
Furniture Co.,
Watson, Pa.*



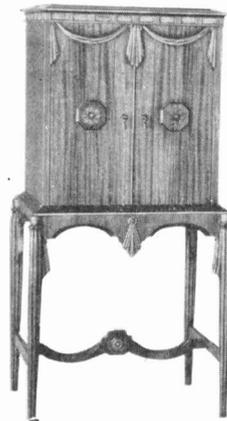
(ABOVE)
*Arborphone Division,
Consolidated Radio Corp.,
Ann Arbor, Mich.*



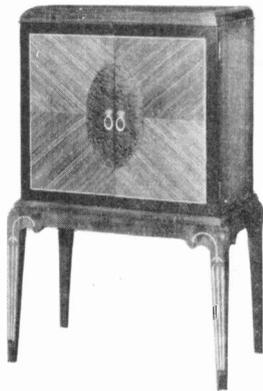
(ABOVE)
*Radio Master Corporation,
Bay City, Mich.*



(ABOVE)
*Superior Cabinet Co.,
Muskegon, Mich.*



(BELOW)
*Frank Hinners Co., Inc.
55 West 42nd Street,
New York City, N. Y.*



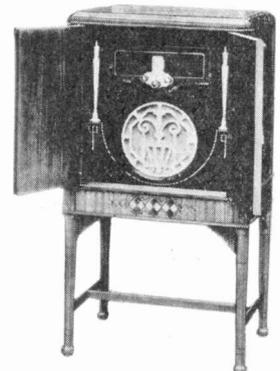
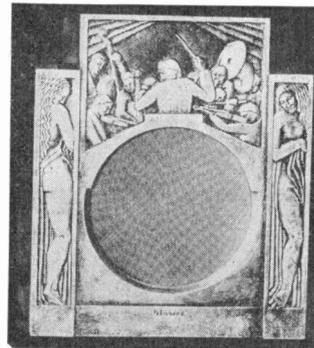
(LEFT)
*I. A. Lund Corporation,
1018 S. Wabash Avenue,
Chicago, Ill.*

(RIGHT)
*Udell Works,
28th Street at Barnes Ave.,
Indianapolis, Ind.*

(BELOW)
*Adler Manufacturing Co.,
Louisville, Ky.*



(LEFT)
*Bay View
Furniture Co.,
Holland, Michigan*



"Radio Retailing's"

ANNUAL CATALOG and DIRECTORY

August, 1928

THE publishing of information concerning radio products, together with the name and address of the manufacturer, is a feature of *Radio Retailing's* editorial service. This service is without charge of any kind to the manufacturers listed. All manufacturers are sent questionnaires and lack of representation in these lists means lack of co-operation from the manufacturer. The following specifications are those of receiving sets, all types of reproducers and furniture.

SPECIFICATIONS of RECEIVERS

Note:—The specifications from the following companies arrived too late for proper alphabetical classification and will be found on page 88: A-C Dayton Co., American Bosch Magneto Co., Bosworth Electric Mfg. Co., Edison Co., Inc., Thos. A., Grigsby-Grunow Co., Kennedy, Inc., Colin B., King Mfg. Corp., Langbein-Kaufman Radio Co., National Carbon Co., Philadelphia Storage Battery Co., Radio Corp. of America, Shamrock Mfg. Co., Tyrman Electric Co.

Name and Address of Manufacturer	Model No.	List Price	Style of Cabinet	Type of Reproducer Built In	A.C. or Battery-Operated Set	Total Watts per Hour Consumed by A.C. Set	No. of R. F. Stages	No. of A. F. Stages	Rectifier Used for B-Supply	Plate Voltage on Last Audio Stage	Overall Dimensions of Set H—W—D	Chassis of this Model Sold Separately	Overall Dimensions of Chassis H—W—D	Number and Types of Receiving Tubes Used
Amrad Corp. Medford Hillside, Mass.	Nocturne	\$295.00	Console	Magnavox†	A.C.	120	3	2	281	380	50x29½x17	No	6½x18x11	4-226 1-227 1-210 or 250 2-281
	Concerto	320.00	Console	Magnavox†	A.C.	120	3	2	281	380	50x30½x17	No	6½x18x11	
	Sonata	475.00	Console	RCA-105†	A.C.	120	3	2	281	380	51½x34½x17½	No	6½x18x11	
	Opera	875.00	Console	RCA-105†	A.C.	120	3	2	281	280	57x35x20	No	6½x18x11	
†Dynamic														
Andrea, Inc., F. A. D. Jackson Ave., Orchard & Queens Sts., Long Island City, N. Y.	10	110.00	Table	Cone Cone	A.C.	50	3	2	280	180	9x21x12	Yes		5-227, 1-171, 1-280 5-227, 1-171, 1-280 5-227, 1-171, 1-280 5-227, 1-171, 1-280 5-227, 1-171, 1-280
	11	135.00	Table		A.C.	50	3	2	280	180	11½x25½x13½			
	30	187.50	Console		A.C.	50	3	2	280	180	40x25x16			
	31	235.00	Console		A.C.	50	3	2	280	180	50x29x17			
	50	225.00	Table		A.C.	100	4	2	280	180	350			
	70	340.00	Console	Dynamic	A.C.	100	4	2	281	350	11½x27x17 41x29x19			* 6-227, 2-210, 1-281 6-227, 2-171, 1-280 6-227, 2-171, 1-280
	265-A	95.00	Table	Bat.	60	4	2	280	180	10½x20½x13½	5-201A, 1-171			
	475-A	185.00	Table	Bat.	4	4	2	280	180	11½x25½x13½	6-2J1A, 1-171			
	SF-45-775	285.00	Console	Bat.	4	4	2	280	180	50x29x17	6-2J1A, 1-171			
	480-B	300.00	Table	Bat.	4	4	2	280	180	13½x33½x15½	7-2J1A, 1-171			
SF-50/80	400.00	Console	Bat.	4	4	2	280	180	52½x33½x18½	7-201A, 1-171				
*These sets are made in two models with push-pull amplifier for 2-210 and 1-281 rectifier or for 2-171 and 1-280 rectifier.														
Apex Electric Mfg. Co. 1410 W. 59th Street, Chicago, Ill.	36	85.00	Metal table	Optional	A.C.	55	3	2	280	165	7x17½x12	No		4-226, 1-227, 1-171A, 1-280
Arborphone Division Consolidated Radio Corp. Ann Arbor, Mich.	45	75.00	Table		A.C.		3	3	280			Yes		4-226, 1-227, 2-171
	55	185.00	Table		A.C.		4	3	280			Yes		4-226, 1-227, 2-171
Atwater Kent Mfg. Co. 4701 Wissahickon Ave. Philadelphia, Pa.	40	77.00	Metal table		A.C.	45	3	2	280	180	7x17½x10	No	4½x16x6½	4-226, 1-171, 1-227
	40-F	49.00	Metal table		*A.C.	45	3	2	280	180	7x17½x10	No	4½x16x6½	4-226, 1-171, 1-227
	42	86.00	Metal table		A.C.	60	3	2	280	180	7½x17½x10	No	4½x16x6½	4-226, 1-171, 1-227
	42-F	96.00	Metal table		*A.C.	60	3	2	280	180	7½x17½x10	No	4½x16x6½	4-226, 1-171, 1-227
	44	106.00	Metal table		A.C.	70	4	2	280	180	7½x21x11	No	4½x19x6½	5-226, 1-171, 1-227
	44-F	116.00	Metal table		*A.C.	70	4	2	280	180	7½x21x11	No	4½x19x6½	5-226, 1-171, 1-227
	52	117.00	Metal table		A.C.	60	3	2	280	180	30x18x11½	No	4½x16x6½	4-226, 1-171, 1-227
	48	49.00	Wood table		Bat.	3	2			135-180	6½x19½x6	No	4½x16x6½	5-201A, 1-171A
	49	68.00	Wood table		Bat.	3	2			135-180	6½x21x6	No	4½x19½x6	5-201A, 1-171A
	41	87.00	Metal table		†D.C.	35	3	2		90	7x17½x10	No	4½x16x6½	7-112A
	*25 cycle models. †110 volt.													
Bremer Tully Mfg. Co. 656 W. Washington Blvd. Chicago, Ill.	6-40	130.00	Table	Magnetic	A.C.	50	3	2	280	170	10x19x10½	No	7x17x9	4-226, 1-227, 1-171
	6-41	190.00	Console		A.C.	50	3	2	280	170	38x22½x13	No	7x17x9	4-226, 1-227, 1-171
	7-70	150.00	Table		A.C.	50	3	3	280	170	10x21x12	No	7x19x11	5-226, 1-227, 1-171
	7-17-M	245.00	Console	Magnetic	A.C.	50	3	3	280	170	49x24x16	No	7x19x11	5-226, 1-227, 1-171
	7-71-D	280.00	Console	Dynamic	A.C.	50	3	3	280	170	49x24x16	No	7x19x11	5-226, 1-227, 1-171
	8-20	230.00	Table	Dynamic	A.C.	100	3	3	281	370	12x28x14	No	7x26x12	5-226, 2-227, 1-210
	8-21	375.00	Console		A.C.	100	3	3	281	370	48x28½x16	No	7x26x12	5-226, 2-227, 1-210
Crosley Radio Corp. 3401 Colerain Ave. Cincinnati, Ohio	704	95.00	Metal table		A.C.	55-65	3	*2	280	180	7½x17½x13½	No	About ¾ in. less all around than cabinet	4-226, 1-227, 2-171A
	706	80.00	Metal table		A.C.	55-65	3	*2	280	180	7½x18x11½	No		4-226, 1-227, 2-171A
	608	65.00	Metal table		A.C.	35-45	2	2	280	135	7½x17½x8	No		3-226, 1-227, 1-171
	601	55.00	Metal table		Bat.		3	2		135-180	5½x17½x7	No		5-201A, 1-171A
	401	35.00	Metal table		Bat.		2	2		135	5½x13½x7	No		4-199, 1-120
*Push pull in second stage.														
Day Fan Electric Co. Dayton, Ohio	25	150.00	Table	Dynamic	A.C.	65	4	2	280	180	10½x26½x15½	No	6½x21½x12	5-226, 1-227, 2-171A
	26	295.00	Console		A.C.	65	4	2	280	180	50x26x17	No	6½x21½x12	5-226, 1-227, 2-171A
	35	79.50	Table		Bat.		4	2		135	11x23x11	No	7x20½x8	5-226, 1-227, 1-112A

Receiver Specifications, Season 1928-29 (Continued)

Name and Address of Manufacturer	Model No.	List Price	Style of Cabinet	Type of Reproducer Built In	A.C. or Battery Operated Set	Total Watts per Hour Consumed by A.C. Set	No. of R. F. Stages	No. of A. F. Stages	Rectifier Used for B-Supply	Plate Voltage on Last Audio Stage	Overall Dimensions of Set H—W—D	Is Chassis of this Model Sold Separately	Overall Dimensions of Chassis H—W—D	Number and Types of Receiving Tubes Used	
Kellogg Switchboard & Supply Co. 1020 W. Adams Street Chicago, Ill.	514	\$495.00	Console	Air column	A.C.	60-65	4	2	280	155	44x35x22	Yes	8 1/2 x 27 x 13 1/2	*1-403, 6-401	
	515	169.50	Table	Air column	A.C.	50-55	2	2	280	155	9 1/2 x 28 1/2 x 12	Yes	8 1/2 x 26 1/2 x 10 1/2	*4-401, 1-403	
	516	375.00	Console	Air column	A.C.	60-65	4	2	280	155	42 1/2 x 31 x 18 1/2	Yes	8 1/2 x 27 1/2 x 13 1/2	*6-401, 1-403	
	517	775.00	Console	Air column	A.C.	60-65	4	2	280	155	44x35x22	Yes	8 1/2 x 27 x 13 1/2	*6-401, 1-403	
	518	225.00	Console	Air column	A.C.	50-55	2	2	280	155	38 1/2 x 32 1/2 x 18	Yes	8 1/2 x 27 1/2 x 13 1/2	*4-401, 1-403	
*Kellogg A.C. tubes.		275.00	Console	Mag. cone	A.C.	50-55	2	2	280	155	42 1/2 x 31 x 18 1/2	Yes	8 1/2 x 27 1/2 x 13 1/2	*4-401, 1-403	
Kolster Radio Corp. 200 Mt. Pleasant Ave. Newark, N. J.	K-20	135.00	Table	Magnetic Dynamic Power cone	A.C.	50	3	2	280	180	9x21 1/2 x 12 1/2	No	7 1/2 x 18 x 7	4-226, 1-227, 1-171A	
	K-21	160.00	Table		A.C.	50	4	2	280	180	9x21 1/2 x 12 1/2		7 1/2 x 18 x 7	5-226, 1-227, 1-171A	
	K-22	200.00	Console		A.C.	50	3	2	280	180	42x23x16		7 1/2 x 18 x 7	4-226, 1-227, 1-171A	
	K-23	285.00	Console		A.C.	90	4	2	280	180	45 1/2 x 25 1/2 x 15 1/2		7 1/2 x 18 x 7	*	
	K-24	350.00	Console	A.C.	100	4	3	280-281	425	45 1/2 x 26 1/2 x 15 1/2	7 1/2 x 18 x 7		†		
	K-35	80.00	Chassis	A.C.	3	0	0				7 1/2 x 18 x 7		3-226, 1-227		
	K-36	95.00	Chassis	A.C.	3	0	0				7 1/2 x 18 x 7		4-226, 1-227		
	K-5	175.00	Consolespeak.	A.C.	80	0	1	281	425	42x25 1/2 x 19			2-281, 1-210, 1-874		
	60	89.50	Table	Bat.	3	2			135	11x18x12			5-201A, 1-112		
	6-H	295.00	Console	A.C.	80	3	3	281	425	53x27x18			**		
	K-30	135.00	Table	D.C.	35	3	2		90	9x21 1/2 x 12 1/2	7 1/2 x 18 x 7		5-201A, 1-171A		
	K-32	200.00	Console	D.C.	35	3	2		90	42x23x16	7 1/2 x 18 x 7		5-201A, 1-171A		
*5-226, 1-227, 1-171A, 1-281. **6-201A, 1-2			10, 1-874, 2-2	81. †5-226, 1-227		0, 2, 28	1, 1-280.	†Also							
Leutz, Inc., C. R. 195 Park Place Astoria, N. Y.	P-6	\$80.00	Table	entire receiver, detector, R. F. and 3 audio stages utilized in audio stages. †R. C. C.	Bat.	2	3	B.H.	135-180	12x22x16	Yes	8x19x12	†		
	AA	200.00	Alum. table		Bat.	4	4	*281	300-425	8 1/2 x 27 1/2 x 15	Yes	8 1/2 x 27 1/2 x 15	§		
	SA	250.00	Alum. table		Bat.	4	4	*1-281	300-450	8 1/2 x 27 1/2 x 15	Yes	8 1/2 x 27 1/2 x 15	4-222, 1-200A, 2-240, 2-250		
	SG	650.00	Alum. table		Bat.	4	4	†2-281	300-450	10x11x20	variable. †R. C. C.	†R. C. C.	†R. C. C.	†R. C. C.	
*Rectifier is of our manufacture and supplies entire B & C current. Where 2-210's or 2-250's are used, push pull system utilized in audio stages. †R. C. C.														Ghost is built into audio or 112. § 5-201A, 1-200	
Mart Elec. Radio Co., Inc. 22 Central Ave. West Orange, N. J.		*225.00	Table	Dynamic	A.C.	85	3	3	281	400	21x32x19	Yes	22 1/2 x 35 1/2 x 20 1/2	6-Kellogg, 1-210	
		*395.00	Console		A.C.	85	3	3	281	400	48 1/2 x 38 1/2 x 23 1/2	Yes	22 1/2 x 35 1/2 x 20 1/2	6-Kellogg, 1-210	
Maxwell Radio Corp. 103 Broadway Brooklyn, N. Y.	AS	375.00	Louis XIV	Exponential	A.C.	35	2	2	B.H.	180	*59x31x20	Yes	7x24x9	1-227, 3-226, 1-171A	
	*Louis XIV Model.	375.00	Coliseum †Coliseum Model.		A.C.	35	2	2	B.H.	180	†47x31x20	Yes	7x24x9	1-227, 3-226, 1-171A	
McMillan Radio Corp. 1421 S. Michigan Ave. Chicago, Ill.	8	160.00	Table	Utah XM	A.C.	65	4	2	280	180	10x23x16	No	7 1/2 x 21 1/2 x 12 1/2	5-226, 1-227, 2-171	
	8Y	210.00	Table		A.C.	65	4	2	280	180	39x27x16	No	7 1/2 x 21 1/2 x 12 1/2	5-226, 1-227, 2-171	
	185	285.00	Console		A.C.	65	4	2	280	180	52x26 1/2 x 17 1/2	No	7 1/2 x 21 1/2 x 12 1/2	5-226, 1-227, 2-171	
	186	285.00	Console		A.C.	65	4	2	280	180	51x26 1/2 x 17 1/2	No	7 1/2 x 21 1/2 x 12 1/2	5-226, 1-227, 2-171	
Minerva Radio Co. 154 E. Erie St. Chicago, Ill.	F26	250.00	Console	Dynamic	A.C.	Set 28 Dyn. 30	3	3		180	50x24x13	Yes	9 1/2 x 10 x 10	2-171, 1-227, 4-226, 1-280	
	F27	250.00	Console		A.C.	3	3		180	48x23x13	Yes	9 1/2 x 18 x 10			
	F28	250.00	Console		A.C.	3	3		180	51x24x13	Yes	9 1/2 x 18 x 10			
	F29	250.00	Console		A.C.	3	3		180	50x24x13	Yes	9 1/2 x 18 x 10			
Operadio Mfg. Co. St. Charles, Ill.	7	112.00	Portable	Magnetic	Bat.		3	3		135	12x17x9	No		6-199 : 1-120	
Premier Electric Co. 3800 Ravenswood Ave. Chicago, Ill.	PT2829RAC	90.00	Table	Peerless	A.C.	32	3	2	280	180	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-227, 1-171	
	PT2829DC	60.00	Table		D.C.	3	2		135	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-201, 1-112		
	PC2829RAC	140.00	Console		A.C.	32	3	2	280	180	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-227, 1-171	
	PC2829DC	110.00	Console		D.C.	3	2		135	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-201, 1-112		
	PC28RAC	153.50	Console		A.C.	32	3	2	280	180	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-227, 1-171	
	PC28DC	123.50	Console		D.C.	3	2		135	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-201, 1-112		
	PC80RAC	157.50	Console		A.C.	32	3	2	280	180	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-227, 1-171	
	PC80DC	127.50	Console		D.C.	3	2		135	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-201, 1-112		
	PC47RAC	167.50	Console		A.C.	32	3	2	280	180	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-227, 1-171	
	PC47DC	137.50	Console		D.C.	3	2		135	8 1/2 x 22 x 12 1/2	Yes	7x21x8 1/2	5-201, 1-112		
Radio Products Corp. 3816 N. 28th St. Birmingham, Ala.	A	80.00	Table	Yes	Bat.		1	2		135 up	9x25x9	No	7x21	3-201A, 1-112	
	B	90.00	Portable		Bat.		1	2		90	16x22x9	No	7x21	4-199	
	C	139.50	Console		Yes	Elec.*	40	1	2	B.H.	135 up	41x25x14	No	7x21	3-201A, 1-112
	D	184.50	Console		Yes	Elec.*	40	1	2	B.H.	135-180	41x25x14	No	7x21	3-201, 1-112
		125.00	Table			Elec.*	40	1	2	B.H.	135-180	10x25x12	No	7x21	3-201A, 1-112
*Separate power units. Note—Prices are without tubes or other accessories.															
Simplex Radio Co. King & Monroe Sts. Sandusky, O.	D	145.00	Metal table		A.C.	100	4	2	280	300	9x18 1/2 x 10 1/2	No		*4-226, 1-227, 2-210	
*Push pull.															
Slagle Radio Co. Fort Wayne, Ind.	Nine	360.00	Console	Dynamic	A.C.	109	6	1	280	180	44 1/2 x 25 1/2 x 18 1/2	No	8x13x11	7-227, 2-171A, push pull	
	Ten 29-A	500.00	Console		A.C.	117	6	2	280	180	44 1/2 x 30 1/2 x 19 1/2	No	9x16x14 1/2	8-227, 2-171A, push pull	
	Ten 29-B	600.00	Console		A.C.	117	6	2	280	180	44x32 1/2 x 20	No	9x16x14 1/2	8-227, 2-171A, push pull	
	Ten 29-C	750.00	Console		A.C.	117	6	2	280	180	58x30 1/2 x 20	No	9x16x14 1/2	8-227, 2-171A, push pull	
	Ten 29-D	850.00	Console		A.C.	170	6	2	2-281	350	54x32 1/2 x 21 1/2	No	9x16x14 1/2	8-227, 2-250, push pull	
	Note—Last two models listed are photograph combinations.														
Sparks-Withington Co. Jackson, Mich.	69	149.50	Table	Cone	A.C.	75	5	1	280	200		No		6-227, 1 power	
	79	199.50	Console		A.C.	75	5	1	280	200		No		6-227, 1 power	
	89	375.00	Console		A.C.	80	5	1	280	200		No		6 heater type, 1-250	
	109	495.00	Console		A.C.	150	5	1	2-281	360		No		6 heater type, 2-150, push pull	
Spittdorf Radio Corp. 146 Summit St. Newark, N. J.	Abbey, Jr.	135.00	Table	Dynamic	A.C.	60	3	2	280	170	13x19x13	No		4-226, 1-227, 1-171A	
	Abbey, Sr.	175.00	Table		A.C.	60	3	2	281	350	16x19x13	No		4-226, 1-227, 1-250	
	Warwick	325.00	Console		A.C.	85	3	2	281	350	38x24x15	No		4-226, 1-227, 1-250	
	Avon	290.00	Console		A.C.	85	3	2	281	350	40x20	No		4-226, 1-227, 1-250	
	Lorenz	390.00	Console		A.C.	85	3	2	281	350	40x40x18	No		4-226, 1-227, 1-250	
	Salem	575.00	Console		A.C.	98	3	2	181	425	90x30	No		4-226, 1-227, 2-250	
	Como	450.00	Console		A.C.	98	3	2	181	425	44x36	No		4-226, 1-227, 2-250	
	Winthrop	750.00	Console		A.C.	98	3	2	181	425	90x39	No		4-226, 1-227, 2-250	
	Devon	850.00	Console		A.C.	98	3	2	181	425	66x36	No		4-226, 1-227, 2-250	
	Note—Last two models listed are photograph combinations.														
Steinle Radio Co. 506 S Wabash Ave. Chicago, Ill.	261	75.00	Table	See Note B	A.C.		3	2	280	170	5 1/2 x 19 1/2 x 8 1/2	No		4-226, 1-227, 1-171A	
	262	*75.00	Table		A.C.		3	2	280	170	5 1/2 x 19 1/2 x 8 1/2	No		4-226, 1-227, 1-171A	
	263	115.00	Console		A.C.		3	2	280	170	38 1/2 x 22 x 12 1/2	No		4-226, 1-227, 1-171A	

Receiver Specifications, Season 1928-29 (Concluded)

Name and Address of Manufacturer	Model No.	List Price	Style of Cabinet	Type of Reproducer Built In	A. C. or Battery-Operated Set	Total Watts per Hour Consumed by A. C. Set	No. of R. F. Stages	No. of A. F. Stages	Rectifier Used for B-Supply	Plate Voltage on Last Audio Stage	Overall Dimensions of Set H—W—D	Is Chassis of this Model Sold Separately?	Overall Dimensions of Chassis H—W—D	Number and Types of Receiving Tubes Used	
Steinlite Radio Co. (Continued) *25 cycle model. †Complete and cone speakers. Dynamic speakers.	264	*115.00	Console	See Note B	A. C.	75.00	3	2	280	170	38½x22x12½	No "A" "A"		4-226, 1-227, 1-171A 4-226, 1-227, 1-171A 4-226, 1-227, 1-171A	
	265	†	Console	See Note B	A. C.		3	2	See "A"	170	41½x26x15				
	226	†	Console	See Note B	A. C.		3	2	See "A"	170	52½x29x17				
Stewart-Warner Speedometer Corp. 1826 Diversy Parkway Chicago, Ill.	801	94.50	Metal table	Built-on	A. C.	36	3	2	280	180	7½x10½x16½	No		4-226, 1-227, 1-171 4-226, 1-227, 1-171	
	802	110.50	Metal table	(Same as 801 except for	A. C.	36	3	2	280	180	15½x10½x16½	No			
	811	94.50	Metal table	(Same as 802	A. C.	25	2	2	280	180		No			
	812	110.50	Metal table	(Same as 802	A. C.	25	2	2	280	180		No			
	806	67.50	Metal table	(Same as 802	Bat.	3	2				7½x10½x16½	No			
Stromberg Carlson Tel. Mfg. Co. 1060 University Ave. Rochester, N. Y.	523	295.00	Treas. chest	No	A. C.	200	2	2	280	180	13½x26x14	No		4-201, 1-171A, 2 tungars 4-201, 1-171A, 2 tungars 5-227, 1-171A 5-227, 1-171A 5-201A, 1-171A, 2 tungars 5-201A, 1-171A, 2 tungars 6-201A, 1-210, 2 tungars 6-201A, 1-210, 2 tungars	
	524	425.00	Console	No	A. C.	200	2	2	280	180	50½x28½x16½	No			
	635	*185.00	Treas. chest	No	A. C.	65	3	2	280	180	10½x23½x14½	No			
	636	*245.00	Console	No	A. C.	65	3	2	280	180	40½x25½x16½	No			
	633W	365.00	Treas. chest	No	A. C.	200	3	2	280	180	17x28½x18½	No			
	634	505.00	Console	No	A. C.	200	3	2	280	180	51x20x19	No			
	734B	755.00	Console	No	A. C.	200	3	2	280	375	53x29½x20½	No			
	744B	1,205.00	Console	No	A. C.	200	4	2	280	375	49½x44½x21	No			
*Less tubes, all other sets include tubes. Prices do not include reproducer on any of the sets listed above.															
Traveler Mfg. Corp. 3401 N. Halsted St. Chicago, Ill.		57.50	Portable	Utah	Bat.		2	2		90	10x12½x8½	No	4x6½x12	5-199	
Wilcox Labs. Charlotte, Mich.	VIII	110.00	Metal	No	A. C.	53	3	2	280	180	7x18x9		7x18x9	4-226, 1-227, 2-171	
	VIII	120.00	Wood	No	A. C.	53	3	2	280	180	8x21x12		7x18x9	4-226, 1-227, 2-171	
Workrite Mfg. Co. 1812 E. 30th St. Cleveland, Ohio	18	128.00	Table		A. C.	40	3	2	280	118	10x23x15	Yes	6x18x11	4-226, 1-227, 1-171	
	28	195.00	Console	Magnetic	A. C.	40	3	2	280	118	42x24x20	Yes	6x18x11	4-226, 1-227, 1-171	
	38	160.00	Table		A. C.	50	4	3	280	160	12x26x16	Yes		6-226, 1-227, 1-171	
	48	250.00	Console	Magnetic	A. C.	40	4	3	280	160	47x27x19	Yes		6-226, 1-227, 1-171	
	58	75.00	Chassis		A. C.	44	3	2	280	155		Yes	6x18x10	4-226, 1-227, 1-171	

Note—See page 88 for further receiver specifications.

REPRODUCER SPECIFICATIONS

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Type	Style	Diameter of Cone or Length of Air Column, in Inches	Voltage Supply Needed for Dynamic Type	Current Used By Field Coil in Amps.	Weight, in Pounds	Overall Dimensions, in Inches H.—W.—D
Andrea, Inc., F. A. D. Jackson Ave.—Orchard & Queens St. Long Island City, N. Y.	Fada—315-A	\$25.00	Magnetic	Table	17			4½	
	W-35-A	25.00	Magnetic	Wall	17			4	
	4	30.00	Magnetic	Mantel	7			14	
	415-B	35.00	Magnetic	Table	22			8	
	W-15-B	35.00	Magnetic	Table	22			7½	
	425-B	50.00	Magnetic	Floor	22			18	
	14	72.50	Dynamic	Mantel Clock	8		110, 25-60 cycle	1.4	
314	80.00	Dynamic	Floor	8		110, 25-60 cycle	1.4		
Atwater Kent Mfg. Co. 4741 Wissahickon Ave. Philadelphia, Pa.	Atwater Kent—E	20.00	Magnetic		15			10½	18x15½x5½
	E 2	20.00	Magnetic		13½			7½	15½x13½x4½
	E 3	20.00	Magnetic		9½			6½	13½x11½x4½
B. B. L. Speaker, Inc. 101 W. 31 St. New York, N. Y.	B. B. L.—Cone	25.00	Magnetic	Cone	24				24x27
	No. 1	37.50	Magnetic	End Table	24				27x28x13½
	No. 2	55.00	Magnetic	End Table	24				29½x29x15
	No. 3	75.00	Magnetic	End Table	24				29½x29x15
	No. 4	95.00	Magnetic	End Table	24				29½x29x15
Bremer-Tully Mfg., Co. 656 Washington Blvd. Chicago, Ill.	Bremer-Tully—M	35.00	Magnetic	Table	7			8	12x10x8
	D	65.00	Dynamic	Table	7	110, A. C.	.75	20	14x11x9
	DB-T	55.00	Dynamic	Table	7	110, A. C.	.06	14	14x11x9
Cannon & Miller Co., Inc. Springwater, N. Y.	Cannonball—No. 1	7.50	Magnetic	Free Edge	14½			8	18x14½x6
	No. 2	9.00	Magnetic	Free Edge	17½			9	21x17½x7½
	B	15.00	Air Column	Cabinet	34			12	15x15x15
	A	22.50	Air Column	Drum	60			14	15x18x12
Cook Radio Corp. 500 S. Bentalou St. Baltimore, Md.	Cook Super-Dynamic—C-E	35.00	Air Column	Panel	84				18x15x10
	C-E-E	50.00	Air Column	Picture Frame	84				24x24x16
	C-F	50.00	Air Column	Panel	108				27x21x14
	C-F-T	75.00	Air Column	Picture Frame	108				47x41x24
	C-G	150.00	Air Column	Cradle Mount.	150				51x30x31
	C-H	350.00	Air Column	Cradle Mount.	180				54x54x32
Crosley Radio Corp. 3401 Colerain Ave. Cincinnati, Ohio * Of push-pull power amplifier.	Crosley Musicone—D	15.00	Magnetic	Table	11½			7	12½x11½x4½
	Crosley Dynacone—E	25.00	Dynamic	Table	10	Plate cur. of P. T.	0.02	8	12½x11½x3½
	F	25.00	Dynamic	Table	10	Plate Current*	0.04	8	12½x11½x3½
Electrical Research Labs. 2500 Cottage Grove Ave. Chicago, Ill.	Erla—1000	50.00	Dynamic		6½	110, A. C.		2½	9½x9x7½
	6	35.00	Dynamic		6½	6, D. C.		17½	9½x9x7½
	40	35.00	Dynamic		6½	100, D. C.	.04	17½	9½x9x7½
	100	40.00	Dynamic		6½	100, D. C.	.1	17½	9½x9x7½

Reproducer Specifications, Season 1928-29 (Continued)

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Type	Style	Diameter of Cone or Length of Air Column, in Inches	Voltage Supply Needed for Dynamic Type	Current Used By Field Coil, in Amps.	Weight, in Pounds	Overall Dimensions, in Inches H.—W.—D.	
Farrand Mfg. Co. Long Island City, N. Y.	Farrand Oval—20	\$16.50	Magnetic	Open Cone	18½x13½	110, A.C. or D.C. or 6 D.C.			20x13½	
	Box Chassis—42-B	18.00	Magnetic	Box	7½				10	
	Junior—64	19.50	Magnetic	Clock	7½				12	
	Panel—62	25.00	Magnetic	Panel	7½				12x11x7½	
	Gothic—60	35.00	Magnetic	Cabinet	7½				9½x9½x6½	
	Table—68	45.00	Magnetic	Table	7½				12x11x7½	
	Gothic Dynamic—70	50.00	Dynamic	Cabinet	7½				36x16x10½	
	Tiffany Table Dynamic—74 Console Grande Dynamic—76	75.00 110.00	Dynamic Dynamic	Upright Table Console	7½ 7½				34x32x16½	
Federal Radio Corp. Buffalo, N. Y.	Ortho-sonic—S40	125.00	Air Column	Console	84	None			44x30½x18½	
	S41	150.00	Dynamic	Console	7				44x30½x18½	
Fenco Cone Co. 57 Murray St. New York City	Kit	2.00	Magnetic						18x24x5	
	Kit	3.00	Magnetic						18x24x7½	
	Hand Painted	4.50-5	Magnetic						18x24x5	
	18	12.00	Magnetic		24					
	32	12.00	Magnetic		36					
	O-49 A-52	15.00 15.00	Magnetic Magnetic		36 36					
Freed-Eisemann Radio Corp. Junius St. & Liberty Ave. Brooklyn, N. Y.	Freed-Eisemann—345 Chassis	20.00	Magnetic	Mantle Clock Shape	9½	Uses Plate Current Supply of Model NR-85 110 D.C. 110, 60 cycle	0.03 0.03 0.03 0.1 1.		4½	
	345 (Walnut)	35.00	Magnetic		14½				9½x4½	
	345 (Silver)	35.00	Magnetic		14½				11½x17½x7½	
	345 (Green)	37.50	Magnetic		14½				11½x17½x7½	
	345 (Black)	37.50	Magnetic	14½	11½x17½x7½					
	300	45.00	Dynamic	Chassis Cabinet Cabinet Cabinet Cabinet	10½				21½	10½x8½
	300 (Walnut)	65.00	Dynamic		10½				34	16x14x10
	300 (Green)	70.00	Dynamic		10½				34	16x14x10
	300 D.C.	65.00	Dynamic		10½				21½	16x14x10
	300 A.C.	75.00	Dynamic		10½				24½	16x14x10
Grebe & Co., Inc., A. H. Richmond Hill, N. Y.	Grebe—1750	17.50	Magnetic	Table or Wall	17					
	350	26.00	Magnetic	Console	14½x10½					
	20-20	35.00	Magnetic	Table or Wall	20					
Hinners & Company, Inc., F. A. 55 W. 42 St. New York, N. Y.	Hinners—Chassis	13.50	Magnetic	Models and prices to be announced later.	7				9x5½	
	Console	16.00	Magnetic		7				9½x9½x5½	
	S	27.00	Magnetic		7				10½x10½x6½	
	A	35.00	Magnetic		7				13x11x6½	
	DY		Dynamic		7				9½x9½x5½	
Joy Kelsey Corp. 542 N. Parkside Ave. Chicago, Ill.	Oxford—22	29.50	Dynamic	Mfr.	10	6 D.C.	0.8	12	11½x10½x7	
	24	31.50	Dynamic	Mfr.	10	90 to 110 D.C.	0.05	12	11½x10½x7	
	23	39.50	Dynamic	Mfr.	10	110 A.C.	0.05	15	11½x10½x7	
	26	50.00	Dynamic	Cabinet	10	110 A.C.	0.05	22	13x18x7	
	25	60.00	Dynamic	Cabinet	10	110 A.C.	0.05	22	14x21x10	
Kolster Radio Corp. 200 Mt. Pleasant Ave. Newark, N. J.	Kolster—K-6	35.00	Magnetic	Table	9½	in special carrying case			11½x11½x6½	
	K-9	50.00	Magnetic	Portable	9½				13x13½x9	
	K-7	75.00	Dynamic	Table	10				15x15x9	
	K-8	100.00	Dynamic	Console	10					
Magnavox Co. 4250 Horton St. Oakland, Cal.	Magnavox—HD-6	35.00	Dynamic	NOTE: All instruments marked † may be mounted in the following cabinets: This Cabinet for D-700 only.	7½	6 D.C.	0.65	12½	9½x8½x6½	
	HD-8	35.00	Dynamic		7½	6/12 D.C.	1.1	12½	9½x8½x6½	
	HD-7	40.00	Dynamic		7½	110/220 D.C.	0.045	11	9½x8½x6½	
	HD-80	50.00	Dynamic		7½	110, 50/60 cycles	1.25	17	9½x11½x6½	
	HD-90	50.00	Dynamic		7½	110, 25 Cycles	1.25	17	9½x11½x6½	
	HD-700	*125.00	Dynamic		7½	110, 50/60 Cycles	0.06	42	10x14½x10½	
										31½x22½x9
Martin-Copeland Co. 101 Sabin St. Providence, R. I.	Marco—M-30	\$30.00	Magnetic		8	6, D.C.	0.6	6	12x11x7-	
	D-6	65.00	Dynamic		8				14x14½x11	
	D-90	67.50	Dynamic		8				14x14½x11	
	D-110	75.00	Dynamic		8				14x14½x11	
Molded Wood Products, Inc. 219 W. Chicago Ave. Chicago, Ill. *25.00 †and Cone	Fairfax—790	20.00*	Air Column	Table	35				12x11x6	
	701	30.00	Magnetic	Table	8				11½x10½x7	
	795	80.00	Air Column†	Floor	35 and 8				32x22½x14½	
	770	60.00	Air Column†	Floor	35 and 8				32x16½x12½	
	725	50.00	Air Column	Floor	96				35½x17x15½	
	710	60.00	Air Column†	Floor	35 and 8				30x72½x15½	
National Carbon Co., Inc. 30 E. 42 St., N. Y. C.	Eveready—1	30.00	Magnetic	Table	7½				11½x10½x6½	
	2	35.00	Magnetic	Table	7½				9½x9½x5½	
Newcombe-Hawley, Inc. St. Charles, Ill.	Newcombe-Hawley—NH-6	35.00	Dynamic	Chassis	7	6, D.C.	.05	15	9½x8½x6½	
	NH-7	40.00	Dynamic	Chassis	7	110, D.C.*	.040	15	9½x8½x6½	
	NH-9	50.00	Dynamic	Chassis	7	8, D.C.	1.8	20	9½x11½x6½	
	966	52.00	Dynamic	Portable	7	6, D.C.	.05	30	12½x14½x10½	
	967	57.00	Dynamic	Portable	7	110, D.C.*	.04	30	12½x14½x10½	
	969	70.00	Dynamic	Portable	7	8, D.C.	1.8	30	12½x14½x10½	
	906	70.00	Dynamic	Table	7	6, D.C.	.05	65	30x23½x15½	
	907	75.00	Dynamic	Table	7	110, D.C.*	.04	65	30x23½x15½	
	909	88.00	Dynamic	Table	7	8, D.C.	1.8	65	30x23½x15½	
	926	80.00	Dynamic	Console	7	6, D.C.	.05	90	44x23½x15½	
	927	85.00	Dynamic	Console	7	110, D.C.*	.04	90	44x23½x15½	
	929	98.00	Dynamic	Console	7	8, D.C.	1.8	90	44x23½x15½	
	956	92.00	Dynamic	Console	7	6, D.C.	.05	100	40x32x15½	
	957	92.00	Dynamic	Console	7	110, D.C.*	.04	100	40x32x15½	
	959	110.00	Dynamic	Console	7	8, D.C.	1.8	100	40x32x15½	
	107	232.50	Dynamic	Comb. Rad.-†	7	110, D.C.*	.04	160	50x32½x19	
	109	237.50	Dynamic	Comb. Rad.-†	7	8, D.C.	1.8	160	50x32½x19	
		80	18.00	Mag.	Chassis	9				9½x9½x6½
		83	28.00	Mag.	Portable	9				10½x10½x7½
		81	40.00	Mag.	Table	9				30x30x14
*or power pack. †Phonograph console.										
O'Neil Mfg., Corp. 715 Palisade Ave. West New York, N. Y.	O'Neil—LS-19	25.00	Magnetic	Ship	17½				20x16x6	
	D-99	14.75	Magnetic	Cone					9½	17½
	C-105	30.00	Magnetic	Clock					8½	12½x12½x8½
	TC-503	48.75	Magnetic	Table					50	29½x30x15

Reproducer Specifications, Season 1928-29 (Continued)

Name and Address of Manufacturer	Trade Name and Model Number	List Price	Type	Style	Diameter of Cone or Length of Air Column, in Inches	Voltage Supply Needed for Dynamic Type	Current Used By Field Coil, in Amps.	Weight, in Pounds	Overall Dimensions, in Inches H.—W.—D.
O'Neil Mfg. Corp., (continued)	LC-501	\$69.50	Magnetic	Cabinet				75	32x30x15
	CB-18	18.00	Magnetic	Chassis	9½			6	10x10x7
	CX-21	16.00	Magnetic	Chassis	9½			3½	9x9x6½
	DX-505	65.00†	Dynamic	Table		110, A.C. or D.C.		50	29½x30x15
	A-506	60.00†	Dynamic	Cabinet		110, A.C.		42	29½x12½x11½
	A-507	50.00	Dynamic	Cabinet		6, D.C.		42	13½x12½x11½
	D-508	50.00†	Dynamic	Cabinet		110 or 220, D.C.		42	13½x12½x11½
	D-509	35.00*	Dynamic	Chassis		6, D.C.		18	10x10x10½
	A-510	45.00†	Dynamic	Chassis		110, A.C.		21	10x10x10½
	D-511	40.00*	Dynamic	Chassis		110 or 220, D.C.		19	10x10x10½
*Note—Baffle box \$2.50 extra. †With power amplifier.									
Operadio Mfg., Co. St. Charles, Ill.	Junior	15.00	Air Column	Table	30			10½	8½x8x6½
	New Senior	25.00	Air Column	Table	54			19	14x14½x7
	Westminster	35.00	Air Column	Table	61			21	15½x12½x8
	Geneva—40	55.00	Dynamic	Table		6, D.C.		17½	12½x13½x10½
	50	70.00	Dynamic	Table		110, A.C.		21½	12½x13½x10½
	60	60.00	Dynamic	Table		110, D.C.		17½	12½x13½x10½
	St. Charles—42	70.00	Dynamic	Cabinet		6, D.C.		65	30x27x15½
	52	90.00	Dynamic	Cabinet		110, A.C.		65	30x27x15½
	62	80.00	Dynamic	Cabinet		110, D.C.		65	30x27x15½
	Barcelona—A-541	42.50	Air Column	Cabinet	61			35	30x27½x15½
	Bel Canto—A-843	80.00	Air Column	Cabinet	84			83	36x31½x17
	43	100.00	Dynamic	Cabinet		6, D.C.		95	36x31½x17
	53	115.00	Dynamic	Cabinet		110, A.C.		95	36x31½x17
	A-8473	225.00*	Air Column	Cabinet	84			118	36x31½x17
	693	260.00*	Dynamic	Cabinet		110, D.C.		130	36x31½x17
693	275.00*	Dynamic	Cabinet		110, D.C.		130	36x31½x17	
*With power amplifier.									
Pal Radio Co., Inc. 1200 Summit Ave. Jersey City, N.J.	Palcone—Aristocrat	19.50	Magnetic	Table	20			5	22x20x6
	Browning—Jr.	15.00	Magnetic	Table	20			5	22x20x6
	Summit—New	16.50	Magnetic	Table	18			6	19x18x5
	Big Boy	20.00	Magnetic	Table*	24			10	26x24x7
	Palcone—Liberty Console—Mfgs.	30.00	Magnetic	Table	18			12	18½x18x6
*and wall cone.									
Philadelphia Storage Battery Co. Phila., Pa.	Philco—211	25.00	Magnetic	Mantel	7			14½	10½x13½x6½
	212-13-14-15	27.50	Magnetic	Mantel	7			14½	10½x13½x6½
	221	50.00	Magnetic	Console	7			45	29½x26½x14½
Presto Machine Products Co., Brooklyn, N. Y.	Presto	14.00	Magnetic		7			3½	9x9x5
Radio Corporation of America 233 Broadway New York City *Includes Radiotrons, built-in power amplifier and "B" eliminator. NOTE:—Other models to be announced about Aug. 15	RCA. Loudspeaker—105	350.00*	Dynamic	Floor		Self contained			4½x23½x16½
	104	275.00*	Dynamic	Floor		Self contained			40x20½x13½
	100-A	310.00*	Magnetic	Table					10½x15x7½
	29.00†	29.00†	A.C. D.C.						
Radio Foundation, Inc. 1 Park Place New York, N. Y.	Ansonia—911-S	29.50	Magnetic	Table	7			9	12x12x6
	911-G	29.50	Magnetic	Table	7			9	12x12x6
	450	25.00	Magnetic	Double cone	20				
	440	15.00	Magnetic	Double cone	16				
Rola Company 4250 Hollis St. Oakland, Calif.	Rola—M		Magnetic	Unit	7½			3	9x9x5
	JM	18.50	Magnetic	Unit	7½			3½	10x10x6
	20	35.00	Magnetic	Cabinet	7½			6	11½x12½x7
	25	60.00	Magnetic	Cabinet	7½			35	29½x30x16½
	D-90		Dynamic	Unit	7½	90, D.C.	.05	15½	11x10½x6½
	D-110	50.00	Dynamic	Unit	7½	110, A.C.	1.5	17	11½x10½x6½
30	75.00	Dynamic	Cabinet	7½	110, A.C.	1.5	22	12½x14½x8	
35	110.00	Dynamic	Cabinet	7½	110, A.C.	1.5	55	29x30x16½	
Stevens Mfg., Corp. New York City	Stevens—LG-28	25.00	Magnetic	Gothic	10			11½	16x10x14
	Stevens—S-28	35.00	Magnetic	Modern	12			12½	17x10½x15
Stewart-Warner Speedometer Corp. Chicago, Ill.	Stewart-Warner—431	\$12.00	Magnetic	Chassis	8			3	8½x8½x4
	433	15.00	Magnetic	Box	8			4½	9½x9½x6½
	435	16.50	Magnetic	Manic clock	6½			5½	8½x11½x5½
Stromberg-Carlson Telephone Mfg. Co. Rochester, N. Y.	Stromberg-Carlson—11	35.00	Magnetic	Wall	22			9½	36½x22½x17
	10	40.00	Magnetic	Pedestal	22			12½	22½x22½x6
Supercraft Prod. Corp. New York, N. Y.	Supercraft—T-20	19.50	Magnetic	Table model	20				21x20x7
	P-20	28.00	Magnetic	Pedestal	20				48x20x7
Temple, Inc. 1925 So. Western Ave. Chicago, Ill.	Air Column 11	22.50	Air Column	Drum	54			17	12½x11½x8½
	15	29.00	Air Column	Drum	60			11	12½x11½x8½
	150*	14.00	Air Column	Drum	54			6½	
	Giant	210.00	Air Column	Drum	126			175	32x32x40
	Air Chrome—2½	35.00	Magnetic	Table	10½x13			7½	15x13½x5½
	K*	20.00	Magnetic	Table	14x14			4½	14x14x5½
	F*	23.00	Magnetic	Table	18x23			6	18x23x5½
	J*	25.00	Magnetic	Table	24x24			11	24x24x8
	Z*	20.00	Magnetic	Table	9½x21			4	9½x21x4½
	*These are manufacturers models for use in console cabinets.								
Timmons Radio Prod. Corp., Philadelphia, Pa.	Timmons—B	18.00	Magnetic		8				8½x8½x5½
	C	21.00	Magnetic		8				9½x9½x6½
Tower Mfg., Co. 112 Brookline Ave. Boston, Mass.	Tower—Spitfire	4.95	Air column	Table	20x10				
	Pirate	7.95	Magnetic	Table	14				
	Castle	9.50	Magnetic	Table	17				
	Adventurer	9.50	Magnetic	Table	17				
	Meistersinger	15.00	Air column	Table	26x14				
	Meistersinger 28	15.00	Magnetic	Table	15				
17.50	Magnetic	Table	10						
Trimm Radio Mfg., Co. 847 W. Harrison St. Chicago, Ill.	Entertainer—58	25.00	Magnetic	Cabinet	7			12	10½x11½x8
	Concerto Grande—38	16.00	Magnetic	Upright	17			14	20x17x5
	Concerto—28	10.00	Magnetic	Upright	14			11	16x14x4½
	Concert—80	25.00	Air Column	Gooseneck	23			13	18x15x12
	Homespeaker—25	10.00	Air Column	Gooseneck	18			10	13x10x10



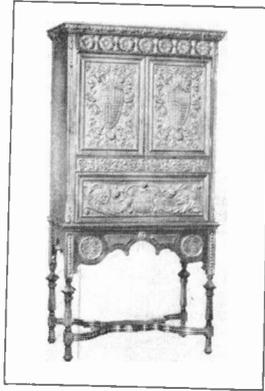
What's New in Radio and

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

A.C. Receivers

The new model 28 table type receiver which the American Bosch Magneto Corporation, Springfield, Mass., has just brought out, has seven A.C. There are three radio frequency stages, a detector and two audio frequency stages using three tubes. Push pull audio is used.

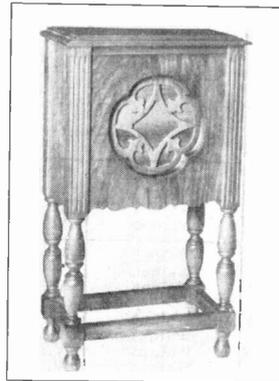
The illustrated cabinet, in the Tudor style, complete with set and reproducer, is \$197.50. With the model 29B console, equipped with dynamic reproducer, the intended retail price is \$295.—*Radio Retailing*, August, 1928.



Radio Cabinets

Of old English period design is the model 217 radio console, illustrated, made by the Aston Furniture Manufacturers, 1223 West Lake Street, Chicago. It is made of five ply walnut with a lacquer satin finish. The legs are of solid walnut and a sliding tray is provided for the receiver. Reproducer baffle board is installed if desired. The overall size is 72 in. by 36 in. by 20 in. and the set compartment is 3 1/2 in. high by 29 in. wide by 15 1/2 in. deep. The intended retail price is \$325.

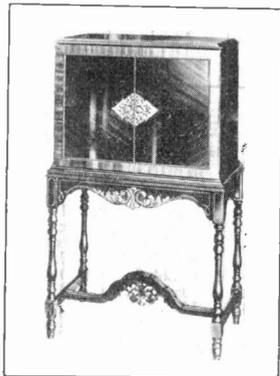
Model 218 is designed along Egyptian lines of a size suitable for the small apartment. It is built of five ply walnut and the doors are of figured matched walnut. A sliding tray is provided for the set as well as a sliding shelf to be used as an arm rest. The overall size is 57 in. by 32 1/2 in. by 18 in. deep and the set compartment measures 9 in. high by 28 1/2 in. wide by 13 in. deep. The intended retail price is \$175.—*Radio Retailing*, August, 1928.



Dynamic Reproducers

Three types of dynamic reproducers have been added to the line of the Abox Company, 215 North Michigan Avenue, Chicago. Type 6, for use with sets utilizing D.C. tubes, the energy for the reproducer field being supplied by a storage battery or an A-power unit, is priced as follows: unit only, \$35; wall model, \$47.50; table model, \$55; and, console model \$70. Type 9, for use on 110 volts D. C. light socket supply, with a voltage and current requirement of 90-110 volt D.C. at 40 milliamperes, lists at, unit only, \$40; wall model, \$52.50; table model \$60; and console model \$75.

Type 11 for use with A.C. tubes, and having a dry disc rectifier and transformer built into the unit, is \$50 for the unit only; \$62.50 for the wall model; \$70 for the table model; and \$85 for the console model.—*Radio Retailing*, August, 1928.



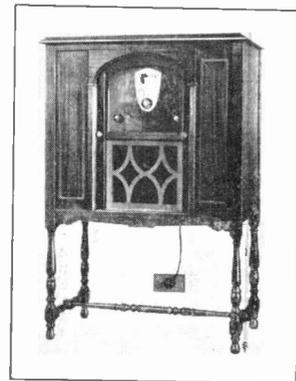
Receivers and Reproducers

A table model receiver, a console type and a reproducer are included in the new "M" line just placed on the market by the Chas. Freshman Co., Inc., 240 West 40th Street, New York City. The table model is an A.C. set, with the single illuminated control, a complete enclosed chassis and power supply. It is finished in stippled bronze, with dull gold highlights. The intended retail price is \$99, less tubes.

The console, illustrated, is also an A.C. receiver in a genuine walnut or mahogany cabinet, with built-in reproducer. Sliding doors completely conceal the panel. Intended retail price is \$175, less tubes.

The reproducer, is a table model of aluminum construction, finished in stippled bronze with dull gold highlights to harmonize with the table model set. Retail price, \$30.

A floor stand designed for the table set, with a shelf below for the reproducer, is also available at \$10.—*Radio Retailing*, August, 1928.



Cabinets for Electric Phonograph Combination

The illustrated "Raduofone" electric phonograph has a Bosworth 6-tube A.C. set with two rectifier tubes and a 250 power tube in the last stage. It also has a G-E motor and turn table, and a seven foot exponential reproducer. The console, which is made of walnut, measures 19 in. by 26 in. by 42 1/2 in. Intended retail price, less tubes, \$420.

Model 950, high boy' with a Bosworth A.C. set. Other specifications same as above. Retail price, \$250.

Both made by the Platter Cabinet Company, North Vernon, Ind.—*Radio Retailing*, August, 1928.



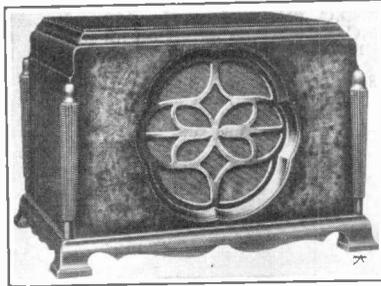
Where to Buy It

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

Automatic voltage regulators, rectifier replacement units, Neon tube, short wave receiver, shield grid kit and time switch are among the items announced by manufacturers this month.

A.C. Receiver

The Browning-Drake Corporation, 110 Brookline Street, Cambridge, Mass., announces a new A.C. receiver. The radio frequency end of the set uses 4 tuned circuits operated by a single control without any auxiliary tuning devices. The audio circuit is straight resistance coupled with a '50 power tube in the output. The compact and sturdy chassis and B-power supply are housed in a three-tone burl walnut cabinet. This model 32, illustrated, will list for \$295. Model 30 in table form will list for \$215.—*Radio Retailing*, August, 1928.



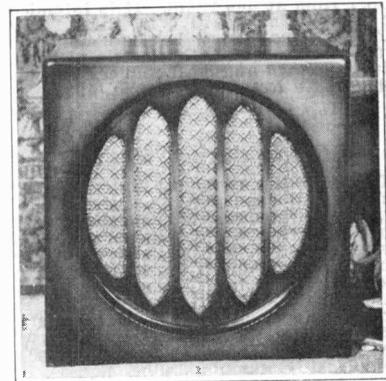
Magnetic Reproducers

Two models of magnetic reproducers have been added to the line of F. A. Hinners & Company, Inc., 55 West 42nd Street, New York city. The type B chassis has a chrome steel magnet and pole pieces of silicon steel, laminated to reduce pole iron loss. The armature spring is brazed by hard solder. One model, in the modernistic trend, has a front panel finished in gold and silver with a two-tone effect and lists at \$35. The table model, illustrated, lists at \$27. The chassis alone retails for \$13.50.—*Radio Retailing*, August, 1928.



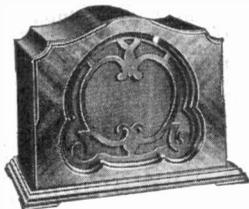
Dynamic Reproducer

A reproducer of the dynamic type, having the same grille and appearance both back and front, has been added to the line of the Utah Radio Products Company, 1615 South Michigan Avenue, Chicago. It may be had with three different units. The cabinet is made of 5-ply walnut with burl walnut front, finished in antique brown, and is 12½ in. high by 15½ in. wide by 12½ in. deep. The intended retail price with the A100 unit, 110 volt A.C. supply for field excitation and using Westinghouse dry rectifier, is \$75; with the R300 chassis, for 6 to 12 volts, D.C., operating from an A-battery with a current consumption of from .5 to 1 ampere, \$60; and with the D200 chassis, 110 to 220 volts, D.C., with a current consumption of from 45 to 90 milliamperes, \$65.—*Radio Retailing*, August, 1928.



Dynamic Cone Reproducer

Newcombe-Hawley, Inc., St. Charles, Ill., has added to its line of radio reproducers a new portable reproducer using its dynamic cone chassis. The cabinet is constructed of walnut with a satinwood front. It is made in three models for use with 6 volt battery sets, 100-200 volt D.C. sets, and 110-115 volt, 60 cycle, A. C. sets.—*Radio Retailing*, August, 1928.



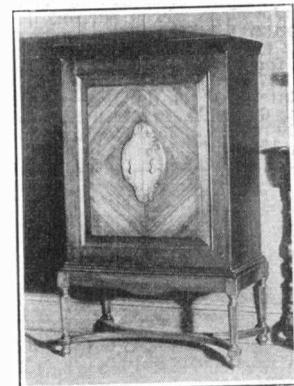
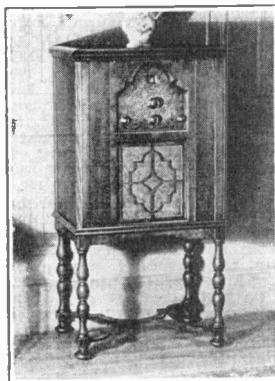
A.C. Receiver

A new receiver using five '27 type A.C. tubes and one '71-A type output tube with all power equipment arranged integrally in one compact unit, is being made by the Stromberg-Carlson Tel. Mfg. Co., Rochester, N. Y. The set is a Neutrodyne with three stages of tuned, neutralized and totally shielded radio frequency amplification including the antenna tuning stage, one totally shielded detector stage, and two stages of high quality audio amplification. It is equipped with a high-low switch which compensates for any fluctuation in line voltage. The volume is controlled by one knob which actuates a volume control potentiometer and a volume control rheostat.

The cabinet has a solid walnut framework with selected panel construction, the top being of selected walnut butts with four-piece matched construction. The upper layer of this cabinet has a decorative hand-carved effect, as also the middle of the front panel. Retail price \$185.—*Radio Retailing*, August, 1928.

New Edison Radio and Phono Combinations

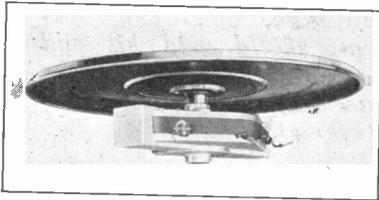
Thomas A. Edison, Inc., Orange, N. J., has just entered the radio field with two models of radio sets both equipped with dynamic speakers and two models of radio and electric phonographs also equipped with dynamic speakers. The first model, illustrated, R-2, is a radio set with overall dimensions of 42½ in. x 22 in. x 16 in. The chassis of this set which is similar in all the equipment built by this company includes three stages of radio frequency amplification, detector and two stages of audio, four 226 tubes, one 227 tube, one 250 tube and one 251 tube being used. All models are equipped with a super-power amplifier in order to get full quality from the dynamic speaker. A new type Peerless speaker built especially for these sets is used. Tuning is accomplished by a single dial calibrated into wave lengths and illuminated from the interior. A phonograph jack with a change-over switch is also part of the equipment on every set. All cabinets are made in Edison's own plant, and in the case of model R-2 it is in blended walnut finish relieved with burl maple panels. Intended retail price less the tubes is \$260. Model R-1 radio receiver with dynamic



speaker measures 46 in. x 22½ in. x 13 in. overall. This is also of blended walnut finish and has panels of burl maple. The controls are of inlaid maple and trimmings of statuary bronze. The doors fold back flat against the sides. Intended retail price, less tubes, \$315.

Of the radio phonograph combinations model C-2 is illustrated. This is completely electrified and the cabinet is of blended walnut finish with ornamental panels of burl maple—the doors folding back flat along the sides revealing four gold embossed record albums. Overall dimensions are 48½ in. x 28½ in. x 18 in. Intended retail price including dynamic speaker, but less tubes, \$495.

The second model radio and electric phonograph combination, C-1 is an exact reproduction of an Italian Credenza. It is handsomely carved from solid walnut with rich polychrome motifs. It has built-in record containers and measures overall 48½ in. x 43 in. x 20 in. The intended retail price less the tubes but including two extra size Peerless dynamic speakers \$1,100. Each radio phonograph combination has an electric pick-up that plays all types of records.—*Radio Retailing*, August, 1928.



Phonograph Rotors

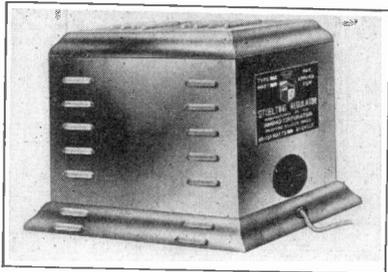
An electric motor for talking machines has been placed on the market by the Rotor Corporation of America, Dayton, Ohio. This rotor combines noiselessness, durability, lightness and compactness, and it maintains a constant speed under variations of voltage. The weight is only 3½ pounds and a space of 1½ in. below the mounting is all that is required for installation. It cannot be used on D.C. The current consumption is ten watts. The intended retail price of Type A (illustrated) is \$22.50. Type B, intended for portable, weighs 2½ lbs., and is supplied with a 10-in. velvet covered turn table in either nickel or oxidized copper finish. The rotor proper runs at 300 r.p.m. It is intended for a mounting board ¾ in. thick. The "Rotrola" may also be had mounted in a portable case with electric pick-up, volume control and cord connections, for \$40.—*Radio Retailing*, August, 1928.

Voltage Regulator

The Stoelting regulator automatically controls and regulates the current supply, incorporates a new principle in electrical circuits, the Stoelting circuit. This device, which has been placed on the market by the Amrad Corporation, Medford Hillside, Mass., is designed to operate over the entire range of line voltage variation from 95 to 135 volts, maintaining a correct constant input voltage to the receiver. It has no knobs, controls, adjustments, bulbs, liquids, or moving parts and requires no attention.

The sixty watt regulators are designed to operate receivers of the type 112 or type 171 power tube class, irrespective of the number of tubes in the receiver, and whose current demand is approximately sixty watts or less. The 120 watt regulators are designed to operate receivers of the type 210 or type 250 power tube class whose current demand is approximately 120 watts or less. The 120 watt type regulators are equally applicable for the operation of the type 112 or type 117 receivers.

The intended retail price of type A, 60 watt, 60 cycle, is \$18; type B, 120 watt, 60 cycle, \$25.—*Radio Retailing*, August, 1928.



A. C. Receivers

Model A, of the A.C. receivers using the Technidyne circuit, made by the Sagle Radio Company, Fort Wayne, Ind., has a dynamic power reproducer, in a single station selector and is housed in a cabinet of walnut finish with butt walnut overlays and trim. It has seven tubes of the '27 type and two '71's in push-pull. Model B is a ten tube console (eight '27's and two '71's in push-pull) with dynamic power reproducer, phonograph pick-up connection, housed in a walnut finished cabinet; model C is a ten tube lowboy, with dynamic reproducer and phonograph pick-up connection; model D is a ten tube highboy of the Florentine period equipped with or without phonograph turntable and space for records; model E is a ten tube highboy (eight '27's and two '50's), with or without phonograph turntable, and space for records.—*Radio Retailing*, August, 1928.

Time Switch

An automatic device made in the form of an owl, for automatically shutting off the radio receiver, has been introduced by the Radio Owl, 2269 East 51st Street, Los Angeles, Calif. This instrument will operate on either A.C. or battery sets. Its operation is hydraulic and may be set for any period from 5 minutes to 1½ hours. The switch has a capacity of 5 amperes. It is to be installed in series with the A-supply with D.C. sets and on the 110 volt side of A.C. sets. It is about 5½ in. high and finished in brown. The intended retail price is \$3.50.—*Radio Retailing*, August, 1928.



Phonograph-Radio Combinations

The Victor Talking Machine Company, Camden, N. J. has added three combination radio receivers and phonographs to its line. Model 7-11 is a Victrola-Radiola combination which will retail for \$250; model 7-26 is an Electrola-Radiola combination, with a concealed cone reproducer. It is housed in an early English design cabinet and has an intended retail price of \$425; while the third, model 9-16, also an Electrola-Radiola combination, has the new Victor power unit, Radiola 18 set and the new Electrola dynamic power reproducer, and is encased in a period cabinet with the antenna plate concealed in the rear, and will retail for \$750.—*Radio Retailing*, August, 1928.

Televisor Tube

A televisior tube, type 61, which can be used in the output circuit for television work and in low frequency oscillators, has been brought out by the CeCo Mfg. Co., 702 Eddy St., Providence, R. I. This tube should not be overloaded. In using a D.C. source, a current limiting resistor or high resistance choke coil in series must be employed. The rating of this tube is: dynamic resistance, 1000-1400 ohms. The current should not exceed 24 milliamperes. D. C. voltage maximum, 220 volts.—*Radio Retailing*, August, 1928.

Dynamic Reproducers

The dynamic reproducers made by the Sandar Corporation, Metropolitan Building, Long Island City, N. Y., come in three types, the 6-volt type for operation with battery sets; the D.C. type for operation on 90 to 110 volt D.C. house lighting current or from a radio set capable of providing 50 to 125 volts, with a minimum of B-power supply of 40 milliamperes; and the A.C. type, for operation on 110 volt A.C. lighting current. Special rectifying unit incorporated in the reproducer transforms the current from alternating to direct. A 25-to-1 step-down transformer is standard equipment in all these reproducers. The end table model, No. 75, is housed in a table console of two-tone walnut, \$75; the table model has a two-tone walnut cabinet of Gothic motif, with a carved, cathedral effect grille, \$50; the table console model, 77, is of two-tone walnut with decorative carved panels, \$110. The chassis of this reproducer is also available, \$45.—*Radio Retailing*, August, 1928.

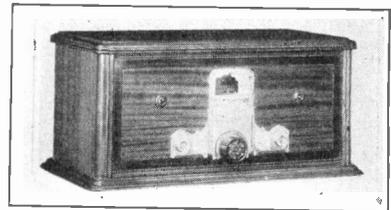


A.C. Tube Checker

Model 291, A.C. tube checker made by the Chicago-Jefferson Fuse and Electric Company, 1500 S. Laflin Street, Chicago, is equipped with a meter, two sockets,—one for the 227 type and the other for the 226 type, A. C. tube,—a rheostat and a push button. This model, 100-120 volts, 50-133 cycles, is \$10 and model 292, 100-120 volts, 25-40 cycles, is \$12.50. A D.C. tube tester is also available which retails for \$4.50.

This company also makes a tube rejuvenator, 110-120 volts, 50-133 cycles, which retails for \$4.50, and a model for 100-120 volts, 25-40 cycles, which lists at \$6.

A voltage regulator for A.C. tubes is also included in the line. This regulator consists of a transformer and switch to enable the operator to step the current up or down to the correct voltage. For use on 110-120 volts, 50-133 cycles, \$5; for use on 110-120 volts, 25-40 cycles, \$6.25.—*Radio Retailing*, August, 1928.



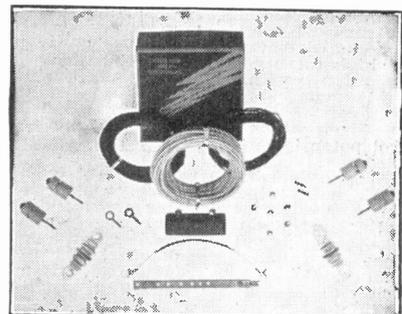
A.C. Receivers

The new Ortho-sonic A.C. seven tube receivers, which have been placed on the market by the Federal Radio Corporation, Buffalo, N. Y., are known as the "G" models. They may also be obtained for battery operation. Among the features are: push-pull amplification combined with a patented balanced circuit; a single control, illuminated scale, compactness, and genuine mahogany or walnut veneered cabinet, with space for battery or current supply devices.

The G-10, operating on 25 or 60-cycle electric current has an intended retail price of \$130. G-40 model is encased in a console cabinet with built-in reproducer. It may also be had with built-in dynamic reproducer. It operates on 25 or 60-cycle current, and lists for \$220.—*Radio Retailing*, August, 1928.

Insured Antenna Kit

The Consolidated Wire and Associated Companies, Green and Congress Streets, Chicago, offer eleven antenna kits, ranging in price from \$2.20 to \$3.50, each of which is covered by insurance. Claims up to \$100 will be paid for any damage done to a set using one of these kits if the injury is caused by lightning or fire resulting from lightning. Kits, without insurance, may also be had from \$1 to \$2.85.—*Radio Retailing*, August, 1928.



Air Column Reproducer

The air column reproducer made by the Ultratone Manufacturing Company, Inc., 1046 West Van Buren Street, Chicago, is made in two table models and seven sizes for consoles. The table models are finished in two-tone walnut stipple. Type 8, illustrated, has a net price of \$6.75. Model 12, with a 48 inch air chamber, is \$10.13, net.—*Radio Retailing*, August, 1928.



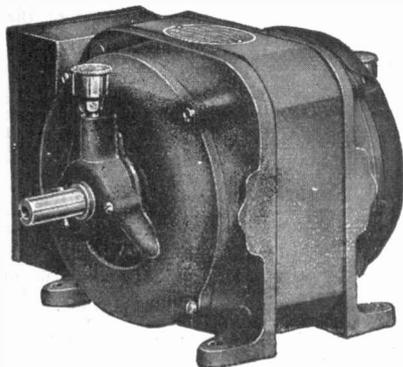
Eight Tube A.C. Receiver

A new model, single-dial, illuminated control A. C. set has been added to the line of the Day-Fan Electric Company, Dayton, Ohio. The set employs eight tubes, four stages of radio frequency, detector, and three stages of audio. It is completely shielded, and uses an output transformer. An interesting feature is the four-prong jack, located in a handy position, which permits the use of either the audio frequency end or the radio frequency end of the receiver separately, by simply "plugging in." This also provides for connecting a phonograph pick-up to the audio amplifying circuit, or for attaching a large power amplifier to the radio frequency output. This receiver may be had either in a table or console style walnut cabinet.—*Radio Retailing*, August, 1928.

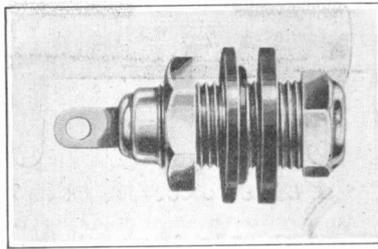
Motor for Television

A special type of constant or adjustable varying speed motor has been brought out by the Baldor Electric Company, 4339 Duncan Ave., St. Louis, Mo. It is designed especially for television work which requires at the receiving end, a motor whose speed can be varied to suit and which will not spark, as sparking distorts the received picture.

This type XIC motor uses 1.4 amp. when idle and 2.8 amp. at full load. It is a 1/2 hp. 110 volt, 60 cycle, 1,800 r.p.m. motor and is designed and built expressly for variable speed work. It is possible to vary the speed from 50-1100 r.p.m. in the six pole motor and from 100-1700 r.p.m. in the four pole motor. This varying can be accomplished in gradual steps. There are no brushes, commutator or automatic switch, or any device that can spark on this particular motor. It is ball bearing, which means minimum friction, is easy to keep accurate and is very quiet. It may be had complete with necessary flexible speed control, silent rubber-cushioned base and a precision flange.—*Radio Retailing*, August, 1928.



Radio Retailing, August, 1928



Tip Jack

A new tip jack suitable for general and specific use on metal and insulated baseboards and panels is announced by the H. H. Eby Mfg. Co., 4710 Stenton Ave., Philadelphia, Pa. It is made with a countersunk head to afford special support to the shank of the cord tip and to provide greater rigidity, and a double spring contact is also provided. Each is equipped with two insulating washers permitting use of the tip jack on metal panels and baseboards, and a color code washer to facilitate wiring.—*Radio Retailing*, August, 1928.



Voltage Regulator

A line voltage stabilizer to regulate the input to the A.C. tubes has been introduced by the Sterling Manufacturing Company, 2831 Prospect Avenue, Cleveland, Ohio. It plugs into the 115 volt 60 cycle light socket and contains no moving parts, resistors, liquids, dry rectifiers, tubes or heat, nor are there any rheostats, meters, or parts to need replacement. Automatically controls voltages between 80 and 135. It is 7 1/2 in. by 4 1/2 in. by 5 1/2 in. and weighs 10 lb. net. The intended retail price, complete, \$15.—*Radio Retailing*, August, 1928.

Radio Cabinets

Six cabinets of especial interest are included in the new line of the Pierson Company, Rockford, Ill. The "Arlington" will accommodate the set, power unit, an Ortho-type reproducer as well as the loop. It is constructed of American walnut with figured and matched butt-walnut ply-woods. The "Umbrian," model 857, is a desk model made of American walnut with generous applications of satin-wood. The outside dimensions are 46 in. wide by 48 in. high.

The "Canterbury," 214, which stands 50 inches high, has a beautifully figured front, decorated with English pulls on the doors, and will accommodate any set up to 27 in. long and 15 in. deep. Ample space for power unit supplied.

The "Aragon," 859, is in the Spanish style and will hold practically any set as well as the Ortho-type reproducer. It is 45 in. wide, 44 in. high and 19 in. deep.

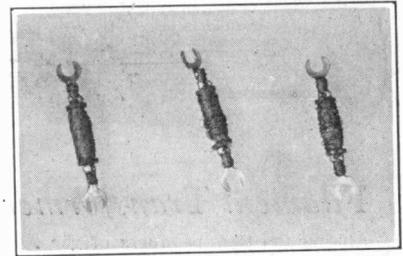
The "Seville," is of the Spanish treasure chest type, finished with special Spanish hardware, size, 36 in. wide by 42 in. high by 18 in. deep.

The "Castilian" is also of the Spanish type and is equipped with a Newcombe-Hawley Ortho-type reproducer. One of the features of this cabinet is the heavy forged antique straps mounting the angled corners.

The "Richelieu" is done in the Louis XVI period and is decorated with marquetry, an ornamental frieze and a generous amount of carving.—*Radio Retailing*, August, 1928.

Grid Resistors

A manufacturer's model suppressor is now being manufactured by the Langbein-Kaufman Radio Co., 62 Franklin St., New Haven, Conn. It is made of a large size wire, impregnated against moisture, and is non-inductive and wound staggard for a minimum of distributed capacity. The intended retail price is 50c.—*Radio Retailing*, August, 1928.



Filament Transformer

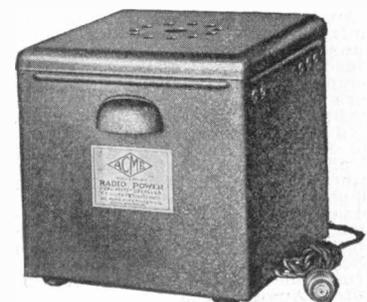
The Transformer Corporation of America, 1428 Orleans Street, Chicago, has developed filament transformers for all types of tubes, to convert battery operated sets into A.C. sets, securing the filament supply from 110 volt, 60 cycle. A.C. Model 687 will handle four to six 226 tubes, one or two 227 tubes and one or two 171 tubes. Both the 5 volt windings and the 2.25 volt windings are center tapped. It is 3 1/2 in. wide by 3 1/2 in. high by 4 1/2 in. long and weighs 5 1/2 lb. It is finished in black crystalline, and the price, complete with 6 1/2 foot cord and plug, is \$7.50.

Model 688, which handles three or four 226 tubes, one 227 and one 171, is \$4.50; model 650 which is capable of handling eight tubes without overload—price is \$6; and model 671, capable of handling seven Arcturus type tubes is \$6.—*Radio Retailing*, August, 1928.



Dry ABC Power Unit

The Acme Electric & Manufacturing Co., 1444 Hamilton Ave., Cleveland, Ohio, is making a dry ABC unit which will operate any set up to seven tubes. It is connected to the A.C. lighting circuit; contains no acids, liquids, stabilizers or battery; is noiseless; and delivers filtered rectified current. The filter and rectifying unit give smooth D.C. current at the proper voltages for 6 and 4-volt sets. The B-unit delivers 40 mills, 160 to 180 volts, has six taps—and has a metal cased condenser with double choke coils and uses the 80 type 125 mill rectifier tube. The C-voltages obtainable are 4 1/2 and 45 volts. The size is 9 1/2 in. high by 12 in. long by 9 1/2 in. wide. The intended retail price, 110-115 volts, 50-60 cycle (4 or 6 volt), is \$63, less tube.—*Radio Retailing*, August, 1928.



A.C. Tube

The Wireless Corporation of America, 1744 North Robey Street, Chicago, is making a '27 type A.C. tube by a new process which, they claim, avoids overheating, which weakens the filament and insulating substance of the tube. It is interchangeable with any other type of '27 heater type A.C. tube, and guaranteed for one year by the manufacturer.—*Radio Retailing*, August, 1928.



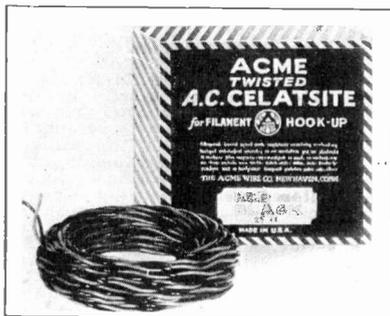
Filament Transformer

Among the new products of the Acme Electric and Manufacturing Company, 1444 Hamilton Avenue, Cleveland, Ohio, is a filament transformer for the new A. C. '26 and '27 type tubes. It delivers 1½, 2½ and 5 volts on the secondary when operating from 110 volts 60 cycle current. This instrument is known as model T-2 and handles six '26 type tubes, one '27 type tube and one 171 tube. The intended retail price is \$6.—*Radio Retailing*, August, 1928.



Twisted A.C. Wire

The Acme Wire Company, New Haven, Conn., has placed on the market a wire for A.C. filament hook-up use. This wire comes in the following convenient form, one strand of red, one strand of black, 16/30 flexible Celatsite twisted together. The two colors are used so that, if desired, the same sides of all filaments can be maintained at the same relative potential. Packed in 25 ft. coils in individual cartons. Intended retail price \$1.75.—*Radio Retailing*, August, 1928.



Waterproof Cord

An adapter harness to be used in conjunction with a standard step-down transformer and A.C. tubes has been added to the line of the Cornish Wire Company, Inc., 30 Church Street, New York City. It may be used with practically all receivers. Adaptors are supplied with the R.C.A. type harness but the Arcturus cable type tubes require no adaptors and can be used in any set without raising the height of the tubes. Ample provision is made for the C-biasing and a volume control is supplied with all harnesses. The intended retail price of type "R" for R.C.A. type tubes is \$8; and type "A" for the Arcturus cable type tubes is \$5.—*Radio Retailing*, August, 1928.



Power Resistances

An electro chemical alloy is being utilized by the DeJur Products Co., 199 Lafayette St., New York City, for the manufacture of a "synthetic" power resistance rated at 3 to 4 watts dissipation per square inch surface area. This resistor, manufactured under a temperature of 2,000 degrees F., is available in all values of resistance from 5,000 to 50,000 ohms. They are said to be exceptionally suited wherever high values of resistance of relatively low wattage capacity are required and have an exceptionally low value of positive temperature coefficient.

This company is also developing a new line of Vitreous enameled power resistances suitable for use in B power units and electric receivers. The resistors consist of a winding using very low positive temperature coefficient wire upon a refractory tube with a heavy coating of Vitreous enamel, "fired" on at a high temperature.—*Radio Retailing*, August, 1928.

Short Wave Receiver

A short wave receiver, completely shielded, equipped with screen grid tubes, and having facilities for narrow and wide frequency band reception, has been added to the line of A. H. Grebe & Co., Inc., 109 West 57th St., New York City. It is known as the CR-19 short wave receiver and has facilities for covering all wavelengths between 10 and 80 meters. It uses five tubes, a screen grid '22 type tube in the r.f. stage; a '01A detector, two hi-mu tubes and a '12A power tube in the resistance coupled audio frequency system. Ample power is assured by using three stages of resistance coupled audio amplification, the first two of which are hi-mu tubes with characteristics suitable for a wide audio frequency band, such as will be necessary for television. The intended retail price will be about \$150.—*Radio Retailing*, August, 1928.

Connector for Speaker Cords

The Belden Manufacturing Company, 2300 South Western Avenue, Chicago, Ill., has developed a bakelite connector for attaching extension cords to radio speaker cords. The connector receives the standard pin type speaker tips. The tips of both speaker and extension cord are simply pushed into the connector. No tools are necessary. A feature is that the tips are completely inside the bakelite connector. No metal is exposed.—*Radio Retailing*, August, 1928.

A.C. Power Pack

Kuprox A.C. power pack for completely electrifying any direct current receiver, illustrated, is made by the Kodol Radio Corp., Cincinnati, Ohio. Makes any battery set an A.C. set. Supplies 4 or 6 volts filament current, up to 180 volts plate current, 4 to 45 volts grid bias current. Operates any make or type of receiver. Uses no acids, liquids, never requires attention. Requires no changes in set wiring. Three models priced, \$62.50 to \$65.—*Radio Retailing*, August, 1928.



Resistors for Line Voltage Control

The Ward Leonard Electric Company, Mt. Vernon, N. Y., has placed on the market resistors, with Edison screw bases, and also rheostats for use in compensating for excessive line voltages where A.C. sets are used. These come in each of the various sizes of resistances, and a table which this company has prepared shows immediately what type of resistance is to be used with a certain line voltage and current consumption. The resistors are priced at \$2 each, while the rheostats have an intended retail price of \$5.50 each.—*Radio Retailing*, August, 1928.



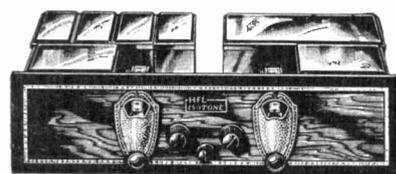
Correction Item

In the July issue of *Radio Retailing* on page 65 an item was run of the new Kolster line. Unfortunately this was illustrated with a table type set which was not Kolster's but that of the Federal Radio Corporation of Buffalo, N. Y.—*Radio Retailing*, August, 1928.

Condenser Bank for High-Voltage Rectifiers

In order to meet the high-voltage requirements of the '81, and similar filament rectifiers, the Dubilier Condenser Corporation, 4377 Bronx Boulevard, New York City, announces a new condenser bank comprising the type PL 666 and type PL 867 units. The former consists of a 2 mfd. 1,000-volt condenser section, while the latter consists of 1 mfd. 600-volt, 4 mfd. 600 volt, 1 mfd. 175-volt, and 1 mfd. 175-volt sections. The condenser bank may be employed in the usual three-section filter network, with the two blocks, or again the type 867 block may be used alone, eliminating the first condenser, in accordance with more recent practice of a two-section filter network. It will be noted that, following the most advanced practice, this condenser bank is made in two blocks so that the high-voltage section is separate.

The PL-666 and PL-867 condenser bank may be employed for the Amertran, Samson, Silver-Marshall and other similar power packs and radio power units utilizing the '10 or '50 type power tubes in push-pull.—*Radio Retailing*, August, 1928.



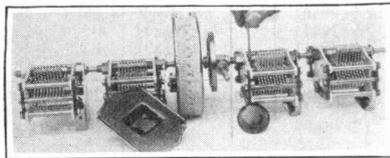
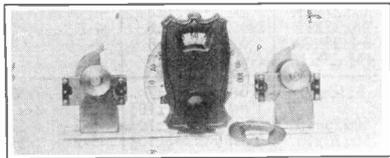
Shield Grid Kit

The High Frequency Laboratories, 28 N. Sheldon Street, Chicago, Ill., has announced a new kit of parts, which assembles into what is known as the "Isotone screened grid radio phonograph." The kit itself consists of three completely assembled, wired and tested units which are bolted down to a foundation plate. The final connections are made underneath the foundation plate by means of small jumper connecting strips. The instrument has an automatic change-over switch allowing phonograph records to be played through the audio amplifier section which houses a microphone transformer and power tube for the purpose of playing phonograph records. All parts are completely shielded and a unique system of assembly permits the wire itself to be completely shielded. The three-stage intermediate frequency amplifier has a gain of 65 per stage and the audio frequency amplifier is a three-stage push-pull combination of which two stages are used in radio reproduction. The intended retail price is \$195.—*Radio Retailing*, August, 1928.

Gang Condenser Assembly

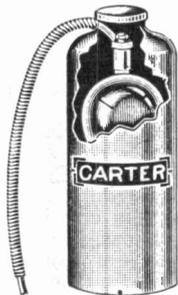
The Precise Manufacturing Company, 254 Mill Street, Rochester, N. Y., is making a group assembly consisting of a drum dial friction drive and four condensers known as the No. 2100 group. These condensers are made entirely of aluminum with 9/64 in. spacing between the stator blades and the rotor blades, and have cone type bearings, an adjustable compensator and are very rigid in construction. The .00035 mfd., capacity lists at \$6, and the .0005 mfd., capacity at \$6.50. Drum dial friction drive, escutcheon plate, knob and mounting bracket are known as the No. 2000 master drum dial assembly, with an intended retail price of \$5.25.

The No. 1580 assembly group uses the No. 2200 friction dial for driving. The friction dial lists at \$2.25 and includes an escutcheon plate, knob and dial. Pulleys and belts are separate and are known as the No. 2020 single pulley and the No. 2015 and 2019 dual pulleys. The belts may be bought in any length, being bronze .005 thick and 1/4 in. wide. The No. 1580 condensers have aluminum end plates, brass rotor and stator assemblies, the blades of which are stippled. They also have a compensator for varying the minimum capacity.—*Radio Retailing*, August, 1928.



Tube Shield and Shielded Connector

A tube shield and shielded connector for use with the new type '22 shielded grid tube is being made by the Carter Radio Company, 300 S. Racing Avenue, Chicago, Ill. The shield is made of heavy copper with a bright lacquer finish. A removable cap is provided at the top of the shield to facilitate mounting the shielded connector on the control grid. The connection to the terminal on top of the tube is made by means of a brass cap, slotted to make a firm spring contact. The wire is separated from the shield by a very thick rubber wall to keep the grid capacity to ground at a very low value. The tube shield completely covers the tube (including the base) and is fastened to the baseboard or sub-panel by a molded adapter ring. The intended retail price of the tube shield only is \$1.50; adapter ring, \$0.35; connector with shielded wire, \$0.50. This company also makes a wire wound tapered rheostat and potentiometer, a type CU center tapped resistor, a type U5-15 tapped resistor, a type JU center tapped resistor for A. C. filament circuits, and type J5-15 and J10-25 tapped resistors for use with a '22 type tube and a six volt battery.—*Radio Retailing*, August, 1928.



Radio Retailing, August, 1928



A & B-Power Units

Among the new items which are being introduced by the L. S. Brach Manufacturing Corp., 127 Sussex Ave., Newark, N. J., is a line of power supply devices.

The Brach dry A-power unit furnishes a humless direct current to the filaments of the radio tube. It is complete with a relay, automatic in action, so that the unit can be controlled entirely from the radio set switch and in addition to controlling this unit, means are provided whereby a B-power unit may also receive its current only when the radio set switch is at the "on" position. It is provided with a leather handle for convenient handling and all the terminals are on the inside. The voltage adjustment is by a small plug and socket. Intended retail price, \$39.50 complete.

A small compact B-power supply unit which is provided with terminals of the following voltages, 45, 90 and 180 volts, is also made. Full adjustments are provided between each of these voltages. The unit has an output up to 40 milliamperes at 180 volts. It is designed to use the '80 tube. All parts are properly shielded and arranged in a compact container measuring 6 1/2 in. wide by 6 in. high by 8 1/4 in. deep.

Terminals of this unit are all placed within the container. A special automatic switch is provided which removes all voltage from the terminals when the cover is off the container. This device is designed to operate on 110 volts, A.C. 60 cycles. Intended retail price, \$27.50, less tube.



The BC-power supply unit eliminates all rheostat types of control and each tap of the output voltage comes to an individual terminal binding post and the following voltages of B and C current are available: B voltages, plus 22, 45, 67, 90, 135 and 180; C voltages, minus 4 1/2, 9, 22 and 40.

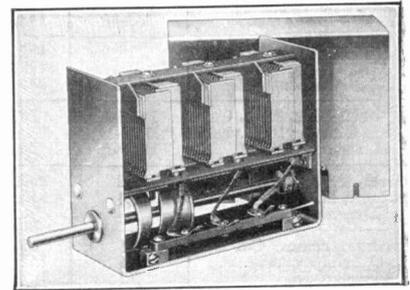
These units are also provided for a voltage regulator tube of the '74 type, which is desirable in order to smooth out the line fluctuation. The output is up to 50 milliamperes. In order to insure smooth humless output, the chokes and transformers have been made under special specifications and construction, and all parts are properly shielded. All terminals are inside the container and the 110 volt supply is cut off by a switch which is automatically operated when container cover is removed. Intended retail price, \$36, less tube.—*Radio Retailing*, August, 1928.

A.C. Receiver

A seven tube A.C. receiver is now being made by the Standard Radio Corporation, Worcester, Mass. It is completely contained in a hand rubbed walnut or mahogany finished cabinet and has the one dial illuminated control. It has four stages of radio frequency, detector, and two stages of audio frequency. The intended retail price, less tubes, is \$85.—*Radio Retailing*, August, 1928.

Gang Condenser

The Pearl Radio Corporation, Philadelphia, Pa., is manufacturing a new straight line condenser. The rotor plates are mounted rigidly on a flat metal carriage which rides on a smooth metal plate which is riveted to each end of the metal frame. These metal ends form part of the shield. The rotor plates are grounded and ground connections supplied. There is a lug riveted to the bottom of the rotor carriage. This operates on the diagonally cut slot of the cam under the rotor carriage. This cam is riveted to the shaft which mounts the dial of the set. Turning the dial pushes or pulls the rotor plates between the stator plates. As many condensers as are desired can be placed in one gang, all operating on the same carriage.—*Radio Retailing*, August, 1928.



A.C. Converter

An A. C. converter is being made by the Webster Electric Company, 850 Blackhawk Street, Chicago, Ill. This device has a variable detector and amplifier and will operate a set of from five to ten tubes supplying A & B current. The size is 6 inches high, 5 1/2 inches wide and 14 inches long. The intended retail price, less tube, is \$59.50. This company also makes an AB power unit known as the "Bone-Dri AB-10" with an intended retail price, less tube, of \$65, and a Webster "70" ABC supply to operate Tyrman 70, with an intended retail price, less tube, of \$62.—*Radio Retailing*, August, 1928.

Tester and Reactivator

An instrument designed to test practically all of the different tubes in general use, including the A.C. and D.C. types, is being made by the Lundquist Tool & Mfg. Co., 144 Green Street, Worcester, Mass. No batteries are necessary, the current being taken directly from any 110 volt, 60 cycle A.C. line. The filament, plate and grid voltages are supplied by a special variable transformer. Its construction is simple, and all parts, such as sockets, binding posts, etc., are mounted on a Bakelite panel with permanently wired and soldered connections. The entire unit is contained in a finished wood carrying case, (size 5 in. by 8 in. by 11 in.), together with all necessary wires, attachments, plug, etc. and is provided with a tube data chart and directions. This instrument is also easily operated as a tube reactivator. The intended retail price is \$32.50.—*Radio Retailing*, August, 1928.



Receiver Specifications, Season 1928-1929 (continued from page 76)

This information was received too late for proper classification.

Name and Address of Manufacturer	Model No.	List Price	Style of Cabinet	Reproducer Built In	A.C. or Battery Operated Set	Total Watts per Hour Consumed by A.C. Set	No. of R. F. Stages	No. of A. F. Stages	Rectifier Used for B-Supply	Plate Voltage on Last Audio Stage	Overall Dimensions of Set H—W—D	Is Chassis of this Model Sold Separately?	Overall Dimensions of Chassis H—W—D	Number and Types of Receiving Tubes Used
A. C. Dayton Co. 300 E. First St. Dayton, Ohio	XL-61	\$65.00	Table	No	Bat.		3	2		135	8½x20½x12½	No	4½x16½x5½	5-201, 1-112
	AC-63	98.00	Table	No	A.C.	28	3	2	280	160	8½x20½x12½	No	4½x16½x5½	4-226, 1-227, 1-171
	AC-65	123.00	Table	No	A.C.	52	3	2	281	425	8½x24½x13½	No	4½x16½x5½	4-226, 1-227, 1-210
	AC-66	148.00	Table	No	A.C.	65	3	2	281	475	8½x24½x13½	No	6½x16½x5½	3-226, 1-227, 1-222, 1-250
American Bosch Magneto Corp. Springfield, Mass.	28	132.50	Table	Magnetic Dynamic	A.C.	45	3	2	280	160	10x23½x10½	No		2-171, 4-226, 1-227
	28A	197.50	Console		A.C.	45	3	2	280	160	39½x28x16	No		2-171, 4-226, 1-227
	29B	295.00	Console		A.C.	80	3	2	2-281	400	52x29x16½	No		4-226, 1-227, 1-210
Bosworth Elec. Mfg. Co. Main & Lexington Aves Norwood, Ohio	B-57-A	70.00	Chassis	Chassis	A.C.	40	3	2	280	180		Yes	6½x22x10	4-226, 1-227, 1-171
	B-75-B	75.00	Chassis		A.C.	100	3	2	2-281	400		Yes	6½x21x10	4-226, 1-227, 1-210
	B-75-A	75.00	Chassis		A.C.	100	3	2	2-281	400		Yes	6½x23½x13½	4-226, 1-227, 1-210
Edison, Inc., Thos. A. Orange, N. J. *Dynamic.	R2	260.00	Console	*Peerless	A.C.		3	2	281		42½x22x16			4-226, 1-227, 1-250
	R1	315.00	Console		A.C.		3	2	181		46x22½x18			4-226, 1-227, 1-250
Grigsby-Grunow Co. 4540 Armitage Ave. Chicago, Ill.	51	65.00	Table	Dynamic	Bat.		3	2		135	13x27x15	No	9x21x8	5-201A, 2-112A
	71	137.50	Console		A.C.	110	3	2	180	180	46x27x15	No	9x21x8	4-226, 1-227, 2-171A
	72	167.50	Console		A.C.	110	3	2	180	180	54x29x20	No	9x21x8	4-226, 1-227, 2-171A
	81	197.50	Console		A.C.	200	3	2	2-181	425	44½x29x18	No	9x21x8	4-226, 1-227, 2-210
Kennedy, Inc., Colin B. Highland, Ill.	60	95.00	Table	No No Magnetic Dynamic	A.C.	45	3	2	280	180	8x18x10	No	6½x7x7	4-226, 1-227, 1-171
	80	180.00	Console		A.C.	60	4	2	280	180		Yes	9½x20½x10½	5-226, 1-227, 2-171
	80	290.00			A.C.	60	4	2	280	180	50x28x15	Yes	9½x20½x10½	5-226, 1-227, 2-171
	80	330.00			A.C.	60	4	2	280	180	50x28x15	Yes	9½x20½x10½	5-226, 1-227, 2-171
King Mfg. Corp. Buffalo, N. Y. *1-P.P.	FK	55.00	Table	No No No No	Bat.		2	2			7½x15½x8½	No	6½x14½x7	3-201A, 1-200A, 1-112A
	GK	72.50	Table		Bat.		3	2				No	6½x17½x7	4-201A, 1-200A, 1-112A
	HK	110.00	Table		A.C.	60	3	2	280	180	7½x20x11	No	6½x19½x9½	4-226, 1-227, 1-271A
	JK	130.00	Table		A.C.	60	3	1*	280	180	7½x20x11	No	6½x19½x9½	4-226, 1-227, 2-171A
Langbein-Kaufman Radio Co. 62 Franklin St. New Haven, Conn. *Arcturus.	J7RCA	87.50	Chassis only	Airchrome	A.C.		3	3	280	200		Yes	7½x15½x9½	5-226, 1-227, 1-112 or 171
	J7RCA	87.50	Chassis only		A.C.		3	3	B.H.	180		Yes	7½x15½x9½	*5-28, 1-26, 1-30
	St. ARC	132.50	Table		A.C.		3	3	B.H.	180	12x22x14	No		*5-28, 1-26, 1-30
		195.00	Console	A.C.		3	3	B.H.	180	42x26x16	No		*5-28, 1-26, 1-30	
National Carbon Co., Inc. 30 E. 42nd St. New York City	1	145.00	Table		A.C.	45	3	2	280		10½x24½x9½	No		4-226, 1-227, 2-171A
	2	155.00	Table		A.C.	45	3	2	280		8½x24½x10½	No		4-226, 1-227, 2-171A
	20	85.00	Table		Bat.		3	2		135	10½x13½x13½	No		5-240, 1-112A or 171A
Philadelphia Storage Battery Co. Ontario and C Sts. Philadelphia, Pa.	511	115.00	Metal table	Magnetic	A.C.	50	3	2	280	135	8x24x11½	No	6½x23½x11½	4-226, 1-227, 1-171A
	521	125.00	Metal table		A.C.		3	2	280	135	8x24x11½	No	6½x23½x11½	4-26, 1-27, 1-171A
	512-13-14-15	125.00	Metal table		A.C.		3	2	280	135	8x24x11½	No	6½x23½x11½	4-226, 1-227, 1-171A
	522-23-24-25	135.00	Metal table		*A.C.		3	2	280	135	8x24x11½	No	6½x23½x11½	4-226, 1-227, 1-171A
	531	200.00	Low Boy		A.C.		3	2	280	135	39½x30x14½	No	6½x23½x11½	4-226, 1-227, 1-171A
	541	210.00	Low Boy		*A.C.		3	2	280	135	39½x30x14½	No	6½x23½x11½	4-226, 1-227, 1-171A
	551	275.00	High Boy		A.C.		3	2	280	135	47½x29½x15½	No	6½x23½x11½	4-226, 1-227, 1-171A
	561	285.00	High Boy		*A.C.		3	2	280	135	47½x29½x15½	No	6½x23½x11½	4-226, 1-227, 1-171A
	571		†		A.C.		3	2	280	135		No	6½x23½x11½	4-226, 1-227, 1-171A
	581		†		*A.C.		3	2	280	135		No	6½x23½x11½	4-226, 1-227, 1-171A
*25 cycle models. †Combination in phonograph and radio. Prices of 571 and 581 to be announced later. Prices given are "less tubes." Tubes \$22.50 extra.														
Radio Corporation of America 233 Broadway New York City	30-A	*285.00	Floor	100-A	A.C.		†	2	2-281		42½x29x17½	No		7-199, 1-171A
	18	115.00	Table		A.C.				280		8½x27½x7½	No		4-226, 1-227
	16	*82.75	Table		Batt.		3	2			8½x16½x7½	No		1-171-A, 5-201A
	51	195.00	Floor	100-A	A.C.		3	2	280		38½x24½x14	No		1-112A 4-226, 1-227 1-171-A
*Includes Radiotrons. †Superheterodyne. Note: Other models to be announced about Aug. 15.														
Shamrock Mfg. Co. 158 Summit St. Newark, N. J. Note: *Push Pull. Note: Set comes in walnut,	jade green,	95.00	Table	No	A.C.		2	*2	280		8½x18½x11	No		4-227, 2-171A
Tyrman Electric Corp. 314 W. Superior St. Chicago, Ill.	50	64.50	Portable	Utah	Batt.		2	2		90	13x15x9	No		1-222 4-199
	60	69.50	Pr. Pk		Batt.		2	2			7x18x9½	Yes	7x18x9	3-222 2-201A 1-171
	72	98.50			A.C.	60	2	2	280	180	8x21x13½	Yes	20½x13½x8	3-222 3-227 1-171
	80	134.50			*Power Pack	A.C.	125	3	2	2-281	400	8x21x13½	Yes	20½x13½x8
*and amp. \$65.00. †or A.C.														

One Radio to Every Nineteen People in Canada

The intention of the Canadian Government to appoint a commission to inquire into the subject of radio broadcasting calls attention to the large increase in the radio population of the Dominion.

The Radio Branch of the Department of Marine and Fisheries, Ottawa, has estimated that there are close to a half million

radio owners in Canada out of a total population of 9,500,000, making the ratio 1 to 19. Incidentally, 50,000 more people in Canada paid the \$1 fee this year than last, this being an indication to the radio trade of radio progress during the past year.

Radio registration statistics are also of direct interest to manufacturers and dealers. Ontario leads the Canadian Provinces with 124,729 registrations of privately-owned radio sets, this being almost half of the total for the whole country. Other

Provincial totals this year include: Quebec, 51,283; Saskatchewan, 26,479; Manitoba, 19,284; British Columbia, 18,514; Alberta, 14,778; Nova Scotia, 7,105; New Brunswick, 4,461; Prince Edward Island, 587; North West Territories, 74, and Yukon, 14.

The best radio city in Canada, according to registrations, is Toronto where there are 41,888 sets—or more than any Province outside of Ontario and Quebec. Montreal, the largest city in Canada, comes next with 33,757 radio registrations.

"Specialty Selling" and Other Topics by Readers

Favors a "Balanced Policy" In Specialty Selling

Editor, *Radio Retailing*:

I HAVE read with interest the pros and cons on the subject of specialty selling that have been appearing in recent issues of your valuable magazine and, if it is not too late, I would like to register my vote in favor of a "balanced" sales policy which includes a proper amount of so-called "outside selling."

Mr. Griffin sounded a popular, but not necessarily correct, note when he pointed to the harmful reactions of outside selling as applied to radio and much water has flown over the millwheel. In the light of a "radio set simplified" and of a market now entering its second, or lethargic, stage it follows that from now on radio must be sold—and the only way whereby this process can completely be effected will be by a proper percentage of in-the-home contacting. By this I mean not only a following up of store leads but the actual creation of new business by smoking out somnolent, but perfectly good prospects.

Naturally discretion must be used. Common sense, not only as to the quality and reliability of the signers of "forced pressure" orders, but as to the maintenance of the firm's reputation and good will by not permitting outside salesmen to become undignified or obnoxious.

Take our own case as an illustration: Fifty per cent of our radio sales this past season would, in all probability, not have been made were it not for the missionary work of my field force of three men. There have been mighty few come-backs from this group of buyers; not any more than from the class who came to the store of their own volition.

Why, I rise to inquire, should a music house turn its back on this substantial volume of added business? Is it not true that the real reason many dealers do not use "cold turkey" selling methods is because store trading is "the easiest way?"

P. G. SMITH,
Manager Radio Department,
J. W. Jenkins Sons Music Co.

Kansas City, Mo.

Thinks Specialty Selling To Cold Prospects Unprofitable

Editor, *Radio Retailing*:

WE have found that outside selling when carried to people who have shown no interest in radio is not profitable. We tried it, and though we sold more sets than all our competitors, if we had been obliged to hire the salesmen we would have shown a loss, and as it was we just donated our own time. This year we have reaped a few sales from some of those demonstrations but also we find that most of those same people still expect an agent to come and force them to be convinced that they need a radio.

Our competitor, a new man, has gone out and sold a number of sets, and high priced ones, to farmers who must bring their battery to town to get it charged. They are already finding out that it is a big expense to keep them up. On the other hand we have refused to sell the sets that are such heavy drains on batteries and all our set owners stay by us for the replacement business. We believe with one other dealer here that, "if they would agree to let us sell all the replacement articles they could have the job of selling the sets."

Wauneta, Neb.

Ivo V. PENNINGTON,
Pennington's Garage.

Specialty Selling Is "Making" This Merchant's Business

Editor, *Radio Retailing*:

I HAVE read with much interest your articles on outside selling as applied to radio and cannot resist the temptation to say a little on the same subject.

Having pushed a good number of doorbells myself and had some very fine front doors slammed in my face, I am sorry to

say that I cannot agree with your calamity howlers who seem to take particular delight in agreeing with everybody. There is only one way to move a quantity of good radio merchandise in the average small city or town and that is "plug it" and "plug it heavy."

Radio merchants should by this time expect to render service for ninety days. Our service crew is more occupied in correcting faults in some other merchants' installations than in our own. Care and intelligent installation will overcome 99 per cent of this so-called "free service bogey."

Get a live crew manager, organize a selling crew and "push." That's what made washing machines and vacuum cleaners a good business and for us it's making radio a good business.

L. RICHARD BARBEAU,
Mystic Radio Company.

Malden, Mass.

Some Rules for Success

Editor, *Radio Retailing*:

FOR the past six years I have been selling, repairing and servicing radio merchandise, and since you started *Radio Retailing* I have been a constant reader and I get some very helpful information. I would like to say a few words in regard to what I think this industry needs. I have sold in the past two years over five hundred radio receivers, installing each and servicing each personally. I have sold enough batteries and other accessories to fill a freight car and yet I am complaining that I haven't sold more.

What this radio industry needs is, first, dealers who are well known in their particular territory and who have the necessary capital to carry a reasonable stock of merchandise; second, service men who understand radio thoroughly and who are also first-class salesmen. By salesman I mean one who does not talk in technical terms but can explain a set in a few words. Dealers should not handle over two lines of merchandise, a medium priced and an expensive furniture model and should stick to these lines. They should advertise locally, and talk only the lines that they carry. This would net dealers handsome profits and create confidence in them.

Find two good lines that are to be depended upon, employ a good service man who knows his business, handle good accessories, treat the public right and you will be a successful radio dealer; otherwise you will be a failure.

I do not believe in free demonstrations in the home. Out of the five hundred or more radio receivers that I have sold I never once left the receiver until I had the check or a promise.

PAUL L. CARRIGER.

El Dorado, Ark.

American Radio Popular in Australia

Editor, *Radio Retailing*:

WE ARE very hopeful of doing big business during the next five or six months, and we have found that it is not necessary to have winter weather to sell radio sets. As a matter of fact, we have sold all of the sets that we have received from America up to date and are now awaiting our next shipment. This is rather a pleasant trend in the market and goes to prove that the radio business is becoming fairly stable.

We had a radio exhibition here the first week in March, and we were glad to see that a good supply of American sets was available.

V. R. POWELL,
A. G. Healing & Co.

Melbourne, Australia.

Thank You!

Editor, *Radio Retailing*:

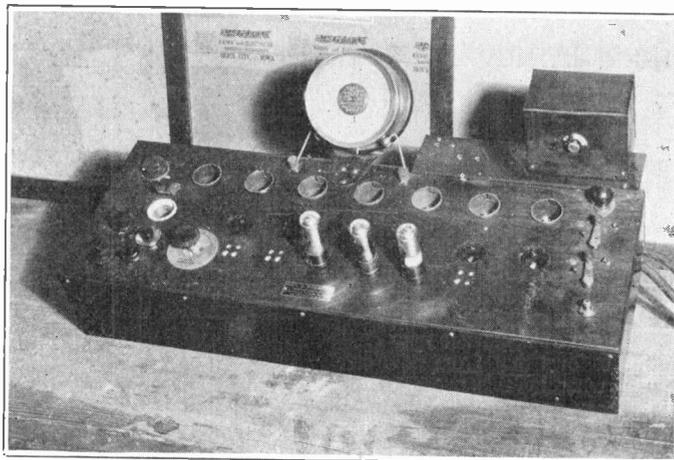
ONE of the reasons why there is so much dissatisfaction with the profits from retail selling of radios is because there are many retailers of radio who do not keep informed in the trend of affairs and of good business methods, by carefully reading the splendid articles published monthly by *Radio Retailing*. If they did, many unbusinesslike methods would be eliminated for they would see the folly of such things.

WILL A. WATKIN, President,
The Will A. Watkin Company.

Dallas, Tex.

Practical Service Methods

Conducted by
HENRY W. BAUKAT
Technical Editor



Tube rejuvenator with time switch attached.

Clock on Rejuvenator Saves Time and Money

TIME is an important element in the proper rejuvenation of tubes. G. R. Lockey, service manager for the Wheeler Radio Store, Sioux Falls, S. D., rigged up an old alarm clock with timing device which automatically controls the 45-second "flashing" charge and the 10-minute "aging" current. The clock also changes the voltage between these two operations so that each is performed at its proper potential.

Apart from the insurance against errors in timing for voltage, which this single little mechanism makes possible, there is the advantage of being able to continue without interruption of one's other servicing activities.

A pilot light indicates whether or not the current is turned on and a buzzer sounds at the completion of the aging operation—when the current is turned off.

Further to guard against error, Lockey has provided his clock with four plug contacts. The clock is placed in one series of contacts for tubes requiring the 15-9 volt cycle and in another set of contacts for the 9-4½ volt tubes.

A Thorardson, 2-D, top transformer is utilized to insure ample capacity.

The time switch is built from an old alarm clock. A fiber ring is mounted on the minute-hand post. On this ring are two metal strips, one of which is of a length

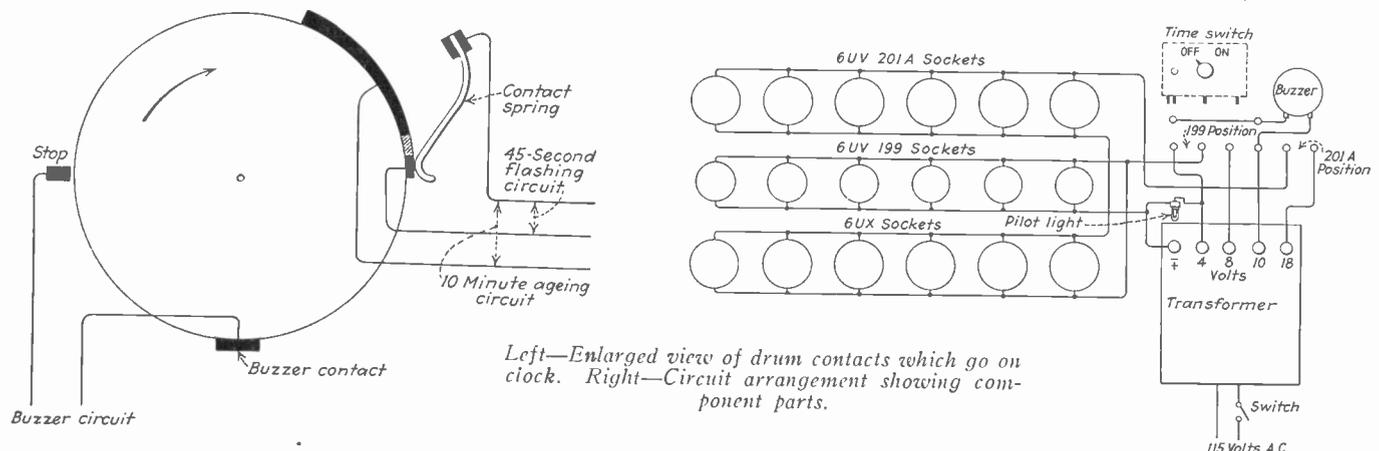
to hold contact with a stationary brush for 45 seconds. The second strip holds contact for ten minutes. When the ring has traveled through the 45-second and the 10-minute period, a third contact is made which turns on a buzzer and stops the mechanism. This buzzer continues until the primary switch of the transformer is opened by hand. The time switch is arranged to plug in to either one of two positions. In this way, it is impossible to put the wrong voltage on tubes.

The accompanying photograph and diagram will further classify the details concerning this confidence builder and time saver.

Why Condensers Wear Out

By HARRY W. HOUCK
Chief Engineer, Dubilier Condenser Corporation

Just because a condenser does not move, light up, heat or do other noticeable things in the course of its operation, is no reason to assume that it lasts forever. Indeed, far from being an inert thing, the usual condenser, whether the small grid condenser or the large filter condenser, is the scene of a great deal of mechanical, electrical and chemical actions, all of which go to wear



Left—Enlarged view of drum contacts which go on clock. Right—Circuit arrangement showing component parts.

out the condenser in the course of time. It is the very goodness of the condenser, together with its use or abuse, that determines just how long the condenser will last.

The usual mica condenser employed in radio reception is employed at such a low electrical strain, compared with its dielectric strength that it virtually lasts forever. In other words, the wear and tear is infinitesimal. The small mica condenser may have a dielectric strength of 5,000 volts, hence an applied voltage of 100 or less involves no appreciable effect on its condition.

In the paper or filter condenser, however, it is different. The applied voltage usually approaches close to the safe dielectric strength of the condenser, so that there is certain to be real wear and tear. The greatest factor of wear in this instance is the slow disintegration of the paper used for the dielectric. There is always a certain amount of leakage, or current flow from one plate to the other plate in a paper condenser. This leakage current singles out the weakest spots in the dielectric, and more and more current flows through such parts of the vast spread of dielectric. This action is accelerated, since more current means more concentrated heat and increased weakness, while increased weakness spells accelerated current flow, in a vicious cycle. Perhaps if we could see such action under the ultra-microscope, we might observe countless hot sparks gnawing away at the dielectric at the weakest point, and steadily increasing the breach.

The life of a paper condenser is comparable to that of an incandescent lamp. You expect at least a thousand hours of steady service from a lamp. Yet the first time you use the lamp, it may blow out, because it is defective. Again, if you use a 110-volt lamp on a higher voltage, it will give far more light but will soon burn out.

Often we are asked what is the precise nature of the breakdown in filter condensers. Well, a condenser may break down in any one of many particulars. It in variably breaks down at the weakest point. In fact, testing serves to check up on design quite as much as on condenser making, since the engineer learns the weak points of his work from the results of condenser tests.

The matter of condenser life is one which has hardly received sufficient attention from radio engineers. When it is borne in mind that the elaborate electrified receivers and radio power units of today can be no better than their filter condensers, and that a broken-down condenser means expensive servicing quite as well as costly replacements, the matter assumes proper proportions. Furthermore, even at this late date many engineers and radio set builders fail to appreciate the accelerated wear and tear on condensers brought about by applying voltages in excess of the true working voltage.

It will be noted that we mention "true" working voltage, which means just what it says to the user, whereas "test voltage," "tested at —" or "voltage rating" may mean little or nothing. However, a 10 per cent overload has been found to reduce condenser life by 50 per cent. Furthermore, if the voltage is doubled, the condenser life is reduced to one-thirtieth of its expected span. While these facts may appear appalling on

the one hand, they are advantageous on the other. They permit of accelerated life tests, whereby it is possible to determine condenser life quite accurately in but a fraction of the time which would be required for a normal life test. There are less than 9,000 hours in a year. Therefore, to determine the life of a good condenser, it would require more than three years of test at normal working voltage to allow a 30,000 hour life. Instead, the accelerated life test applies double the voltage, so that the actual number of hours obtained may be reduced to a thousand hours in this case, or approximately 42 days.

The condenser manufacturer of today is beginning to realize just what he is doing and what he is selling to the public. The problem now is rather one of having the public realize that condensers must be employed well within their rating, and that honestly-built condensers cost money.

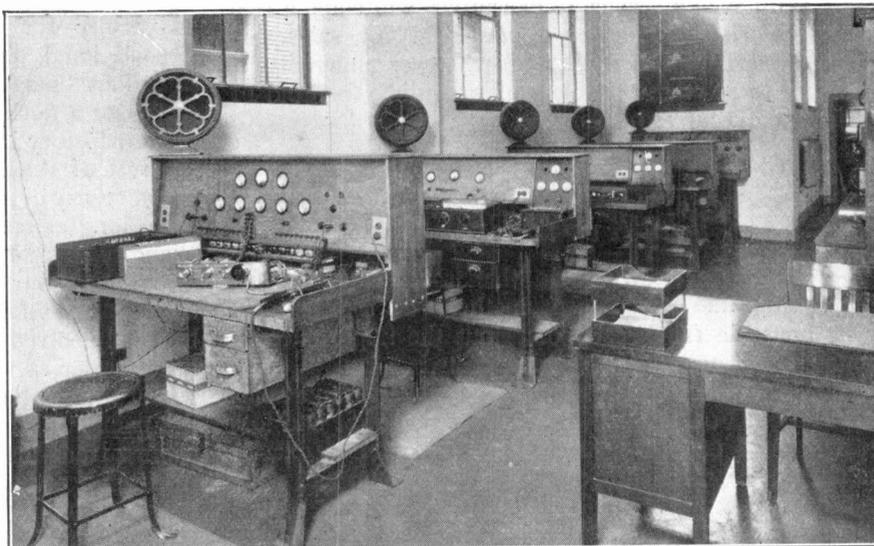
Proper Equipment for Serviceman

At least a dozen separate items are listed as the proper equipment for the serviceman by Fada Radio. With a little variation this list includes the essentials that every serviceman should have with him at all times.

The following are the twelve items:

1. Circuit tester.
2. Voltmeter (A good high resistance voltmeter).
3. Pliers (one light, long-nosed pair of wire cutters and one heavy duty pair).
4. Soldering iron and solder.
5. Screw drivers (a long, thin one and one for heavy work).
6. Spare tubes (both power and regular tubes should be carried).
7. A dead tube (This is used in neutralizing and is prepared by taking a new and perfect tube and cutting off the positive filament prong close to the bakelite base).
8. Neutralizing tool.
9. Earphones.
10. A coil of wire (18 gauge stranded and rubber insulated).
11. Insulating tape.
12. Hydrometer.

The variations referred to occur, of course, where the serviceman is working on a job not requiring an operation indicated, as, for instance, neutralization. Nevertheless, it is better for the serviceman to be prepared in going out to meet all conditions applying to various types of sets.



Atwater Kent radio sets are serviced under ideal conditions in this light, roomy and efficient service room of the Cleveland Distributing Company, Cleveland, Ohio. This is an excellent example of modern service practice.

Radio Retailing

A McGraw-Hill Publication

AUGUST, 1928

Vol. 8, No. 2

“A

RADIO

An Important New Market Waiting Ready to Be Tapped

LAST month *Radio Retailing* published a letter from Edgar Kobak, vice-president of the McGraw-Hill Publishing Company, telling of his experience with a radio set in his office. He had had it installed to see how much it would bring him of value to a business executive. It brought him nothing. He, therefore, raised the question—Why shouldn't there be broadcasting of daily news for the business man and a radio set in every office?

There should be. There can be. There will be. It will come when the radio industry awakens to the importance of the service and the value of the market which it offers.

The first reaction of the industry will probably be negative. It has never been done. There are difficulties in the way. Of course there are. But radio has reached its present heights by climbing on top of difficulties day by day and reaching higher. The very fact that radio has been made of such economic worth to the farmer points to the possibility of a service to business and industry. For why should men wait for the evening paper to learn the news of the morning, when it may have vital value in that day's decisions and plans?

Radio Retailing believes that the business man should have a broadcasting service now—along the line of Mr. Kobak's suggestion. The letters of comment on Page 61 show that other men think so, too. It can be done. Radio can be made a vital necessity to every large business. With such a service to executives will come a rich market offering the dealer a new field for sales. It merits immediate attention and whatever ingenuity is necessary to solve the problem of providing the kind of service the executive needs.

* * * *

“The Key to Profits”

IN AN article elsewhere in this issue, Ray Sutcliffe, analyzing the management methods of a prominent music house in the West, points out the importance of keeping accurate trace of selling costs.

The music house in question—the Poppler Piano Company, Grand Forks, N. D., has evolved a profit and loss record which enables its management to know exactly the amount of sales each department is doing, and what its costs are.

In other words, it has “departmentalized” its business not by building a wall around each department but by separating the accounting according to types of merchandise. Radio sales and costs are segregated from phono-

graph sales and costs, and so on down the line, each product being set up practically as an individual business.

The value of this method of cost accounting cannot be too strongly emphasized. The owners of the Poppler Piano Company know at all times just what merchandise is moving and how much it costs them to sell it. It is business methods such as this that will bring radio profits to all types of merchants, as well as to the music trades.

* * * *

When Is a Tube Not a Tube?

WHEN a manufacturer advertises as an eight-tube receiver a set using seven receiving tubes and one rectifying tube, the question arises as to whether this does not constitute fraudulent or misleading advertising.

When a set is called an eight-tube set, it interprets itself to the public as eight receiving tubes. Custom has brought about this condition. True, the set legitimately has eight tubes, but it also has a panel light and could just as technically be called a nine-tube set.

Custom has dictated that “an eight-tube set” means to the public that it has eight receiving tubes.

Calling a set with only seven receiving tubes “an eight-tube set” because of the rectifier, may be taking unfair advantage of the public.

* * * *

Trade-ins and “Customer Psychology”

THE music trade has struggled with the trade-in difficulty for many years and hasn't solved it yet. Second hand pianos and delapidated phonographs, accepted as “part payment,” have caused many a music merchant a flock of headaches.

Now history is repeating itself and the music trade and the rest of the radio industry as well is working itself into a frenzy over radio trade-ins.

So long as customers buy merchandise and that merchandise is replaced by newer and better merchandise, we'll have the trade-in problem with us. And very probably, as C. L. Dennis says on another page, it will never be finally solved. The headache will remain, and ache a little harder as time goes on.

But there are several things that can be done to relieve the pain. First of all, create a “customer psychology” against trade-ins by showing them that their old set represents an actual financial loss to you if taken in trade. Most customers are reasonable. They are usually business men and they know the difference between profit and loss.

Then suggest various ways in which the old set may be useful to the customer. Show him that the actual dollars

in Every Office

and cents value of the set to him is much more than you could give him for it.

Then, if the set **MUST** be taken in order to make a sale, the allowance should be so low as to leave you a profit on the new sale as well as a profit on the trade-in sale after a sufficient mark-up. In other words, work toward the goal of making a profit, however small, on both sales. Easy to say and hard to accomplish, but nevertheless these factors should be kept in mind when making the allowance.

The radio industry must avoid the pitfall in which the automobile trade found itself trapped. The auto trade raised the list price of new cars high enough to make a large allowance for the old car. This, of course, encouraged trade-ins and the public swamped auto dealers with a mountain of junk on wheels.

The radio trade should approach the subject from the opposite angle. The list price and the allowance must continue so small as to discourage the public from attempting trade-ins. Concerted action by the industry along these lines will soon create a "customer psychology" against trade-ins.

* * * *

"Canned" Music and Artistic Interest

AT HOME and abroad, music artists are discussing the ultimate effect of reproduced music on their art.

Will the attendance at musical events be lessened by this ability of the radio and phonograph to deliver, in the home, music whose quality and scope now challenges the best the concert stage has to offer?

Will our appreciations be clouded and the development of playing technique stifled by the present movement toward "canned" music? What, it is asked, will be the standard of taste of the coming generation, raised on music reproduced electrically?

The United States does not share the pessimistic European viewpoint on this subject. In this country, we believe that a number of interesting things will spring from this modern trend; developments in the world of music that will create new markets for the alert dealer.

The human element in music, both composers and artists, will, under the stimulus of a vastly larger audience than in the past, be moved to even greater attainments. For proof of this, consider the recent offer of a phonograph manufacturer, posting handsome cash prizes for original compositions by American musicians, as an illustration of the type of practical musical incentive which these new conditions are producing.

Flawless reception will quicken the layman's appreciation of all that is beautiful in music to the extent that he will patronize the concert hall as never before.

Art is not menaced by mechanism but rather is being revived because of it.

Fall

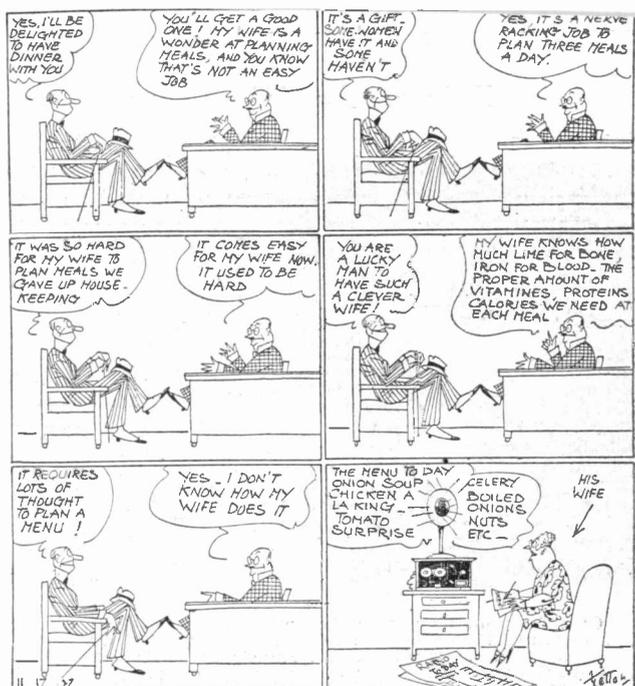
SO MUCH has that continual less repetition. B radio for what it as a peacock about tion, and the ma Doomsday about equalled construc thing. The set i Philharmonic or meals.

Yet the trade b the public the ver that is, beyond th

The political c year; certainly th tional events was possibly be proud its mind that the store and beg dea to do any busine out of their shoes

And what they programs and val

Such Is Life



Copyright, New York Evening World

ing About

exhibits before the doors are thrown open to the public at one o'clock may obtain credentials for two company representatives by making the request in writing to G. Clayton Irwin, Jr., show manager, 1800 Times Building, New York City.

In order to focus the attention of retail buyers on community dealers during the New York show, it has been arranged to provide without cost to those metropolitan New York dealers who make the request in writing, a complete window trim consisting of streamers and appropriate cards. This window trim may be obtained by all metropolitan dealers by addressing Mr. Irwin at the address given above.

Many New Models To Be Shown at New York Show

Many new models which were not quite ready for display at the Chicago Trade Show in June are to be shown at the Fifth Annual Radio World's Fair at the New Madison Square Garden, New York City, the week of September 17, as well as several numbers which have been developed since June.

The entire exhibition space in the Madison Square Garden with its 60,000 square feet will be filled with receivers and accessories from the factories of about two hundred and fifty of the country's leading radio manufacturers. This vast exhibition space is exactly 100 per cent greater than the combined space in the grand ball room and the exhibition hall at the Hotel Stevens, which was required for the trade show just over. It is thought to be a conservative estimate that at least 2,500,000 receiving sets will be sold during the twelve months beginning with the opening of the New York show.

This annual exhibition gives dealers and jobbers the country over an opportunity to inspect the new lines, all under one roof. To facilitate such contacts, the management has arranged for special trade show hours, from 11 to 1 p.m. on each day, excepting the opening day, at which the public is not admitted. During these two hours, dealers and jobbers may leisurely inspect and compare the respective receivers, reproducers and accessories each manufacturer is offering.

Dealers or jobbers wishing to inspect

West Coast Music Association Includes Radio in Name

That radio is steadily gaining recognition in the music field is shown in the action of three hundred delegates attending the Western Music Trades Convention in Los Angeles, June 26 to 28. The name of the organization was officially changed from Western Music Trades Association to Western Music and Radio Trades Association.

Deciding to hold next year's convention in Salt Lake City, the delegates elected a Utah man as president. The new officers are: Royal W. Daynes, Consolidated Music Company, Salt Lake City, president; Ellis Marx, Marx Music Company, Sacramento, first vice-president; Shirley Walker, Sherman, Clay & Company, San Francisco, second vice-president. Two directors added to the former list are: W. W. Bradford, Knight-Campbell, Denver, and Ernest Ingold, Ernest Ingold, Inc., San Francisco.

The importance of radio in a music store was stressed throughout the convention by prominent speakers. On radio day, July 27, speeches included: "Outstanding Essentials for a Radio Dealer's Success" by C. H. Mansfield, associate general sales manager, Platt Music Company, Los Angeles; "The Dealer's Radio Skyline" by Major I. E. Lambert, assistant general attorney, Radio Corporation of America; "Dynamic Reproducers," by Heckert L. Parker, western sales manager, Farrand Manufacturing Company, Inc., and "Radio Merchandising" by R. E. Smiley, assistant general sales manager, Atwater Kent Manufacturing Company.

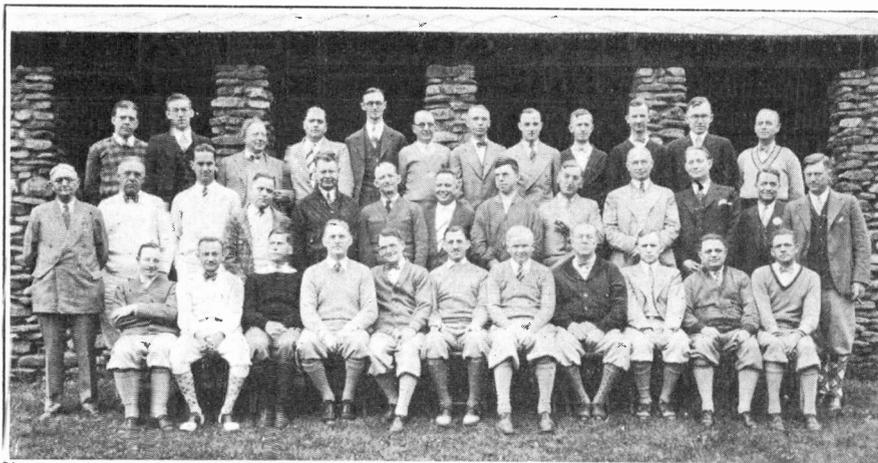
An outstanding social event was a barbecue at the Uplifters Club, Santa Monica Canyon, sponsored by the Atwater Kent Company. Ray Thomas, Southern California A-K distributor, acted as host to the six hundred guests. The convention proper ended with a banquet Thursday night at the Ambassador Hotel.

The delegates spent a large part of every afternoon at the International Pageant of Music and Exposition which was held in the Ambassador auditorium, June 18-30, under auspices of the Music Trades Association of Southern California.

THE BORKMAN RADIO CORPORATION, Salt Lake City, Utah, has discontinued the manufacture of reproducers and will concentrate its production on apparatus for radio and electrical mechanical operation, both for home and public address purposes.

HARDWICK, FIELD, INC., New York City, has moved to suite 901 at 122 Greenwich Street.

Knickers Are *The* Thing at Sylvania Meeting



Over forty distributors and members of the sales force of the Sylvania Products Company, Emporium, Pa., roughed it from Monday until Friday at a rustic lodge in the mountains of St. Mary's, Pa. This is what is commonly called an annual convention. It has been reported that, owing to the number of complaints, the sweaters and sox this year were noticeably tamer.



Arthur Haugh Talks to Staff of the United Radio Corporation

More than twenty-six members of the sales, executive and engineering staffs of the United Radio Corporation, Rochester, N. Y., attended the two-day convention at the plant just prior to the Trade Show. Arthur T. Haugh, vice-president

and general sales manager, spoke to the group on the progress the radio industry had made in the last year. The meeting wound up with a trip to the R. M. A. Convention, for which a special car was chartered.

Stations Broadcasting Still Pictures

The Radiovision Corporation, 62 West 39th Street, New York, announces that stations KSTP, of the National Battery Broadcasting Company, St. Paul, Minn., and WGBI of Scranton, Pa., have joined the growing list of stations broadcasting pictures through the Cooley Rayfoto process on their radio schedules.

Among the other stations in the chain are: WMCA, Hotel McAlpin, New York City, which broadcasts a picture playlet every Wednesday night and pictures three mornings each week; WTMJ, Milwaukee Journal, Milwaukee; KMOX, Voice of St. Louis; WOKO, Hudson Valley Broadcasting Company, Mt. Beacon, N. Y.; WDEL, Wilmington Electric Specialty Company, Wilmington, Del.; WWJ, W. R. Hoffman, Detroit; WFI, Strawbridge & Clothier, Philadelphia; CKNC, Canadian National Carbon Company, Toronto; and CJRN, D. R. P. Coats, Grain Exchange Building, Winnipeg.

Award Prizes in Federal Sales Contest

The Arrow Electric and Radio Company, Inc., Jersey City, N. J., was presented with an engraved loving cup by the Federal Radio Corporation, Buffalo, N. Y., for having won the recent international retailer sales contest. The Arrow Electric and Radio Company sold the greatest number of Federal receivers during the 30 day contest with retailers in the United States and Canada.

There were four additional prizes. The winner in Group A, which included dealers in the United States and Canada in cities with a population over 100,000, was won by the Radio Studio of Omaha, Neb.; the prize in Group B, cities between 25,000 and 100,000, was won by Prest & Dean, Long Beach, Calif.; in Group C, cities between 10,000 and 25,000, the winner was Yudkins, Danbury, Conn., and in Group D, cities of less than 10,000 population, the Brecht Drug Company, Yankton, S. D., was the victor.

Each winner in the group contest was awarded an engraved silver loving cup and his selection of additional salesmen's prizes.

Radio Positions in Civil Service Available

Applications for the position of radio operator (airways) to fill vacancies in the Lighthouse Service, Department of Commerce, must be on file with the Civil Service Commission at Washington, D. C., not

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THE ANNUAL ATWATER KENT convention held by Ernest Ingold, Inc., San Francisco, Calif., at the St. Francis Hotel, in that city, attracted nearly a thousand radio men from northern California. The fourth edition of the Atwater Kent Follies was presented, and L. M. Willis, R. E. Smiley, and T. Wayne McDowell, all of the Atwater Kent Company of Philadelphia, appeared on the afternoon program. A buffet luncheon was served immediately following the speakers and artists.

THE FEDERAL RADIO CORPORATION, Buffalo, N. Y., has established at the plant a "laboratory for dealer problems." The "laboratory" is taking the shape of a wholesale department for the Buffalo area and is under the direction of L. W. James. A corps of salesmen and servicemen operating in direct touch with the dealers is maintained.

THE WENDHEISER MUSIC STORE, Rockville, Conn., has moved into its new and up-to-date home at 21 Main Street.

All-American Mohawk Distributors Convene at Chicago



More than seventy radio distributing concerns from all parts of the United States and Canada were represented when the second annual distributors convention of the All American Mohawk Corporation, Chicago, met at the Hotel Stevens for a two-day session. As chairman, Otto N. Frankfort, vice-

president in charge of sales, presided over the business sessions. The opening address was made by E. N. Rauland, president. Gustave Frankel followed with a few words of welcome. A tour of inspection of the factory, luncheons, and banquets rounded out the activities.

"Fada Sales" Boosts Trade Publications

"Fada Sales" suggests to dealers the advantages of reading carefully all the trade publications in the radio field. Citing *Radio Retailing* as an example, the editor of the dealer publication of F. A. D. Andrea, Inc., points out the business advantages of keeping posted through the trade press on business ideas.

The Fada advice to dealers in a recent issue of "Fada Sales" is as follows:

"There are several good trade publications covering the radio field and you should subscribe to all of them and read all of them. Suppose the subscription price is \$2.00 a year and you only get one idea a year out of each one, the results you will get from applying sound ideas in your business that have worked for others will pay for your investment many times over."

"If you find that you are too busy in the store to read these publications then have them sent to your home. Fifteen or twenty minutes spent with each one each month will certainly prove valuable."

"Don't be discouraged if you do not find an idea applicable to your business right

THE MOLLOY-DAVIS COMPANY, with offices in New York and Philadelphia, has been formed by Thomas J. Molloy and Russell S. Davis, to handle the output of the American Furniture and Cabinet Company, Philadelphia, and the Home Furniture Company. Mr. Molloy joined the American Furniture and Cabinet Company a year ago and his success with this line led to the formation of the new company in partnership with Russell S. Davis, who was formerly sales manager for the Motor Parts Company, Philadelphia.

THE PILOT ELECTRIC MANUFACTURING COMPANY, INC., Brooklyn, N. Y., was awarded the gold medal for its Centraline condenser and Pilot-Lite dial at the recent Radio Exposition held in Liege, Belgium.

THE UNITED RADIO CORPORATION, Rochester, N. Y., has added Herman A. Smith, formerly sales manager of the Argus Radio Corporation, to its staff as eastern sales manager.

cers: president, Clarence A. Earl; vice-president in charge of sales, Harry A. Beach; vice-president in charge of engineering, George J. Eltz; vice-president and treasurer, W. J. Keyes; and secretary, W. Edgar Miller. Martin Zatulove, who held the position of supervisor of sales, has resigned.

THE STERLING SALES CORPORATION, Cleveland, Ohio, has been organized to act as manufacturers' representative and also to market the entire output of the National Tube Manufacturers, Cleveland. W. W. Dowdell, formerly connected with the Sterling Manufacturing Company, also of Cleveland, is vice-president and general manager of the new company.

H. L. WILLIAMS, recently appointed advertising manager of Silver-Marshall, Inc., Chicago, has been forced to resign and move to the west coast owing to the ill health of Mrs. Williams.

J. P. KENNEDY, South Bend, Ind., has moved his radio store to 418 West LaSalle Street, where about three hundred square feet of floor space and a small laboratory have been added.

FRANK W. SICKLES has purchased the holdings of H. C. Hyde, G. E. Boynton and A. L. Bausman in the F. W. Sickles Company, Springfield, Mass.



His Nose Knows!

Harold Wrape, president of the Federated Radio Trade Association, is, incidentally, a dog fancier. Here he is with "Pretzel," one of his famous French Poodles, begging to be put to the blindfold test. Even blindfolded, he knows which is Harold.

GORDON G. ATWELL, Shreveport, La., has put into effect a complete Southern branch service to serve manufacturers who desire to have their product properly handled in the South but who do not wish to establish a Southern branch. Goods may be sent to Shreveport in any quantity, carload lots or less, and they will be reshipped from that point. Fireproof storage and mechanical and parts service are also available.

THE WILL A. WATKIN COMPANY, radio retailers of Dallas, Texas, are in the market for a line of radios, reproducers, tables and cabinets.

WORK IN THE NEW ENGLAND territory, by ... Troan, who will cover New York City; and, Edgar K. James, who has been made Mershon sales engineer.

C. B. CABANISS, formerly associated with Albert Frank & Company, New York City, has joined Frank Kiernan & Company, New York City, advertising agents, as account executive.

Fewer Sets and Reproducers Held by Dealers

Stocks of battery-operated radio receiving sets in the hands of the 8,291 dealers reporting to the Department of Commerce for the April 1 quarterly survey of radio stocks in the hands of dealers, totaled 49,682 with the same number of dealers carrying 31,069 A.C. sets compared with 62,778 battery-operated sets and 25,584 A.C. sets held by the 7,737 dealers reporting for the January 1 quarterly survey.

Some 67,952 ordinary reproducers and 3,126 amplified reproducers were held by the dealers reporting on April 1, compared with 74,771 ordinary reproducers and 3,054 amplified reproducers in the hands of dealers reporting on January 1.

Receiving tubes for alternating current held by 8,291 dealers on April 1, totaled 154,603, with dry and storage battery tubes, respectively, totaling 136,150 and 274,516, compared with 115,004 tubes for alternating current, 144,210 tubes for dry batteries, and 299,471 tubes for storage batteries held by the 7,737 dealers reporting on January 1.

Storage batteries numbering 37,579 were in the hands of the dealers reporting for the April 1 survey with the same number of dealers holding 142,060 45-volt dry B-batteries, 47,370 22½-volt dry B batteries, and 82,673 4½-volt dry C-batteries compared with 42,500, 188,376, 59,204, and 88,409 batteries, respectively, in the hands of the 7,737 dealers reporting on January 1.

Battery-operated receiving sets numbering 12,125 and 7,490 A.C. sets were held by 2,270 dealers in the East North Central States reporting on April 1, compared with 13,874 and 6,717 sets, respectively, in the hands of 2,352 dealers reporting on January 1.

Replies from 1,627 dealers in the Middle Atlantic states show 11,703 battery-operated sets and 9,502 A.C. sets on hand April 1, compared with 14,598 sets and 7,597 sets, respectively, held by the 1,436 dealers reporting on January 1.

Stocks of receiving sets in the hands of dealers in other geographical regions of the

live for the A. C. Dayton Company, Caswell-Runyan Company and Windsor reproducers.

THE ARCTURUS RADIO COMPANY, Newark, N. J., has more than doubled the number of types of tubes it manufactures and present production plans embrace adding as many more types during the next twelve months.

Carryola Distributors Take Aeroplane Trip



Fourteen Carryola distributors were the guests of the Carryola Company on a monoplane trip along the shores of Lake Michigan to the factory at Milwaukee, Wis., where the group inspected the plant. The party later flew to the estate of O. L. Prime, president of Carryola.

News of Jobbers and Distributors



New Day-Fan President Talks to Wholesalers

Day-Fan distributors from all parts of the country recently met at the factory of the Day-Fan Electric Company, at Dayton, Ohio, to make plans for the coming season and see the latest receiver, upon which the production of the factory is to be concentrated. The new president, Lee Warren James, succeeding Charles F. Kettering, who remains as a director, told of the reshaping of the organization. Charles T. Lawson, sales manager, (front row, first on the right) also addressed the group.

Splitdorf Appointments

To round out its New York State distribution facilities, the Splitdorf Radio Corporation, Newark, N. J., has appointed several distributors in the upper part of the state. The Buffalo Ignition Sales Company, Buffalo, N. Y., will act as exclusive wholesaler in the western counties and a number of Pennsylvania counties. This firm has established a special radio department under the managership of Harold D. Doney, who will have three men in the territory.

The Cook Iron Store, Inc., Rochester, N. Y., will handle the Rochester jobbing section, and the Albany Hardware Company, Albany, N. Y., will cover the eastern New York State territory.

Two western distributors have also been named. The Williams Hardware Company, Minneapolis, Minn., will cover Minnesota and the two Dakotas, while the Piper and Taft Company, Seattle, Wash., has been reappointed distributor in the state of Washington.

THE STEWART - WARNER SPEEDOMETER COMPANY, Chicago, recently held its fourth annual international convention of distributors. One of the highlights was the advertising meeting held at the Hotel Palmer. Interesting and informative talks were given by R. H. Woodford, radio sales manager, A. B. Dicus, advertising manager, and W. D. McJunkin, president of the McJunkin Advertising Company. After this meeting, at which the advertising and merchandising plans were presented, the delegates were taken through the plant.

J. C. SCHMIDTBAUER, vice-president and general manager of the Julius Andrae & Sons Company, Milwaukee, Wis., has been elected president of the Illinois Electric Company, Chicago. He will continue his present business connections in Milwaukee, spending only part of his time in Chicago.

THE DETROIT ELECTRIC COMPANY, Detroit, Mich., Grebe distributor, has placed R. A. Lewis in charge of its Cleveland, Ohio, branch.

H. C. SCHULTZ, INC., Detroit, Mich., Sonora distributor, has inaugurated a \$300,000 promotion program, sponsored by the Sonora Phonograph Company, in an effort to bring to its dealers a more intensive and profitable selling plan.

THE KRUSE-CONNELL COMPANY, distributor of Indianapolis, Ind., has opened a branch in South Bend, Ind.

Philadelphia Jobber Host to Federal Retailers

Over one hundred retailers carrying the products of the Federal Radio Corporation, Buffalo, N. Y., were the guests of R. E. Tongue Brothers & Company, Philadelphia, Pa., at a dealer parley and dinner. R. E. Tongue, Jr., was master of ceremonies and he introduced R. E. Tongue, Sr., president, who gave a short address of welcome.

C. J. Jones, assistant sales manager for Federal, was the next speaker. He presented the new A. C. receiver and outlined the merchandising and advertising plans for the coming season. He also discussed the increase of retailer discounts and designated retailer policies of the company.

Glen Tongue then outlined in detail the mechanical structure of the receivers and followed his remarks with a general discussion on service.

THE POST AND LESTER COMPANY, Boston, Mass., has been appointed exclusive distributor in the New England states for the Radiovision Corporation, New York City, manufacturers of the Cooley Rayfoto picture receiving apparatus.

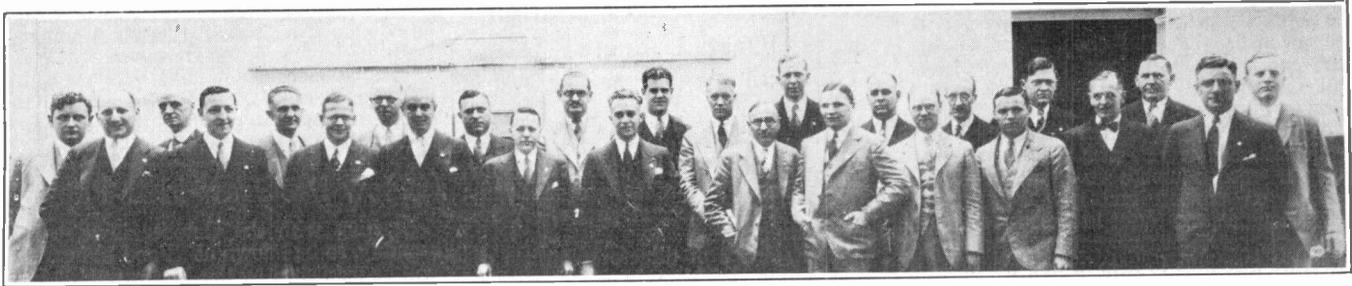
THE BELMONT CORPORATION, Minneapolis, Minn., has added 6,000 square feet of floor space, part of which will be devoted to a radio and phonograph display room.

A. L. WYNSTON, JR., LTD., Toronto, Canada, has moved to its new home at 210 King Street, West.

Newcombe-Hawley Jobbers Inspect Plant



Grouped on the steps of the new Hotel Baker, are the distributors of Newcombe-Hawley, Inc., St. Charles, Ill., who attended the sales convention held at the factory. The new reproducers were displayed and the plant inspected. A luncheon, a golf tournament and dinner made the day a complete success. If you look closely you will see J. B. Hawley, second from the left in the front row, and A. L. Newcombe, president, fourth from the left.



Arthur Haugh Talks to Staff of the United Radio Corporation

More than twenty-six members of the sales, executive and engineering staffs of the United Radio Corporation, Rochester, N. Y., attended the two-day convention at the plant just prior to the Trade Show. Arthur T. Haugh, vice-president

and general sales manager, spoke to the group on the progress the radio industry had made in the last year. The meeting wound up with a trip to the R. M. A. Convention, for which a special car was chartered.

Stations Broadcasting Still Pictures

The Radiovision Corporation, 62 West 39th Street, New York, announces that stations KSTP, of the National Battery Broadcasting Company, St. Paul, Minn., and WGBI of Scranton, Pa., have joined the growing list of stations broadcasting pictures through the Cooley Rayfoto process on their radio schedules.

Among the other stations in the chain are: WMCA, Hotel McAlpin, New York City, which broadcasts a picture playlet every Wednesday night and pictures three mornings each week; WTMJ, Milwaukee Journal, Milwaukee; KMOX, Voice of St. Louis; WOKO, Hudson Valley Broadcasting Company, Mt. Beacon, N. Y.; WDEL, Wilmington Electric Specialty Company, Wilmington, Del.; WWJ, W. R. Hoffman, Detroit; WFI, Strawbridge & Clothier, Philadelphia; CKNC, Canadian National Carbon Company, Toronto; and CJRN, D. R. P. Coats, Grain Exchange Building, Winnipeg.

Award Prizes in Federal Sales Contest

The Arrow Electric and Radio Company, Inc., Jersey City, N. J., was presented with an engraved loving cup by the Federal Radio Corporation, Buffalo, N. Y., for having won the recent international retailer sales contest. The Arrow Electric and Radio Company sold the greatest number of Federal receivers during the 30 day contest with retailers in the United States and Canada.

There were four additional prizes. The winner in Group A, which included dealers in the United States and Canada in cities with a population over 100,000, was won by the Radio Studio of Omaha, Neb.; the prize in Group B, cities between 25,000 and 100,000, was won by Prest & Dean, Long Beach, Calif.; in Group C, cities between 10,000 and 25,000, the winner was Yudkins, Danbury, Conn., and in Group D, cities of less than 10,000 population, the Brecht Drug Company, Yankton, S. D., was the victor.

Each winner in the group contest was awarded an engraved silver loving cup and his selection of additional salesmen's prizes.

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Starting with the October issue, a new monthly, to be known as "Food Industries," will be published by the McGraw-Hill Publishing Company, publishers of "Radio Retailing." This paper will cover, among other things, the technology of manufacturing food products, the methods of food production, and the handling of raw materials and finished products.

THE SONATRON TUBE COMPANY, Chicago, Ill., has entered into a contract with the Voice-A-Phone Company, Philadelphia, manufacturers of the "Hanaphone," for the delivery of a specially designed and constructed radio tube perfected in the Sonatron laboratories. The tube is to be used in apparatus which reproduces specialty vaudeville acts employing talent as well as full-length talking feature photoplays. This equipment is also available for home use.

THE ANNUAL ATWATER KENT convention held by Ernest Ingold, Inc., San Francisco, Calif., at the St. Francis Hotel, in that city, attracted nearly a thousand radio men from northern California. The fourth edition of the Atwater Kent Follies was presented, and L. M. Willis, R. E. Smiley, and T. Wayne McDowell, all of the Atwater Kent Company of Philadelphia, appeared on the afternoon program. A buffet luncheon was served immediately following the speakers and artists.

THE FEDERAL RADIO CORPORATION, Buffalo, N. Y., has established at the plant a "laboratory for dealer problems." The "laboratory" is taking the shape of a wholesale department for the Buffalo area and is under the direction of L. W. James. A corps of salesmen and servicemen operating in direct touch with the dealers is maintained.

THE WENDHEISER MUSIC STORE, Rockville, Conn., has moved into its new and up-to-date home at 21 Main Street.

All-American Mohawk Distributors Convene at Chicago



More than seventy radio distributing concerns from all parts of the United States and Canada were represented when the second annual distributors convention of the All American Mohawk Corporation, Chicago, met at the Hotel Stevens for a two-day session. As chairman, Otto N. Frankfort, vice-

president in charge of sales, presided over the business sessions. The opening address was made by E. N. Rauland, president. Gustave Frankel followed with a few words of welcome. A tour of inspection of the factory, luncheons, and banquets rounded out the activities.

"Fada Sales" Boosts Trade Publications

"Fada Sales" suggests to dealers the advantages of reading carefully all the trade publications in the radio field. Citing *Radio Retailing* as an example, the editor of the dealer publication of F. A. D. Andrea, Inc., points out the business advantages of keeping posted through the trade press on business ideas.

The Fada advice to dealers in a recent issue of "Fada Sales" is as follows:

"There are several good trade publications covering the radio field and you should subscribe to all of them and read all of them. Suppose the subscription price is \$2.00 a year and you only get one idea a year out of each one, the results you will get from applying sound ideas in your business that have worked for others will pay for your investment many times over."

"If you find that you are too busy in the store to read these publications then have them sent to your home. Fifteen or twenty minutes spent with each one each month will certainly prove valuable.

"Don't be discouraged if you do not find an idea applicable to your business right away, because you probably won't. But certainly once in a year at least you will find one valuable idea that you can directly apply to your business both from reading the advertisements and the news and editorial pages."

THE JENSEN RADIO MANUFACTURING COMPANY, Oakland, Calif., has added five men to its sales force. J. W. Sands will contact in Ohio, Michigan, Indiana, Kentucky and West Virginia; James A. Kennedy will cover metropolitan New York in addition to Pennsylvania, Delaware, New Jersey, Maryland and Washington, D. C.; L. R. Hadin will travel upper New York State and the New England states; W. V. Crowley will cover Wisconsin, Minnesota, Iowa, Nebraska and North and South Dakota; while C. F. Crane will call on manufacturers, traveling out of the Chicago office.

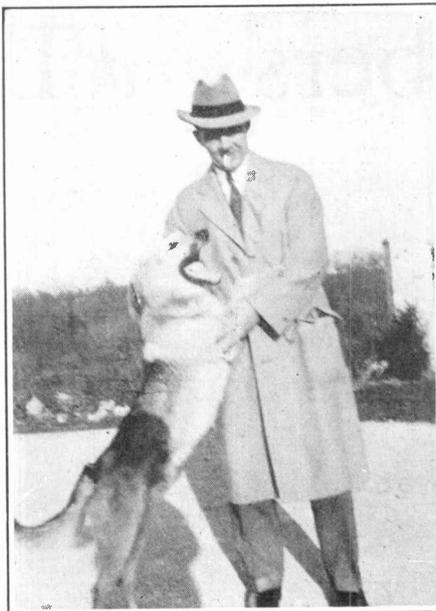
CHAS. FRESHMAN COMPANY, INC., New York City, has elected the following officers: president, Clarence A. Earl; vice-president in charge of sales, Harry A. Beach; vice-president in charge of engineering, George J. Eltz; vice-president and treasurer, W. J. Keyes; and secretary, W. Edgar Miller. Martin Zatulove, who held the position of supervisor of sales, has resigned.

THE STERLING SALES CORPORATION, Cleveland, Ohio, has been organized to act as manufacturers' representative and also to market the entire output of the National Tube Manufacturers, Cleveland. W. W. Dowdell, formerly connected with the Sterling Manufacturing Company, also of Cleveland, is vice-president and general manager of the new company.

H. L. WILLIAMS, recently appointed advertising manager of Silver-Marshall, Inc., Chicago, has been forced to resign and move to the west coast owing to the ill health of Mrs. Williams.

J. P. KENNEDY, South Bend, Ind., has moved his radio store to 418 West LaSalle Street, where about three hundred square feet of floor space and a small laboratory have been added.

FRANK W. SICKLES has purchased the holdings of H. C. Hyde, G. E. Boynton and A. L. Bausman in the F. W. Sickles Company, Springfield, Mass.



His Nose Knows!

Harold Wrape, president of the Federated Radio Trade Association, is, incidentally, a dog fancier. Here he is with "Pretzel," one of his famous French Poodles, begging to be put to the blindfold test. Even blindfolded, he knows which is Harold.

THE UDELL WORKS, Indianapolis, Ind., has been bought by H. T. Griffith and H. H. Phillips. Mr. Griffith will be president under the new régime, and Mr. Phillips will act as secretary and treasurer. Both men have been connected with the company for over a quarter of a century and were in full charge of its activities for several years prior to the death of Albert A. Barnes, founder of the business. James E. Perry, president of the Indianapolis Baseball Club, has been elected vice-president.

THE AMRAD CORPORATION, Medford Hillside, Mass., has added the following men to its sales force: L. D. Trefry, who will work in the New England territory; E. H. Troan, who will cover New York City; and, Edgar K. James, who has been made Mershon sales engineer.

C. B. CABANISS, formerly associated with Albert Frank & Company, New York City, has joined Frank Kiernan & Company, New York City, advertising agents, as account executive.

Plan Educational Broadcast For School Children

A splendid opportunity for radio dealers to interest schools, both public and private, in the purchase of radio equipment is presented in the plan of the Radio Corporation of America to broadcast a series of twenty-four educational orchestral concerts, beginning October 26. The concerts will be put on the air every Friday morning at 11 o'clock, eastern standard time, over WJZ and associated stations, covering the entire country between the Atlantic Coast and the Rocky Mountains.

They will be under the personal supervision of Walter Damrosch, who is guest conductor of the Philharmonic-Symphony Orchestra of New York. In order to present the series in a manner that will interest school children of all ages, Mr. Damrosch has graded the concerts, offering, first, the simpler pieces and leading up to the more complicated orchestrations. A list of twelve questions and the correct answers, has been prepared for each concert for the use of the teachers.

THE KELLOGG SWITCHBOARD AND SUPPLY COMPANY, Chicago, has appointed J. E. Loeber and R. B. Nall as sales representatives. Mr. Loeber, who was formerly connected with the All-American Mohawk Corporation, will cover the south side of Chicago, while Mr. Nall, formerly sales manager of the Davidson Talking Machine Shop, also of Chicago, will travel northern Illinois and Indiana.

This company has also appointed W. E. Conners to represent it in the northern Illinois and Indiana territory, while B. H. Darst will cover Ohio, West Virginia, Kentucky, Indiana, Michigan, and parts of Pennsylvania. C. W. Hunter will represent Kellogg in California, Oregon and Washington, with headquarters at the San Francisco branch of the Kellogg Company at 1054 Mission Street.

IRVING J. JACOBSEN, formerly of Jacobsen & Cross Company, has organized the firm of Irving J. Jacobsen & Company, at 549 West Randolph Street, Chicago. He will act as manufacturer's representative for the A. C. Dayton Company, the Caswell-Runyan Company and Windsor reproducers.

THE ARCTURUS RADIO COMPANY, Newark, N. J., has more than doubled the number of types of tubes it manufactures and present production plans embrace adding as many more types during the next twelve months.

Carryola Distributors Take Aeroplane Trip



Fourteen Carryola distributors were the guests of the Carryola Company on a monoplane trip along the shores of Lake Michigan to the factory at Milwaukee, Wis., where the group inspected the plant. The party later flew to the estate of O. L. Prime, president of Carryola.

News of Jobbers and Distributors



New Day-Fan President Talks to Wholesalers

Day-Fan distributors from all parts of the country recently met at the factory of the Day-Fan Electric Company, at Dayton, Ohio, to make plans for the coming season and see the latest receiver, upon which the production of the factory is to be concentrated. The new president, Lee Warren James, succeeding Charles F. Kettering, who remains as a director, told of the reshaping of the organization. Charles T. Lawson, sales manager, (front row, first on the right) also addressed the group.

Splitdorf Appointments

To round out its New York State distribution facilities, the Splitdorf Radio Corporation, Newark, N. J., has appointed several distributors in the upper part of the state. The Buffalo Ignition Sales Company, Buffalo, N. Y., will act as exclusive wholesaler in the western counties and a number of Pennsylvania counties. This firm has established a special radio department under the managership of Harold D. Doney, who will have three men in the territory.

The Cook Iron Store, Inc., Rochester, N. Y., will handle the Rochester jobbing section, and the Albany Hardware Company, Albany, N. Y., will cover the eastern New York State territory.

Two western distributors have also been named. The Williams Hardware Company, Minneapolis, Minn., will cover Minnesota and the two Dakotas, while the Piper and Taft Company, Seattle, Wash., has been reappointed distributor in the state of Washington.

THE STEWART-WARNER SPEEDOMETER COMPANY, Chicago, recently held its fourth annual international convention of distributors. One of the highlights was the advertising meeting held at the Hotel Palmer. Interesting and informative talks were given by R. H. Woodford, radio sales manager, A. B. Dicus, advertising manager, and W. D. McJunkin, president of the McJunkin Advertising Company. After this meeting, at which the advertising and merchandising plans were presented, the delegates were taken through the plant.

J. C. SCHMIDTBAUER, vice-president and general manager of the Julius Andrae & Sons Company, Milwaukee, Wis., has been elected president of the Illinois Electric Company, Chicago. He will continue his present business connections in Milwaukee, spending only part of his time in Chicago.

THE DETROIT ELECTRIC COMPANY, Detroit, Mich., Grebe distributor, has placed R. A. Lewis in charge of its Cleveland, Ohio, branch.

H. C. SCHULTZ, INC., Detroit, Mich., Sonora distributor, has inaugurated a \$300,000 promotion program, sponsored by the Sonora Phonograph Company, in an effort to bring to its dealers a more intensive and profitable selling plan.

THE KRUSE-CONNELL COMPANY, distributor of Indianapolis, Ind., has opened a branch in South Bend, Ind.

Philadelphia Jobber Host to Federal Retailers

Over one hundred retailers carrying the products of the Federal Radio Corporation, Buffalo, N. Y., were the guests of R. E. Tongue Brothers & Company, Philadelphia, Pa., at a dealer parley and dinner. R. E. Tongue, Jr., was master of ceremonies and he introduced R. E. Tongue, Sr., president, who gave a short address of welcome.

C. J. Jones, assistant sales manager for Federal, was the next speaker. He presented the new A. C. receiver and outlined the merchandising and advertising plans for the coming season. He also discussed the increase of retailer discounts and designated retailer policies of the company.

Glen Tongue then outlined in detail the mechanical structure of the receivers and followed his remarks with a general discussion on service.

THE POST AND LESTER COMPANY, Boston, Mass., has been appointed exclusive distributor in the New England states for the Radiovision Corporation, New York City, manufacturers of the Cooley Rayfoto picture receiving apparatus.

THE BELMONT CORPORATION, Minneapolis, Minn., has added 6,000 square feet of floor space, part of which will be devoted to a radio and phonograph display room.

A. L. WYNSTON, JR., LTD., Toronto, Canada, has moved to its new home at 210 King Street, West.

Newcombe-Hawley Jobbers Inspect Plant



Grouped on the steps of the new Hotel Baker, are the distributors of Newcombe-Hawley, Inc., St. Charles, Ill., who attended the sales convention held at the factory. The new reproducers were displayed and the plant inspected. A luncheon, a golf tournament and dinner made the day a complete success. If you look closely you will see J. B. Hawley, second from the left in the front row, and A. L. Newcombe, president, fourth from the left.

What's the Solution to Trade-ins?

(Continued from page 69)

junk. Usable junk, perhaps, but for which there is no ready sale; therefore, clearly junk so far as the radio-music dealer is concerned. And perhaps a source of loss through tinkering in his service department. A retail merchant is in business for just one thing, and that is to keep his stock turning over at a profit.

SO MUCH for the element of caution on the part of the dealer. What can he do to dissuade the customer from palming off the old set as a trade-in? He might suggest that the customer keep the old set for his own use—a secondary set for special purposes, the children's playhouse, the summer cottage, the camp, the servant's room—the garage, the work shop, the boat. There may be places and people where and to whom the old set would be a very welcome gift. Charity, perhaps, or a kindly remembrance of a poor relative. There are many suggestions that may be made to the trade-in customer, through the exercise of a little ingenuity and tact.

In spite of it all, we may be compelled to take the trade-in, but not more than one to every ten customers. Make ten per cent the danger limit of trade-in business.

After we have taken the old sets in trade, what can we do with them?

Forced to take them in, the music trade as a whole has found the trade-ins unprofitable—in fact a source of serious loss. What shall be done about it? Where

can we find an outlet for this unwelcome stock? The music trade has advertised the traded-in piano as a "practice piano" for the beginner, the used phonograph as a rainy-day entertainer in the summer camp.

It may be possible to lump the whole stock of trade-ins into one grand bargain sale, once or twice a year. It is even known in the piano trade that some houses specialize in "used" instruments, buying them up in bulk from big establishments which find difficulty in disposing of them, and then selling them to the colored or the foreign trade.

THERE is no final solution of this trade-in problem, not even in the piano field, old and experienced as it is with this kind of business. None of the suggestions offered is a complete answer to the situation, yet there are individual cases of successful handling of the trade-in problem.

What are you doing with your trade-ins? Perhaps you have one solution, or a partial one, which, fitted to the ideas of another dealer, may help you both. *Radio Retailing* wants to bring this subject up into the light of day for discussion and would like to receive the suggestions of the music trade on the problem of trade-ins, which is common to the entire field.

Admittedly, this problem is not solved and probably never will be. But an "open forum" discussion may result in some measure of relief.

Selling the Best People

(Continued from page 67)

set out to learn everything there is to know about quality furniture. And today, seven volumes on furniture design and the history of cabinets are on his desk constantly—a permanent and indispensable part of his business.

Thus has radio changed from the counter-and-shelf conglomeration of miscellaneous parts to a "style" business in which the merchant must know music and furniture as well as radio!

THE Brunswick Salon's advertising follows along the same general principles as its methods of getting prospects—the advertising is designed and placed to reach a distinct class market. In addition to three daily newspapers, advertising is constantly placed where "society" will read it—in society magazines and in the programs of the opera and polo games. Billboards are placed along routes travelled by society to and from its resorts—and in the summer, Abelowitz maintains a branch in Southampton, L. I., the great society summer resort, and in the winter, moves the branch to Palm Beach, Florida. "Radio is not a twelve-month business," he says, "but can be made so by following the crowds."

In other words, wherever the "best people" congregate, Abelowitz is there, too. And, by keeping the Brunswick Salon everlastingly before their eyes, he has built his business from nothing to a million dollars a year, inside of four years.

Every year, the Salon gives a concert, either in the store or at a prominent society rendezvous, to introduce the new lines—a buffet supper is served, popular artists appear in person, the new lines are demonstrated, and society fights for cards of admission! The "concert" costs in the neighborhood of \$1,000, but everyone who attends must register, resulting in another priceless list of "the best people." And every one is a prospect for a \$1,500 or more cabinet.

Incidentally, not a word of direct selling is done at these concerts.

Salesmen and saleswomen—the Salon has four of the latter—are paid a salary and a monthly bonus, the bonus being based on business done in excess of the same month last year. And an extra bonus is given salesmen for moving slow numbers. Paradoxically, the feminine members of the sales staff are instructed not to sell to women. Abelowitz read "Gentlemen Prefer Blondes" and conceived the idea of switching the sexes. His saleswomen sell only to masculine customers, and salesmen are instructed to cater to feminine customers.

The result is an average sale in excess of \$1,500. It must work.

Summed up, the Brunswick Salon's principle of selling is simply this: quality sets for quality markets. Sell the best people in town and the others will follow along in the natural course of events.

Summer Sales AHEAD of 1927

Boston

"Quiet but Optimistic"

New England district quiet during the past month. Complete sets sold better than same month last year but total volume compared with previous year was approximately one half. Buying is cautious at present but dealers are very optimistic for coming season. Manufacturers display of new models attracting much interest in all electric cabinet sets with built in speakers. In opinion of many, price range complete, should be about one hundred and seventy-five dollars. Steady prices prevail in this district and the stabilization of trade is apparent. Better programs this summer have been a great help along with increasing interest in national broadcasting hook-ups. Latter, many dealers say, is the strongest magnet on the list of attractions put before the public.

San Francisco

"Sales Holding up Well"

Radio sales have proved better than was expected earlier in the summer and are holding up very satisfactorily despite general depression in other lines. Special interest in dynamic speaker and in sets taking care of varying voltage conditions. Improvement shown over last month as well as over previous year at same time. Judging from present sales fall business should show much better returns than previous year. Public confidence in A.C. sets now well established so that dealers anticipate excellent replacement business during fall.

Kansas City

"Best Summer Ever Experienced"

Agricultural conditions in Kansas City territory best in five years resulting in best summer business ever experienced here with sales running thirty to one hundred per cent larger than previous year. There is a very definite reduction in number of jobbers and dealers handling radio particularly in larger cities but it is generally conceded that this elimination will considerably stabilize business. Public and dealers are waiting patiently for real action on part of the radio commission because receiving conditions have not shown any material improvement during past year and all changes made so far merely have changed the tone of the heterodyne squeals rather than reduced their number.

St. Louis

"Demand Ahead of Supply"

St. Louis is enjoying its greatest July radio demand ever experienced. June was also an unusually surprising month. Jobbers and dealers who have new merchandise in stock report sales as good this summer as they were during the winter season. The tradesmen not having received shipment from manufacturers report unprecedented demand but lament slow factory deliveries. Many customers willing to wait but others buy lines now in stock. Trade show at Chicago, subsequent publicity in local papers in June and association and individual effort to overcome summer slump has succeeded.

Los Angeles

"Twenty-five per Cent Ahead"

Southern California last few months has been on an average of 25 per cent better than last summer. Early delivery of new models from manufacturers, growing public confidence in A.C. sets and more aggressive dealer selling methods account for greater volume. Complete A.C. sets and radio furniture comprise nearly 80 per cent of current sales. Increasing interest being shown in phonograph combinations. Accessory sales mainly dynamic and small magnetic speakers although replacement tube and battery business is good. Television and shortwave kits keeping parts sales up to normal. New sets have been introduced to public in orderly manner with practically no destructive dumping of older models. Dealer and jobber stocks of old sets

are fairly clean and new models are being sold as received. Trade is more optimistic than at any corresponding period in past and is looking to fall radio show to add impetus to sales.

Denver

"Whole Territory Exceeding 1927"

Radio business in the Rocky Mountain territory is in very healthy condition especially in districts far removed from the large centers where even those dealers report increase in sales as much as fifty per cent over the corresponding period of 1927. The general public, as well as all members of the trade, are showing very great interest in new developments. Distributors report movement of sets well in excess of that of any previous year and indications are that the late summer and early fall business will greatly exceed 1927.

Detroit

"Trade Good—Prospects Excellent"

Distributors report gains in first half year, as compared with corresponding period last year, ranging from ten to several hundred per cent. Majority claim one hundred per cent increase or better. General conditions are favorable. Manufacturers are bringing out new models early and all dealers expected to have complete stock at beginning of season. This should produce big increase as few had new sets early last season. Demand is for consoles. Table models are declining. Dynamic figures expected to be sensation of year.

Chicago

"Insistent Demand for Fall Models"

The Chicago market is experiencing an insistent demand, dealer to jobber to manufacturer, for 1928-29 products. This is particularly acute for the more startling lines announced at the trade show. Consumer buying appears to be three weeks ahead of last year due to stimulus of extensive summer advertising. A number of leading dealers decry policy of popularizing 1929 models before the consumer show and before dealers have sufficient time to clear 1928 stock. Every sign points to substantial increase in the consumer market this winter.

Pittsburgh

"Slump but Prospects Good"

Summer slump is prevalent in Pittsburgh but to a less degree than previous years. Activities are now under way in preparation for Pittsburgh's radio show in October. More attention is being paid to auxiliary units designed for improving old receiver models and there is still a degree of interest displayed in battery operated outfits despite the inroads of the electric models. This is perhaps due to the price difference. Tone quality, simplicity of operation and appearance seem to incorporate public demands. Some interest is being displayed in short-wave reception and it is believed that considerable activity will result this season along these lines.

San Antonio

"One Hundred per Cent Ahead"

Sales have held up remarkably well considering the hot weather. At present a hundred per cent over last year for June and July and about thirty per cent for this year's first six months. Two reasons are advanced for this prosperity: one is the keen interest shown in timely events such as baseball and national conventions; the other is chain broadcasting which brings in excellent concerts. Unusual interest has been shown in the new electric models. Repair business is fine as is sale of batteries. General business showing revival and outlook for second half of the year is best ever viewed. Rural sales fair with signs of improvement. Credits and collections good. Radio station advertising proving boon to local retail merchants and dealers look forward to good business through rest of year.

Sylvania

—progressive,
protective, profitable policies
assure you of steady, maximum profits

Progressive in that Sylvania builds a complete line of standard tubes for every radio requirement—perfects each new type before announcing it to the trade—tests each individual tube under rigid standards.

Protective in that Sylvania maintains uniform trade discounts and resale prices—provides full protection against price decline on all tubes on basis of satisfaction to the customer.

Profitable in that Sylvania influences every radio tube user with broadcasting programs—brings buyer to dealer with newspaper advertising and store display—keeps the trade informed of latest developments through trade-paper advertisements and bulletins.

{ If you are not already handling Sylvania Radio Tubes—the “Tubes that Never Disappoint”—we’ll be glad to send you complete information. }

SYLVANIA PRODUCTS COMPANY
EMPORIUM, PENNA.

Listen in on one of the reasons for the ever-increasing popularity of Sylvania Tubes — the Sylvania Foresters, each Wednesday night at 8:30 (eastern daylight saving time) through stations WJZ, WBZ, WBZA, KDKA and KYW.

MEMBER
RMA

Sylvania

RADIO TUBES

WORTH NOTING

Among receiver manufacturers and custom set builders the popularity of Thordarson transformers is without equal.

Such universal acceptance is no accident — It is the fruit of years of successful engineering, dependable manufacturing, and effective merchandising.

The wise dealer, in selecting his radio line, will choose the receivers and kits that are Thordarson equipped.

C.H.T.

EXPERIMENTAL FIELD?

IS THE parts business completing a cycle in the radio industry? Is it slowly but surely returning to its first field—the experimental side of radio? The demand for parts for experimenting with short-wave sets, telephotographic and television outfits would seem to indicate that it is.

Power amplification apparatus is still the leading factor in the parts trade, while custom set building seems to be on the wane, but the subjects of real interest among the parts buyers today are short-wave broadcasting and radio pictures. The old-time experimental set builder and the wireless operators have long been building short-wave sets and experimenting with telephotography, but only recently has the broadcast-listening set builder fallen for the lure of international reception on short waves and the absorbing technicalities of telephotographic or television receiving circuits with their new problems to be solved.

What are parts manufacturers doing to meet this new demand? At least a dozen of them now have short-wave kits, sets or adapters on the market. Two concerns are offering still-picture kits and parts to the trade, while several manufacturers are offering various essential parts or skeleton kits for television experimenting.

Practically every kit that

is being offered for short-wave reception is so made up that either a straight short-wave set may be built from it or a so-called converter or adapter can be constructed. The latter is plugged into the detector of any broadcast receiver, thus utilizing the amplification circuit and speaker of the latter. These kits are selling for from \$10 to \$30, while the assembled sets or adapters range from \$20 to \$50.

While it is true that assembled short-wave receivers can be bought, their price is three or four times that of a short-wave kit and hence offer practically no competition to the parts dealer. Moreover, an experimental set builder usually has his individual ideas about the technicalities of a circuit which very often makes it easier to sell him individual parts than the assembled job.

In the field of telephotography the opportunity for merchandising parts is unlimited. There are no assembled outfits to be had and any customer desiring to experiment in these two fields must buy his parts and assemble the apparatus. Two concerns are selling parts for still-picture recorders. One is merchandising its apparatus in a skeleton kit form while the other is supplying the parts piece-meal.

Similarly, in the television field, no manufactured as-

There is a definite trend toward short waves and picture broadcasting—Is it resulting in a reversion to experimentation on the part of radio fans?

In the modern Broadcasting Station

In amateur transmitting and receiving sets as well as in quality radio receivers for home use, Faradon Capacitors play a very definite part in maintaining satisfactory service, meriting its widespread utilization.

More than twenty years of the application of electrical engineering skill combined with highest quality materials have made Faradon Capacitors the standard of electrostatic condenser long life and reliability.

Dealers who are proud of the quality equipment which they sell, stock Faradon and Faradon equipped sets.

WIRELESS SPECIALTY
APPARATUS CO.

Jamaica Plain, Boston, Mass., U. S. A.

Established 1907



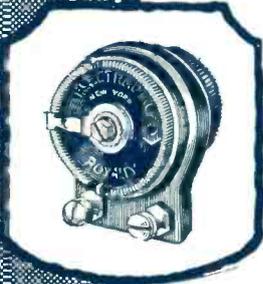
Electrostatic Condensers for All Purposes

It Pays To Sell Quality ELECTRAD RADIO CONTROLS

The story of the superior quality of Electrad Products is going the rounds of builders of sets and power devices, experimenters and owners of receivers, because of their uniform satisfaction, our consistent, big scale advertising, and the fact that leading engineers specify Electrad controls in units of their design.

Steady sales and profits are assured dealers who carry the Electrad line.

Electrad specializes in a full line of Controls for All Radio Purposes.



ROYALTY Variable High Resistances

Recommended wherever a variable high resistance free from inductance and capacity effects is needed. Unusually accurate and dependable. Range of resistance covered in one turn of knob. 11 types to meet every radio purpose.



TRUVOLT Reg. U. S. Pat. Off. U. S. Patent No. 1676869 ALL-WIRE RESISTANCES

The Ideal Variable, fixed and tapped voltage controls. Air-cooled—remarkably accurate and durable. Truvolt Variables eliminate difficult calculations in building B-Eliminators and power packs. Truvolt Fixed Resistances are adjustable to any values by sliding clip taps.



TONATROL Reg. U. S. Pat. Off. A Complete Line of Volume Controls

Controls volume perfectly from a whisper to full output. There are types of Tonatrols designed for every kind of A.C. or battery receiver. They come in standard types or, if desired, with a filament or a power switch attached.



PHASATROL Reg. U. S. Pat. Off. A True Balancing Device for Radio Frequency Amplifiers

Eliminates the squeals and howls of H.F. oscillations—stops distortion and simplifies tuning. Easily installed and adjustment is permanent.

Mail coupon for FREE circulars and Full Information

ELECTRAD, INC.,
Dept. K-8, 175 Varick St., New York
Please send me FREE circulars on the Electrad line of resistances, also complete dealer information.

Name
Address

ELECTRAD



No Grid Leak Interference with the Bradleyunit-B Resistor

BRADLEYUNIT-B solid-molded resistors eliminate the noise and interference in radio circuits caused by inferior grid leaks. Oscillograph tests show the Bradleyunit-B to be remarkably quiet in operation.

The Bradleyunit-B Fixed Resistor is made of a special, uniform mixture, baked and solid-molded at high pressure. This creates a solid, uniform unit, providing a constant resistance regardless of voltage used.

Radio dealers are assured of an accurately calibrated resistor which will retain its initial rating indefinitely.

For Radio Dealers

These remarkable solid-molded resistors are practically unaffected by moisture, altho not depending on a glass enclosure for protection.

The Bradleyunit-B is furnished with or without tinned leads for soldering Made in values from 500 ohms to 10 megohms.

*Order your supply of
Bradleyunit-B Resistors today*

Allen-Bradley Co., 489 Clinton Street
Milwaukee, Wis.

Allen-Bradley Resistors

MANUFACTURERS and MARKETS

*Devoted to the Problems
of the Manufacturer in
the Design and Distribu-
tion of Radio Apparatus*

A Section of *Radio Retailing*

August, 1928

Europe's Greatest Radio Show

A UNIQUE opportunity to compare the latest development of radio in Europe and America has been afforded by the great radio show at the Leipzig Trade Fair just closed. More than 500 exhibits, chiefly German, have illustrated every phase of the science. Remarkable progress has been made in the past year in improving tonal production, selectivity, in eliminating static and in simplifying and cheapening many forms of apparatus. It is noticeable that Germany advances along theoretical lines, and that here the science of radio is far advanced, while in the United States the practical side is amazingly developed. Both countries, it is apparent, may learn from one another.

A notable advance has recently been made in Germany in the technique of broadcast transmission. The microphones now employed are especially good in the transmission of the violin and the distinctive instruments of large orchestras and the soprano voice. The German stations transmit the high frequencies faithfully. American stations, it is recognized, reproduce the lower notes extremely well. Germany has fewer broadcasting stations than America, while the programs especially in the musical features, are of a very high grade. Although the distances are great in the United States, the land line relays in America are considered better than in Europe.

Much more attention is paid in Germany today to simplifying and decorating cabinets than formerly. A five-tube set in an attractive cabinet to work effectively with stations in all parts of Europe sells for about \$125. Sets which will work satisfactorily with local stations sell for one-half, or even one-fourth, this sum. Multiple dials have been done away with, and the newest dials have the names of the broadcasting stations marked on them instead of the wave lengths, thus simplifying the control. American sets are being imported for working with stations with low wave lengths.

Germany is returning to the metal horn reproducers. The other forms, especially the paper disks, are thought to require too much power to give the same results. Great improvements have been made technically along this line, and the metallic quality has been eliminated. A good reproducer sells as low as \$5 and the best for about \$35. The newest German batteries are much smaller than formerly, and are claimed to be a great improvement. By the use of very thin plates batteries are now offered less than two inches square, which can be charged with any kind of current. The

prices of batteries are considerably lower than in the United States.

Most of the German sets use outdoor antennas. There has been a notable advance recently in developing the indoor antenna. It is possible to pick up stations in all parts of Europe with an antenna which is mounted on a frame less than one foot square. There are several highly ingenious forms of folding antennas which can be adjusted in a few seconds. A novelty of the radio show this year is a new triple tube which is claimed to do the work of three ordinary tubes, and do it better, especially in working with distant stations. (Note—also brought to U. S. last year.) A number of ingenious lightning arrestors have been developed in Germany recently. The simpler forms, which cost about \$2, can be readily connected up in the circuit and prove a complete safeguard. Recent experiments in Germany have proved that radio antennas are not potential inviters of lightning any more than metal gutters or wire clothes lines.

Germany is beginning to export radio sets and parts to America and anticipates a ready sale, especially for her newest tubes. Many American sets are also finding their way to Germany where their technical excellence is greatly appreciated. The great radio show at the Leipzig Fair is the common ground where the latest radio products of many nations are displayed on equal terms. The central position of Leipzig makes it possible to tune in upon the powerful broadcasting stations all over Europe, and listen in on programs in nearly a dozen languages, including Esperanto, broadcast from Moscow.

What the World Wants

Listed below are some specific inquiries for American goods received in the Department of Commerce, Bureau of Foreign and Domestic Commerce, at Washington, D. C. To obtain confidential information, it is necessary only for American exporters to apply to the nearest office of the Bureau or at Washington, giving the number or numbers of the inquiry or inquiries in which they are interested. An asterisk (*) indicates that the inquirer would act as both purchaser and agent.

ENGLAND—31,004. Radio kits, super-heterodyne.

FRANCE—31,667. Radio sets and parts. 31,007. Radio sets and parts.

CANADA—Agents—31,008. Radio sets. NETHERLANDS—31,760. Radio apparatus. *31,745. Radio parts.

SOUTH AFRICA—31,758. Batteries for radio and flashlights. 31,758. Radio parts and short wave receivers.

New Sound Amplifying Device

The Electrical Equipment Division of the Bureau of Foreign and Domestic Commerce, Washington, D. C., has been informed, by Trade Commissioner Julian B. Foster, stationed at Wellington, New Zealand, regarding the invention, by a Mr. Rod of Wellington, of a sound-amplifying device which departs from the long-standing principles embodied in such reproducers as the telephone, graphophone, horn, and cone loudspeakers.

Mr. Rod's invention relates to sound amplifying, reproducing or recording instruments or devices, and has particular reference to means used for the aforesaid purposes, wherein there is employed a thin flexible sheet in curved form held at one edge in a fixture, and connected at a point opposite said edge with a vibratory stylus, adapter to vibrate under audio-frequency impulses.

Making use of a tongue-shaped diaphragm, Mr. Rod is able to reproduce in natural tones by rippling the vibrations on to the narrow end of a diaphragm which is suspended like a musical string from heavier bass to highest treble in a gradual taper. The size of the diaphragm is practically unlimited, except by the magnetic unit, and thus with an area of approximately three feet the full musical range is obtained without sound reflection or forced magnification. Owing to its bass to treble suspension, the reproduction is nondirectional, and therefore natural, as in the case of all string instruments when played.

Mr. Arthur H. Davis, one of the managing directors of the Cinema Art Films (Australia and New Zealand) Limited, expects to come to the United States soon. He will endeavor to interest an American firm in the invention.

New Radio Trade Marks

The following is a report of trade marks favorably acted on by the United States Patent Office during the past month and which, unless opposed, will be duly registered. Anyone believing that such registration would be an infringement of his own rights may oppose the application or seek its cancellation.

The editors of *Radio Retailing* have arranged with Lester L. Sargent, patent attorney, of 1115 K Street, Washington, D. C., by whom this report is furnished, to make an advance search without charge on any trade mark any reader may contemplate registering, if he will communicate either with the editors of *Radio Retailing* or with the attorney direct.

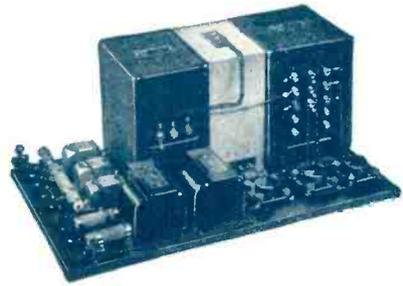
JUNE 19, 1928

"Wizard" (with scroll design) for radio vacuum tubes. Serial No. 260,997. Gold

Single 250 TCA Ampli-pack

A complete A.C. Power Supply—"A," "B" and "C"—including type 226 and 227 tubes in receiver, makes any D.C. set a modern A.C. receiver. Uses single 250 tube or two 210 type tubes in push-pull as amplifiers.

A set can be made into the most advanced type with maximum reception by using an Ampli-pack as a power supply.



TODAY is the day of greatest improvement in the manufacture of the radio receiver. Every radio owner wants both maximum quality and volume in tone quality. With the TCA Ampli-pack, TCA offers the dealer another item to add to his line of profit-making accessories.

Many manufacturers now in production are highly pleased with the TCA products which they are using.

Jobbers and dealers write for complete specifications; discounts and information on TCA products of quality.

Manufacturers:
Send us your specifications on power packs, audio transformers, and chokes. We will gladly furnish samples together with quotations on your season's requirements.

Transformer Corporation of America

1428-1432 Orleans Street, Chicago, Illinois

Manufacturers of the T. C. A. Line of Power Transformers, Audio Transformers, Chokes, Power Packs, and Power Amplifier Packs

Check Your Condensers

Sprague Hi-volt Midgets meet every requirement in A. C. set construction. Small, compact and dependable, they are safe for continuous A. C. operation up to 550 volts, 60 cycles, and up to 750 volts D. C.

Waterproofed with asphalt covering and special process of triple impregnation. Capacities from .00007 to .1 MFD, in new direct-to-panel eyeletting model.

SPRAGUE SPECIALTIES COMPANY
Quincy, Massachusetts

SPRAGUE

BEEDE Socket Test Kit

A complete and efficient test kit at a very low price.

Simply remove tube and insert Socket Meter.



Contains an individual meter for each test and makes mistakes impossible

List of Meters in Kit

- 1 No. 50 Plate Voltage Tester, 0-300 v.
- 1 No. 55 Grid Bias Tester, 0-50 v.
- 1 No. 60 A.C. Filament Tester, 0-7½ v.
- 1 No. 75 A.C. Line Tester, 0-150 v.
- 1 Adapter for 5-prong sockets.
- Leatherette Carrying Case.

LIST PRICE \$15.00—Dealers \$9.00.
If your Jobber cannot supply you we will ship direct at dealers' price.

Write us about other Beede Products.

Beede Electrical Instrument Company
136 Liberty St., New York

Seal Electrical Co., Inc., New York City. Filed February 1, 1928. Used since July 1, 1927.

"Big Boy" for storage batteries. Serial No. 264,711. Big Boy Products Co., New York, N. Y. Filed April 12, 1928. Used since March 30, 1928.

JUNE 26, 1928

"Ex-Plus" for batteries. Serial No. 263,834. Smith Bros. Hardware Co., Columbus, Ohio. Filed March 7, 1928. Used since February 15, 1928.

"Airdized" for secondary batteries. Serial No. 264,788. Westinghouse Union Battery Co., Swissvale, Pa. Filed April 13, 1928. Used since March 31, 1927.

"Phantom" for electrical reproducers and amplifiers for use with phonographs and radio receiving batteries adapted to operate in connection with band or orchestral musical instruments, the reproducers, amplifiers and musical instruments being sold as a unit. Serial No. 264,852. Louis G. Sylvester, Scranton, Pa. Filed April 14, 1928. Used since Feb. 20, 1928.

"Revelaphone" for electrical phonograph pick-up. Serial No. 265,075. Louis G. Sylvester, Scranton, Pa. Filed April 18, 1928. Used since May, 1926.

"Radiomobile" for radio receiving sets. Serial No. 265,216. Kemper Radio Corp. Los Angeles, Calif. Filed April 21, 1928. Used since December, 1927.

"Air-Scout" for radio receiving sets and parts thereof particularly goods for assembling tuned radio frequency sets. Serial No. 265,234. Pilot Electrical Mfg. Co.,

Brooklyn, N. Y. Used since September 18, 1927.

"A" (capital letter on shield like design) for fixed condensers. Serial No. 265,263. Tobe C. Deutschmann, Cambridge, Mass. Filed April 23, 1928. Used since January 1, 1928.

"Ranger" for secondary batteries. Serial No. 265,510. Westinghouse Union Battery Co., Swissvale, Pa. Filed April 27, 1928. Used since March 8, 1928.

JULY 3, 1928

"Mohawk" for radio parts and equipment, namely B-power units, reproducers, rectifiers and radio batteries and dry-cell sets. Audio frequency transformers, condensers, charging panels, bulb type rectifiers and rheostats. Serial No. 210,984. Earl H. Robinson, doing business as the Mohawk Elec. Mfg. Co., Newark, N. J. Filed March 13, 1925. Used since June 27, 1913.

"Electra" for batteries. Roger G. Lafite, doing business as Automotive Mfg. Co. Kansas City, Mo. Serial No. 264,760. Filed April 13, 1928. Used since Apr. 13, 1928.

Envelope-like design of rectangular shape. For electric condensers of constant capacity and devices for connecting radio receiving sets to power lines in lieu of aerial antenna. Serial No. 240,070. Dublier Condenser Corp., New York, N. Y. Filed Nov. 15, 1926. Used since Aug. 15, 1926.

"Arco-ized" for batteries and battery plates. Serial No. 265,608. Arco Battery & Plate Co., Ft. Wayne, Ind., Filed April 20, 1928. Used since May, 1927.

1,676,848. Transmission Regulation. Harold T. Frills, Red Bank, N. J. Assor. to Western Electric Company, Incorporated. New York, N. Y.

1,675,866. Selective Signaling Circuits. Paul H. Pierce, Westfield, N. J. Assor. to Western Electric Company, Incorporated. New York, N. Y.

1,675,874. Amplifying Electrical Variations. Harold C. Baumann, West Long Branch, N. J. Assor. to Bell Telephone Laboratories, Incorporated, New York, N. Y.

1,675,876. Translating Circuits. Harold S. Black, Newark, N. J. Assor. to Western Electric Company, Incorporated, New York, N. Y.

1,675,880. Electric Current Transmission. Austen M. Curtis, East Orange, N. J. Assor. to Bell Telephone Laboratories, Incorporated, New York, N. Y.

1,675,882. High-Frequency Circuits. Gerhard Freiherr Du Prel, Munich, Germany. Assor. to Dr. Du Prel Elektromedizinische Apparate G. m. b. H., Munich, Germany.

1,675,888. Radiotransmission. Raymond I. Heising, Milburn, N. J. Assor. to Western Electric Company, Incorporated, New York, N. Y.

1,675,889. Electric Wave Signaling System. Arthur W. Kishpaugh, East Orange, N. J. Assor. by mesne assignments to Western Electric Company, Incorporated, New York, N. Y.

1,675,890. High-Frequency Transmission. John C. Gabriel, New York, N. Y. Assor. to Western Electric Company, Incorporated, New York, N. Y.

1,675,893. Carrier-Wave Transmission. Jacob S. Jammer, New York, N. Y. Assor. to Western Electric Company, Incorporated, New York, N. Y.

1,675,894. Method and Apparatus for Recording and Reproducing Sound. Charles D. Indridge, Montclair, N. J. Assor. to Western Electric Company, Incorporated, New York, N. Y.

1,675,987. Radiotelegraphy. Albert H. Mittag, Schenectady, N. Y. Assor. to General Electric Company.

1,676,002. Variable-Capacity Electrical Condenser. Frank Edmund Bancroft, Longsight, Manchester, England. Assor. to Ripaults, Limited, London, England.

1,676,050. Rheostat. Thomas Rhodus, Chicago, Ill.

1,676,145. Method of and Means for Adjusting Audion Circuits. Lewis M. Hull, Boonton, N. J. Assor. to Radio Frequency Laboratories, Incorporated, Boonton, N. J.

JULY 10, 1928

1,676,240. Radio Signaling System. Herman A. Affel, Brooklyn, N. Y. Assor. to American Telephone and Telegraph Company.

1,676,244. Multiple-Channel Radio receiver. Otto B. Blackwell, Plandome, N. Y., and De Loss K. Martin, West Orange, N. J. Assors. to American Telephone and Telegraph Company.

1,676,252. Multiple-Channel Radio Receiver. Harry B. Coxhead, Hollis, N. Y. Assor. to American Telephone and Telegraph Company.

1,676,256. Stabilizing Means for Radio Receiving Systems. Philip E. Edelman, Chicago, Ill.

1,676,301. Program Transmission System for Apartment Houses. John F. Toomey, New York, N. Y. Assor. to American Telephone and Telegraph Company.

1,676,404. System of Radio Communication. Joseph O. Mauborgne and Guy Hill, Washington, D. C.

1,676,491. Combined Radio and Phonographic Recording and Reproducing System. Paul Goldsborough, Minneapolis, Minn. Assor. of one-fourth to Albert P. Upton, Minneapolis, Minn.

1,676,740. Condenser. David W. R. Morgan, Swarthmore, Pa. Assor. to Westinghouse Electric & Manufacturing Company.

1,676,744. Electrical Amplifier. Greenleaf Whittier Pickard, Newton Center, Mass. Assor. to Wireless Specialty Apparatus Company, Boston, Mass.

1,676,745. Electrical Reactance and Method and Apparatus. Greenleaf Whittier Pickard, Newton Center, Mass. Assor. to Wireless Specialty Apparatus Company, Boston, Mass.

1,676,748. Means for Radio Signaling. Samuel Ruben, New York, N. Y.

1,676,869. Resistance Unit and Rheostat. Henry G. Richter, Roselle Park, N. J. Assor. to Electrad, Inc., New York, N. Y.

1,676,890. Speaker Unit. Otto S. Drake, Newburgh, N. Y.

1,677,021. High-Frequency Filament Heating Means. Warren E. Danley, Highland Park, Ill. Fansteel Products Company, Inc., North Chicago, Ill.

1,677,075. Radio Tuning Dial. Leonard E. Dorsey, Coatesville, Pa.

1,677,090. Vacuum-Tube Circuits. Lewis M. Hull, Boonton, N. J. Assor. to Radio Frequency Laboratories, Incorporated, Boston, Mass.

New Radio Patents

DESIGNS

JUNE 19, 1928

75,541. Radio Speaker. Sylvester A. Baker, San Francisco, Calif. Assor. to Baker Smith Company, Inc., San Francisco, Calif.

75,551. Radio Antenna. Edward Foose, Rockville, Md.

75,554. Speaker or the Like. Peter H. Fuller, Dobbs Ferry, N. Y.

75,558. Speaker. Rafael Yela Gunther, Los Angeles, Calif.

75,561. Speaker. Hugo Heller, Milwaukee, Wis. Assor. to Arthur C. Kootz, Milwaukee, Wis.

75,562. Speaker. Hugo Heller, Milwaukee, Wis. Assor. to Arthur Kootz, Milwaukee, Wis.

75,594. Radio Cabinet. Otto T. Swanson, Kingston, Ill.

REISSUES

17,002. Automatic Radio Station Finder. Anthony J. Vasselli, Newark, N. J. Assor. to, by mesne assignments to Zenith Radio Corporation, Chicago, Ill.

REISSUES

JUNE 26, 1928

75,608. Cabinet for a Sound-Reproducing Instrument or the Like. Nathan P. Bloom, Louisville, Ky.

75,617. Speaker. Herman L. Faison, West Philadelphia, Pa.

75,620. Escutcheon Plate for a Radio dial. John Geleso, New York, N. Y. Assor. to Pilot Electric Company, Inc., Brooklyn, N. Y.

75,621. Radio Cabinet. Joseph W. Gosling, Schenectady, N. Y. Assor. to General Electric Company.

REISSUES

17,017. Illuminated Dial. William C. Bucholz and Frank Bucholz, Brooklyn, N. Y.

17,023. Radio Metering System. Edward E. Clement, Washington, D. C. Assor. to Edward F. Colladay, Washington, D. C.

17,024. Speaker. Fay O. Farwell, Toledo, Ohio.

PATENTS

JUNE 19, 1928

1,673,796. Radio Receiving System. Joseph Bethenod, Paris, France.

1,673,876. Indicator Switch for Radio Circuits. Albert C. Koeppler, Chicago, Ill. Assor. of one-half to Ernest W. Bradow, La Grange, Ill.

1,673,886. Variable Electrical Coil. Joseph Tillou Sattels, Plainfield, N. J. Assor. to Dreadnaught Electric Corporation, New York, N. Y.

1,673,888. Radio Dial. Eric G. Shalkhauser, Peoria, Ill.

1,674,218. Radio Receiving Apparatus. George Edward John Oakley, Slough, and Kenneth Graham Smith, Maidenhead, England. Assors. to Brandes Laboratories, Inc., Newark, N. J.

1,674,323. Speaker. Fay O. Farwell, Toledo, Ohio.

1,674,331. Grid for Thermionic Tubes. Joseph J. Jackman, Danvers, Mass. Assor. of one-fourth to Francis H. Caskin, Danvers, Mass.

1,674,448. Wireless Receiving Circuit. Maurice M. Phillips, Pittsburgh, Pa.

1,674,603. Radio Dial. Hyman Matzner, New York, N. Y.

JUNE 26, 1928

1,674,695. Radio Telephone System. Harry Nyquist, Millburn and Sunner B. Wright, East Orange, N. J. Assor. to American Telephone and Telegraph Company.

1,674,696. Radio Receiving System. Russell S. Ohl, New York, N. Y. Assor. to American Telephone and Telegraph Company.

1,674,738. Drive for Radio Tuning Mechanism. Clarence A. Pinkham, Jackson Heights, N. Y. Assor. to Arthur Dorsey, N. Y.

1,674,740. Radio Transmitter. William H. Priess, Belmont, Mass. Assor. to Wireless Specialty Apparatus Company, Boston, Mass.

1,674,797. Tone Arm for Sound-Reproducing Instruments. Frank W. Reed, Los Angeles, Calif.

1,675,018. Radio Apparatus. Dorsey F. Asbury, Broomes Island, Md.

1,675,031. Loud-Speaker System. Frederick A. Kolster, Palo Alto, Calif. Assor. to Federal Telegraph Company, San Francisco, Calif.

1,675,038. Telegraphy and Radiotelegraphy. Yves Marrec, London, England. Assor. to Marrec, Limited, London, England.

1,675,186. Amplifier High-Frequency Electrical Currents. Edward H. Loftin and William F. Grimes, Washington, D. C. Assors. to Edward H. Loftin, Trustee.

JULY 3, 1928

1,675,323. Wave Signaling System. Edward H. Armstrong, Yonkers, N. Y. Assor. by mesne assignments to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.

1,675,332. Direction Finder. Henri Jean Joseph Marie De Regnaud, De Bellescize, Toulon, France.

1,675,334. Electron Device. Harold Potter Donle, Meriden, Conn. Assor. by mesne assignments to Radio Corporation of America.

1,675,343. Sound Reproducer. Thaddeus Graham, Los Angeles, Calif.

1,675,360. Indicating Means for Radio Apparatus. George L. Lang, South Orange, N. J. Assor. to Splittorf Electrical Company, Newark, N. J.

1,675,473. Radio Receiving Circuits. Chris L. Volz, Detroit, Mich.

1,675,485. Vacuum-Tube Contact Device. John C. Farley, Opelika, Ala.

1,675,626. Radio Battery Charging Cabinet. Arthur S. Tuttle, Sherburne, N. Y.

HAMMARLUND'S New Contributions to Bigger Parts Sales

Knob-Control Drum Dial

Unmatched beauty and a mechanism that would delight a watchmaker.

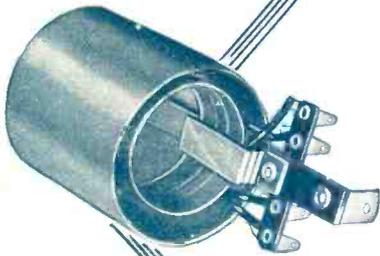
The control knob is uniquely planned to be placed in any position on the panel desirable for attractive balance. Numbers and degrees illuminated from the back.



Shield-Grid Coils

Exceptionally efficient low-resistance space-wound, self-supporting inductance, 2 in. in diameter. A high-impedance primary with three taps for desired pick-up and selectivity.

Antenna coupler and R.F. transformers for use with either .0005 mfd. or .00035 mfd. condensers. Vertical mounting bracket. Convenient soldering terminals.



For the Short-Wave Fan

Plug-in Coils covering the short-wave bands from 8 to 215 meters. Extremely low resistance; widely-spaced plug-in terminals. Adjustable primary, held in any position by friction.

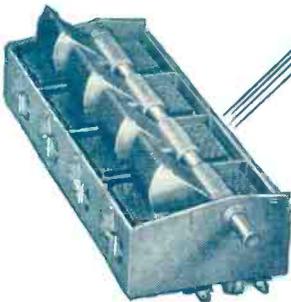


"Battleship" Multiple Condenser

Leader of the gangs. Built for strength as well as beauty. Die-cast frame, free-moving rotor. Sections accurately matched to within 1/4 of one per cent (plus or minus).

Made in 350 mmfd. and 500 mmfd. sizes, with two, three and four gangs.

Recesses in the frame permit direct attachment of new type Hammarlund Equalizing Condensers for utmost precision.



Write for literature on these and other new Hammarlund developments

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For Better Radio
Hammarlund
PRECISION
PRODUCTS

FROST-RADIO

NOW OFFERS A COMPLETE LINE
FOR THE SET BUILDER

FROST always has led the parts field in quality and production. Now it is again first with a COMPLETE LINE of parts—everything the set builder needs. Recent additions to the line include the following:

- Variable Resistance with A.C. Switch
- Approved A.C. Snap Switch
- Gem Hum Balancer
- Center Tapped Resistances
- Panel Brackets and Hook-up Wire
- Universal Resistance Kit
- Filter and By-Pass Condensers
- "B" Blocks
- Moulded Mica Condensers
- All-Bakelite Cable Plug
- Convenience Wall Outlets

Our new catalog of all these new Frost Parts, illustrating and describing our entire line, will be mailed on receipt of coupon. Write for this 16-page book today.

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HERBERT H. FROST, INC., ELKHART, IND.
Send me your new Catalog of all Frost-Radio Parts, including the new items listed in Radio Retailing.

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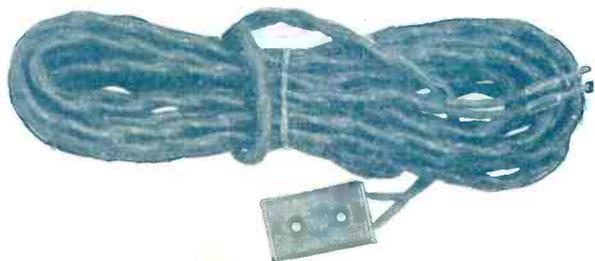
Gavitt high Power cords and cables

CORDS that appeal to customers on account of their UNUSUAL QUALITY, and satisfy the most exacting technician, due to their HIGH INSULATION and PERFECT WORKMANSHIP.

Prices that please all, and DELIVERY SERVICE that NEVER FAILS.

Write for samples and prices.

GAVITT MFG. CO.
BROOKFIELD, MASS.



Departmentalization—The Key to Profits

(Continued from page 60)

of these departments Poppler has had during his 21 years' experience in the music business, it is the intention of Mr. Poppler to look to his sheet music and small goods operations. He will also institute economies in the piano department and develop further his radio and phonograph music activities.

Table IV indicates a satisfactory relation of total operating costs to gross sales. This is due to the large volume of business Poppler's own personality and aggressiveness is producing under conditions which make for low overhead. For example: rent, 1.2 per cent, and advertising, 2 per cent. Poppler's total gross margin is approximately 37 per cent. This is better than the national average for retail businesses. Note also that he is realizing a net profit on his interest account—see

Table I. This should be credited to the radio, phonograph and piano departments.

Table I gives certain other details which are necessary to complete the analytical picture. Observe the disproportionate relation of piano sales to net profit, and of the salary item on sheet music, small goods and phonographs as against gross volume. This situation will be corrected this fall. Phonographs and radio sets are good income producers because of the satisfactory relation of gross margin to selling costs. While records represent but 6.4 per cent of total sales value they account for 9.7 per cent of total profits. This is due to these factors: ample margin and no commission, delivery or advertising expenses. Poppler should, and will, advertise records this winter.

The Truth About Television

(Continued from page 65)

displacing each image, covers the area of a 45 line picture. The same effect would be secured with a 45 hole disc operating as follows: during the first rotation of the disc, the first, fourth, seventh, tenth, etc., holes would sweep the disc, the others being for the time closed; during the next revolution, the second, fifth, eighth, eleventh, etc., would sweep the disc; and in the third revolution, the third, sixth, ninth and twelfth. In that way, the received picture is made to appear like a forty-five line picture, although it uses the channel space of a fifteen line picture. Whether this is a real gain is questionable because the flicker has been increased threefold and, to secure a quality and freedom from flicker equal to that attained by a forty-five line disc would require the making of 48 reproductions per second with Senabria's disc. On the other hand, this ingenious expedient has made it possible to experiment with television transmission and reception at a minimum use of frequency space and, while clarity and fidelity of reproduction are not yet a consideration in the field, it affords the gateway to useful experimentation.

WRNY, New York, has announced that it will soon begin broadcasting television images consisting of ten images per second and 36 sweeps of the subject. Reducing the number of images to ten makes it doubtful whether this can be called television because any normal motion would result in a hopeless blur. The transmissions have not been started at this writing, hence no results can be reported.

WLEX has been broadcasting in Boston for some weeks with a 36 hole disc, but no public demonstration of radio reception, after several weeks of transmission, has been successful. WGY is sending images requiring a 24 hole disc and synchronization is left to the experimenter's ingenuity or luck.

The Alexanderson system is not yet in commercial form. A recent demonstration used 40,000 cycle modulation. The Jenkins system is also in the laboratory stage and is not yet commercialized.

IN ENGLAND, the Baird system has been exploited. No regular radio transmissions have been reported, although they have been widely promised. An American company, to exploit the Baird system, has been formed with much preliminary announcement but no public demonstrations. The apparatus, marketed in England, consisted of a scanning disc and a selenium cell. With these, the experimenter was expected to build a transmitter. Later, by purchasing and assembling more parts, he would have the privilege of viewing the image transmitted on a scanning disc mounted on the same shaft as the transmitter. The range of the system is thus the length of a shaft on a motor.

The same plan has been used in various demonstrations on this side of the water, where the subject has been scanned on one side of the disc and the neon tube mounted on the other. This merely shows what kind of an image *could* be received if transmission and reception were synchronized. If this fact is not clearly explained at such demonstrations, they come mighty near to being misrepresentation.

A new system is coming forward in England, known as the Fuller system, which makes still pictures. It is rumored that the apparatus will cost \$150. The advantage of still picture transmission is that there is no limitation as to the time required in transmitting a complete picture. With the Fuller system, a gelatine etching is made from which photograph prints can be made. This is a rather complex process which probably offers serious sales resistance, but, on the other hand, it is possible to make a high grade picture, synchronizing with a signal entirely within the broadcasting band.

In the United States, the Rayfoto system makes a 4x5 picture consisting of 110,000 image points. It produces positives and therefore no films or prints need be made. A finished picture is secured by a simple finishing process, requiring but a few seconds. 110,000 image points are equivalent to about 80 screen, nearly double the screen of a newspaper picture. Phonograph records of radio transmissions are available for test and demonstration purposes and broadcasting at this writing is actually going on in New York, St. Louis, Milwaukee, Winnipeg, and has been arranged for in Philadelphia, Detroit and Toronto. But this is not television.

THE proponents of still-picture transmission hold that they will soon be able to send high grade pictures, properly synchronized, in the form of motion picture film, which can then be projected on a home projector. This makes it possible to avoid that stringent limitation imposed by direct television that the complete subject must be reproduced each sixteenth of a second. Telephoto reproduction, furthermore, makes a permanent record which can be examined as often as desired, instead of a fleeting image which can be held only a fraction of a second. Radio transmission of still photographs is the furthest present commercial development of radio vision. "Television" itself, or the reception of satisfactory moving images by radio in American homes, is still something to be looked forward to in the very indefinite future.

For the present, universal television consists of merely moving shadows, at best. However, backed up by enough stations broadcasting moving images, and the public informed of just how little they will receive and how crude the images are, even moving shadows can be merchandised, provided they are sold as such.

It is, undoubtedly, a market for experimenters only, and must continue to be for several years to come.



GLASS INSULATORS

6 Sizes

Highest Quality

Lowest Prices Guaranteed

New packing, Two No. 8 Insulators in a box.

Write for samples, prices and catalog.

A. G. KAUFMANN CO., INC.

527 Fifth Ave., New York City

Territory open for active representatives



Radio Control Box

THE Real Volume seller of the season. A manual line voltage regulator to fit all "AC" receivers. Protects "AC" tubes from overloading. One adjustment at time of installation. Lists at \$3.00. Only one model to stock.

Write for details and nearest jobber.

Centralab

CENTRAL RADIO LABORATORIES
30 Keefe Avenue, Milwaukee, Wisconsin

BRYANT
*Superior Wiring
Devices
for
Radio
Manufacturers*

THE BRYANT ELECTRIC CO.

Bridgeport, Connecticut

NEW YORK PHILADELPHIA CHICAGO SAN FRANCISCO

Manufacturers of "Superior Wiring Devices" since 1888.

MANUFACTURERS OF HEMCO PRODUCTS



BRAIDITE HOOK-UP WIRE

"The Braid Slides Back"

Radio's most popular and biggest selling Hook-up Wire. Sample package sent to dealers and distributors upon request.

CORNISH WIRE CO. 30 Church St. New York City

Only reliable products can
be continuously
advertised

“Where can I buy that part?”

—radio parts dealers, parts jobbers, set manufacturers and accessory makers every day must find the answer to that question. And so each issue of *Radio Retailing* contains a complete listing of radio parts and their manufacturers—you’ll find this month’s on page 107—the only listing of its kind published by any magazine.

In addition, lists and specifications of other radio products that dealers, jobbers and manufacturers must buy are published periodically in *Radio Retailing*.

For example, this issue contains a complete listing and specifications of sets, reproducers and furniture.

Your copy of *Radio Retailing* can serve you every day in the month.

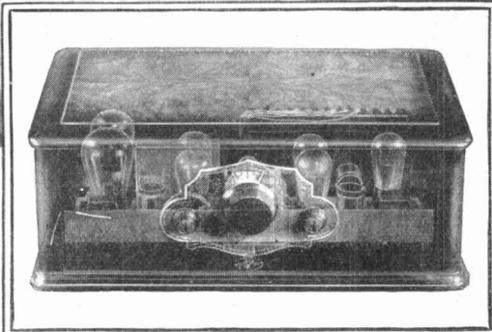
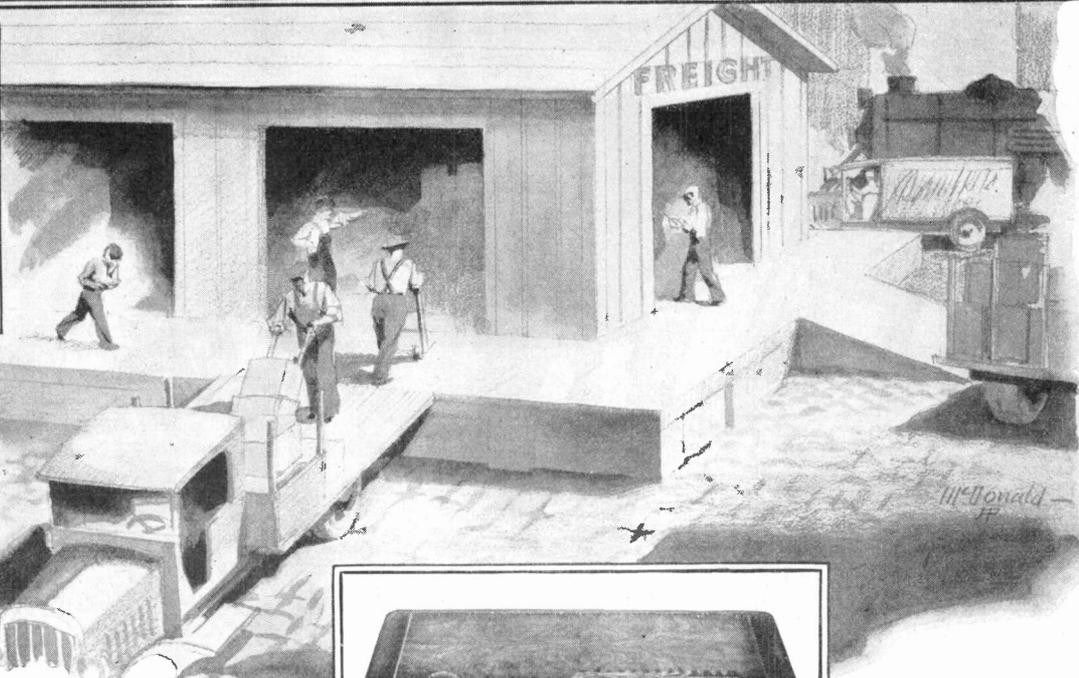
For the man who believes his own ears

What Happens between the Laboratory and the Living Room?

By R. S. COPP, Chief Engineer



R. S. Copp



BETWEEN testing laboratory and the dealer's store, a radio set is handled an average of eleven different times during shipment. Twice as many handlings follow before it finally reaches the living room.

With a circuit properly designed and built, with both materials and the completed set fully tested and the shipping package designed to stand the rough handling which every shipment undergoes—nothing happens on this long journey.

But if any one of these details is overlooked, if any one has not been given greatest care—then every trouble and "grief" which radio has ever known may occur, from defective operation of the set itself to damage and even destruction of the cabinet.

In designing A-C DAYTON 1929 models we have gone far beyond ordinary development work in construction and packing. A bridge type

of construction with "L" beam design is the result. It is a fact worth thousands of dollars

to you that these A-C DAYTON receivers can be taken into your customers' homes in the original package, opened, installed and operated with all the efficiency they demonstrated at the laboratory bench. And your service costs, after the sale is made, will be the lowest in your experience.

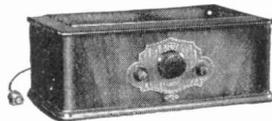
If you are looking at the permanent side of radio profits, you will find A-C DAYTON 1929 engineering as sound a protection as our guarantee on price declines, obsolescence of models and territory.

A-C DAYTON RADIO

Full information by return mail. Write or clip the coupon to your letterhead.

THE A-C DAYTON COMPANY, Dayton, Ohio 3
Gentlemen: Please send complete details about your dealer's franchise.

Name.....
Address.....



This amazing device instantly adapts any radio set to receive broadcasting on short wave lengths. Gets international programs. The biggest radio development in recent years.

AC-63, SELF CONTAINED ALL-ELECTRIC: a 6-tube receiver complete for light socket operation except for tubes and speaker. May be used with any type speaker. Power tube takes full rated voltage. A reliable electric set listing \$98, except Canada and West. Model XL-61 listing at \$65, is same as AC-63, except that it is battery operated.



FLEWELLING SHORT WAVE ADAPTER \$22.50

SHOWERS WALNUT VENEER CABINETS

Radio's greatest cabinet value!

Only Showers with their many years' experience and large resources could produce values such as these. Rich walnut veneers, rare woods and genuine decorative wood carvings beautifully designed, make these cabinets the greatest value the radio world has ever seen.



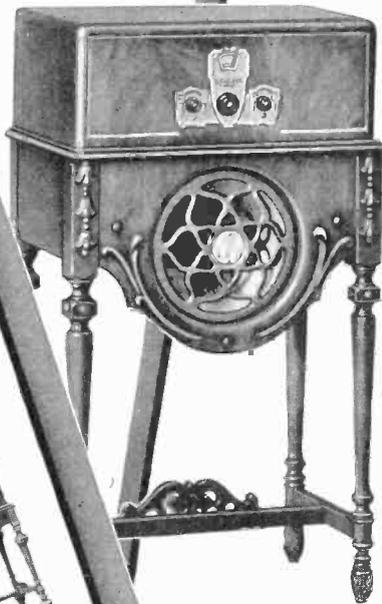
Powel Crosley, Jr., endorses Showers Radio Cabinets as ideal for Crosley Radio

In Showers cabinets he finds VALUE—comparable to the VALUE in Crosley receivers. Showers gigantic production methods create economies that cannot be realized in smaller concerns.

CONSOLE RADIO CABINET *with built in* **DYNACONE**

\$50

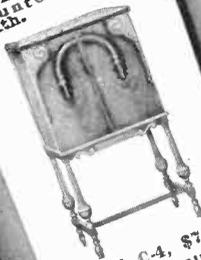
This is SHOWERS' most amazing value—MODEL C-3 CONSOLE, equipped with the new CROSLY DYNACONE, the greatest loud speaker achievement of 1928. This beautiful walnut veneer console stands 38 inches high. Exquisitely matched patterns of beautiful grained veneers and genuine wood carvings are splendidly handled in a decorative note of real beauty. There is nothing in the radio world to compare with this wonderful super-value.



Model C-1, \$84
Here is beauty! Rare! zebra wood and motted walnut veneer with genuine wood carvings. Full swinging doors. The Crosley DYNACONE is built in.



Model C-2, \$70
The finest walnut veneer. The DYNACONE is gracefully mounted underneath.



Model C-4, \$70
Matched with walnut veneer with overlaid decorations of curly maple veneer. CROSLY DYNACONE built in.

Manufacturing operations by the straight-line or mass production method is the most economical way of producing merchandise today. Showers use this method to produce the Showers Crosley radio cabinets—1928-29's greatest radio cabinet VALUE.

In the world's largest furniture manufacturing plant are found the greatest economies of production.

Because of Showers' great resources, are permitted:—

1. Construction engineering that gives strength and durability without sacrificing grace and beauty.
2. Use of rare and costly woods in decorative treatment.
3. Designing talent of the very best.
4. Use of genuine wood carvings.
5. Use of baffle boards to give the best possible tone effect to the Crosley speaker—the DYNACONE.

Through their many years of furniture building experience, Showers are able to give the world values in radio cabinets that competition CANNOT MEET. This experience results in well-built furniture made to conform with the furniture mode of today.

Sell your customers the BEST — Showers cabinets at prices below competition. Mail the coupon below for complete information.

CROSLY Radios interchangeable with SHOWERS Cabinets

This is the real advantage of selling SHOWERS cabinets for CROSLY receivers. Any Crosley set can be installed in any Showers-Crosley cabinet. Selection of cabinets and receivers is made by the customer. With this feature dealers can sell their customers easily and permit them to select the cabinet which they like best.

WORLDS LARGEST FURNITURE MAKERS
This is one floor of eleven plants, 92½ acres of fine furniture.

COUPON

SHOWERS BROTHERS CO.
Dept. 130, Bloomington, Ind.

I am interested in the combination of value you and Crosley make possible. Please send me further literature and advise me if a sale franchise is open in my territory.

Name

Address

SHOWERS

RADIO FURNITURE

SHOWERS BROTHERS CO.

Bloomington, Ind.

Replace Your Old Radio!

Few radios at any price combine ALL the following features which are so necessary to the fine radio reception you may have today. Crosley gives you them ALL at the world's lowest prices.



The Crosley neutrodyne circuit is sharp, sensitive and selective.



Crosley Radios are shielded

Each element is shielded from each other. Stations close together are easily separated. This feature is featured in the most expensive radio.



Crosley Radios are selective

In the lower end of the dial where stations are crowded together you will appreciate the selective qualities of Crosley radio. You only listen to ONE at a time.



Crosley Radios have volume

The volume may be increased tremendously without distortion.



Crosley Radios can be softened to a whisper

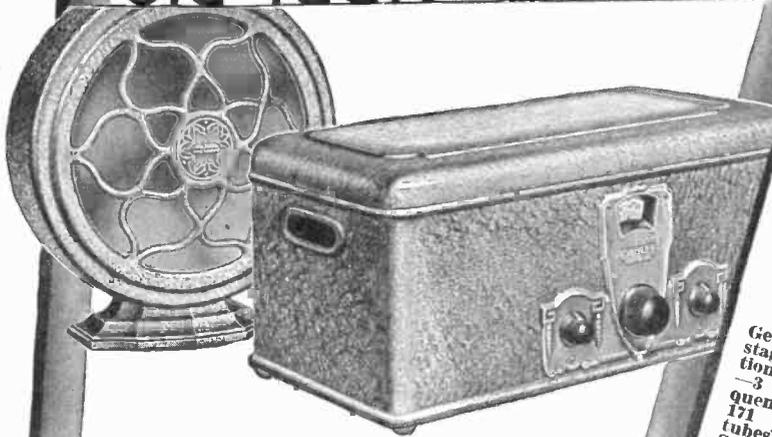
The volume control is so positive you cut any program to scarcely audible reception.



Crosley Radios fit any kind of furniture

Outside cases of Crosley radios are easily removed for installation into any cabinet.

New AC electric receivers replace old radio models



Genuine 6 tube Neutrodyne Crosley GEMBOX \$65.

Self-contained AC electric receiver. Utilizes two radio, detector, two power and a rectifier tube (171 power output tube). Operates from 110 volt 60 cycle AC home lighting current.

Try this amazing set. Prove to yourself on a 5 DAY FREE TRIAL IN YOUR OWN HOME that no radio that approximates Crosley price can compare in performance. Why pay higher price?

This wonderful little Gembox is designed to use the new and astounding dynamic

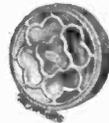
DYNA-CONE

the Crosley power speaker, which is radio's greatest development this year. A genuine dynamic speaker selling for \$25 equals ANY in pure realistic tone—unmatchable in price.

5 tube dry cell operated BANDBOX Jr. \$35.



Drain on No. 6 dry cells economical. Ideal battery set.



Improved Musicone \$15
This Crosley achievement is the world's greatest success in the field of magnetic type speakers.

CROSLY AC Electric Radio Sets unequalled values

Crosley AC Electric Radios operate on 25 to 40 and 60 cycles. Where AC 110 volt current is available they are perfect radio receivers. No better performance is obtainable. Cabinets can be built at any price to make radio expensive, but for realistic, powerful reception, Crosley receivers know no superior.



8 tube AC Electric JEWELBOX \$95
Genuine neutrodyne—3 stages radio amplification—227 detector tube—3 stages audio frequency (last two stages being 171 push-pull tubes) and 280 power shielded coils, modern illuminated dial. Highly selective.



8 tube AC Electric SHOWBOX \$80
Genuine neutrodyne—3 stages radio amplification, detector, 3 stages audio (last two being 171 push-pull power tubes) and 250 rectifier.



The 6 Tube BANDBOX Battery Type \$55
The Bandbox is the ideal radio for electric current is not available for AC receivers. Genuine Neutrodyne housed in a beautiful gold high-lighted case.

WHATEVER HAPPENS IN 1928 YOU'RE THERE WITH A CROSLY

FREE TRIAL

Ask any Crosley dealer to hitch a new Crosley radio to your antenna. Test, try and prove in your own home (under the exact conditions you will enjoy your radio) the superior performance of Crosley Sets. If you can't locate a nearby dealer, fill out the coupon below.

CROSLY RADIO

THE CROSLY RADIO CORPORATION
Cincinnati, Ohio
Powel Crosley, Jr., President
Montana, Wyoming, Colorado, New Mexico and West prices slightly higher.
Crosley Radio prices do not include tubes.

Mail this

COUPON

Dept. 130
Please send literature describing in detail the complete Crosley line.

Name

Address

NEWCOMBE-HAWLEY RADIO REPRODUCERS

The most complete line of radio reproducers ever offered by one manufacturer. Covers the three leading types of loudspeakers —Magnetic— Air Column— Dynamic. Alert dealers and jobbers appreciate the outstanding sales advantage of one complete line, and are featuring the Newcombe-Hawley line.

Send for latest bulletins today!

MAGNETIC CONE REPRODUCERS



Portable
A beautiful portable reproducer in burl walnut cabinet.



Table
For large receivers such as R. C. A. Model 18 A. C. sets.

AIR COLUMN REPRODUCERS



Portable
Equipped with Nathaniel Baldwin unit. Air column is 56 inches long.

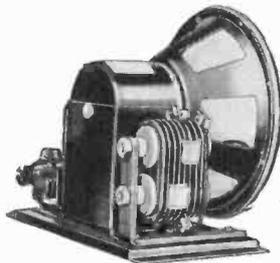


Table
With Newcombe-Hawley 72-inch air column and Nathaniel Baldwin unit.

DYNAMIC CONE REPRODUCERS IN ALL MODELS



Table
With D. C. or A. C. Dynamic Cone Reproducer. Wide enough to hold most radio receivers.



The Heart of Newcombe-Hawley Dynamic Cone Reproducers
A remarkable unit of unsurpassed tone quality and volume. Furnished for battery or A. C. light socket operation.



Small Console
With Dynamic Cone Reproducer.



Radio-Phonograph Combination
With Dynamic Reproducer, electric turntable pickup, and space for set.



Portable
Satinwood front. Dynamic Cone Reproducer.



Portable
Burl walnut cabinet. Dynamic Cone Reproducer.



Large Console
For large R. C. A. Model 18 and other large sets. With Dynamic Reproducer.

MAIL THIS COUPON

Newcombe-Hawley, Inc.
201 First Ave., North, St. Charles, Ill.
Please send at once latest bulletins on the Newcombe-Hawley Line.

Name.....

Address.....

CARRYOLA Portable Phonographs

New Air Column Horn Instruments Enthusiastically Received by Music and Radio Dealers Everywhere



CARRYOLA presents an entire new line of instruments—the most amazing improvements ever incorporated in portable phonographs—superior in tone quality, excellent in finish, and striking in eye value. Made in the world's largest portable phonograph plant, operating its own foundry, motor plant, metal stamping, nickel plating, and wood working departments. Capable of unlimited production. All CARRYOLA products are made in the factory from the steel in the foundry to the finished product with the exception of fabrikoids which are supplied by DuPont. Dealers will find it to their advantage to investigate CARRYOLA PORTABLE PHONOGRAPHS. Write at once for complete information and the address of your nearest distributor.



MODEL TWENTY

A truly outstanding value in its price class, having a long air column metal horn (as shown above) producing true tone quality and abundance of volume—nickel plated hardware—two record spring motor—metal tone arm—sensitive Duro aluminum metal diaphragm—made in three colors of genuine DuPont fabrikoid in black, blue or brown with inside linings to match—plush covered turn tables to harmonize—wood album holds 15 records. Measurements 7 1/2 inches high, 12 inches wide and 14 1/4 inches long, weight 12 pounds.

Retails at \$15.00



MODEL THIRTY

The most remarkable value in portables today. 50 inch air column metal horn (as shown above) constructed according to the exponential curve theory, a product of our own laboratory. Heavy nickel plated hardware—large motor plays three records with one winding—patented Bakelite tone arm—beautiful Bakelite reproducer with patented tripod diaphragm—special patented lock catches—exclusive DuPont fabrikoid in 5 colors black, blue, green, brown and red, with linings to match—plush covered turn tables. Measurements 8 1/4 inches high, 12 3/4 inches wide and 16 inches long—weight 19 pounds.

Retails at \$25.00



MODEL FORTY

A wonder portable for appearance, tone quality and volume. 60 inch air column metal horn, (as shown above) our own laboratory product made according to the exponential curve theory. Heavy gold plated hardware—special spring motor plays three records—automatic stop—Bakelite tone arm—Bakelite reproducer with patented tripod diaphragm—plush covered turn table, patented automatic album holder and lid support—lacquered wood finish inside—outside covering extra heavy fabrikoid in two colors, brown or black. Measurements 9 1/4 inches high, 13 1/4 inches wide, 17 1/4 inches long, weight 23 pounds.

Retails at \$35.00

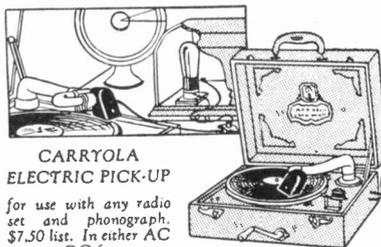
C a r r y o l a

BEYOND THIS YOU BUY FURNITURE

CARRYOLA ELECTRIC PICKUP

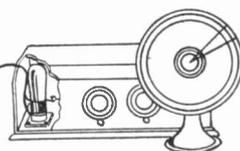
replaces the reproducer of the phonograph.

By inserting the cord tips on one of the prongs to the detector tube and to the ground post of any radio set—phonograph records played on any phonograph may be electrically reproduced through the radio loud speaker. Control volume by turning a single knob. This attachment may be used with any standard Radio Set and any Phonograph.



CARRYOLA ELECTRIC PICK-UP

for use with any radio set and phonograph. \$7.50 list. In either AC or DC form.



CARRYOLA PORTO PICK-UP

\$20.00 list with spring motor. \$38.50 list with electric motor. In either AC or DC form.

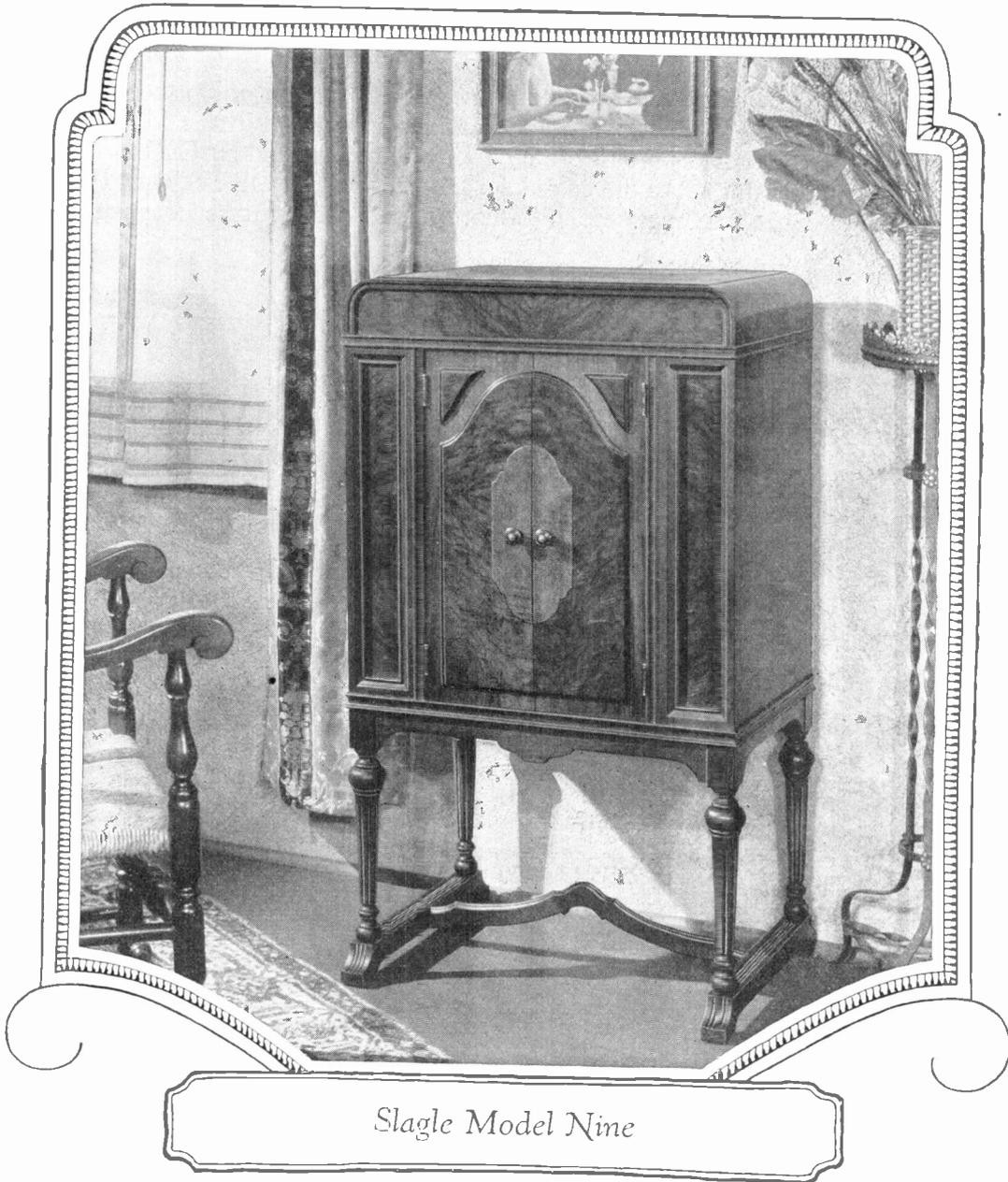
CARRYOLA PORTO PICK-UP

To attach simply place the cord tips on one of the prongs to the detector tube and ground post of any radio set. That's all. Play records in the usual way—hear them from the loud speaker with all the added volume and richness of tone that is characteristic of electric reproduction.

The Carryola Porto Pick-up is equipped with a curved throw-back arm, which makes it easy to change needles. Volume control conveniently located on motor-board enables operator to regulate volume anywhere within limits of receiving set and speaker. Case is beautifully finished in durable Fabrikoid with nickel-plated fittings.

THE CARRYOLA COMPANY of AMERICA
World's Largest Manufacturers of Portable Phonographs Milwaukee, Wisconsin

Slagle Radio



SLAGLE RADIO for the Nineteen Twenty-Eight and Nine season again utilizes the same new and revolutionary circuit which made its performance so outstanding last year. Important additions and refinements have been made, and almost every conceivable feature providing beauty, convenience, power, range, and richness of musical expression, is abundantly supplied. Some interesting facts on radio profits await Dealers writing to the factory.

Slagle Radio Company
 Fort Wayne, Indiana
 Division United States Electric Corporation

Licensed under patents of Radio Corporation of America and associated companies,—and the Technidyne Corporation.

FADA Radio

The outstanding features
of the Chicago Radio Show

FADA "10"

FADA "70"

Time after time this remark was made:

The FADA "10"



"Fada has done it again"

—with Fada "10", the long looked for great performer in the class around the \$100 market, and Fada "70", the console model that will take the class market by storm.

The FADA "70"



Handsome burled walnut Sheraton console with built in Fada "14" Dynamic Power Speaker. Operates on disappearing loop antenna which rests in cabinet when not in use.

The Big Parade in Radio marches on with the Fada "10" and the Fada "70". They'll bring the dollars to Fada dealers—and the Fada franchise grows more and more valuable. Don't delay—see if your territory is open—write or wire.

Fada A. C. Electrics from \$110 up

F. A. D. ANDREA, INC., LONG ISLAND CITY, N. Y.

Fada prices slightly higher West of the Rockies

The
Authorized
Furniture
for all
ATWATER KENT
RADIOS



Model 40, Desk

Finished in Walnut. Cabinet is 30 inches long, 20 inches wide and 38 inches high. For use with Atwater Kent Set 40, and Atwater Kent Speaker E-3. List Price, \$40.



Model 30, Console

Finished in Walnut. Cabinet is 21 inches long, 12 inches wide and 38 inches high. For Atwater Kent Sets 40 and 42, and Atwater Kent Speakers E-2 and E-3. List Price, \$30.



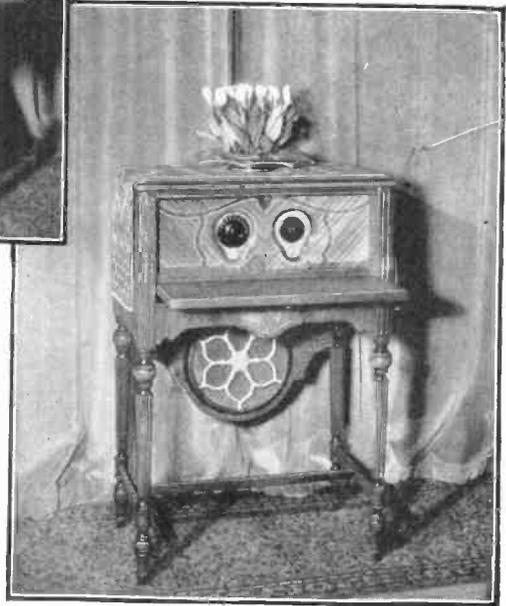
Model 121, Secretary

Finished in Walnut. Cabinet is 29 inches long, 13 inches wide, and 49 inches high. For use with Atwater Kent Sets 40 and 42, and Atwater Kent E-3 Speaker. List Price, \$45.



Model 18, Spinet, (with disappearing speaker; closed)

Finished in Walnut. Cabinet is 25 inches long, 16 inches wide, and 38 inches high. For use with Atwater Kent Sets 40, 42 and 44, and Atwater Kent E-3 Speaker. List Price, \$45.



Model 18, Spinet (with disappearing speaker; open)

This view shows the speaker as it appears when in use. As the folding shelf in front of the dial board is lowered, the speaker automatically swings down into its operating position. Design Patented.

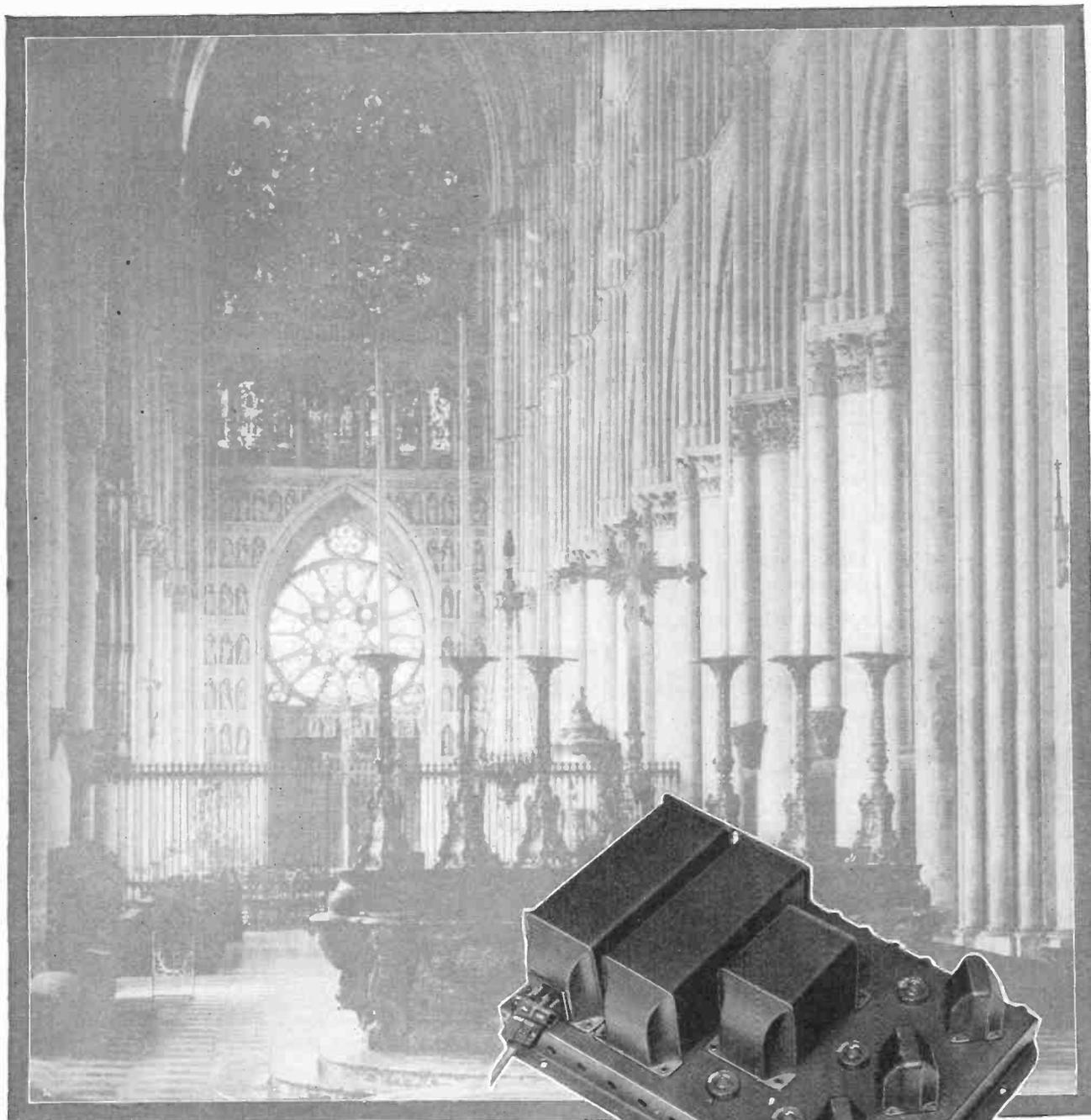


Red Lion Cabinets

THE four new models shown above are meeting with a most enthusiastic reception from Atwater Kent dealers everywhere. They bid fair to outdo the popularity of the previous season's big sellers in Red Lion Cabinets.

Their beauty, practicability and convenience make these cabinets fitting furniture for the new and highly-developed Atwater Kent Receiving Sets and Speakers. Atwater Kent and Red Lion are a sales-winning, profit-making combination.

RED LION CABINET COMPANY, RED LION, PENNA.



Majestic Music—Martial Volume for your customers from their present sets

equal to the coronation music of Rheims Cathedral, can be obtained by adding a Samson PAC2, which will also eliminate all A, B and C batteries with their attendant care and replacement.

Rich bass notes, remarkable clarity and a volume which can be controlled from a whisper to dance hall proportions are obtainable. The PAC2 will operate 1 to 16 loud speakers or 500 to 700 headsets.

The Samson PAC2 Power Amplifier and ABC Eliminator are designed to meet AIEE Standards and Underwriters' Requirements. The Amplifier is of the two stage transformer coupled type using a 227 tube in first stage and two 210's in push pull for second stage. Compensation is provided for 105 to 120 volt, 50-60 cycle current. External voltages are 45, 90 and 135B, $-4\frac{1}{2}$ C, and AC filament current for two 227 and five 226 tubes. An 874 regulator tube is used to maintain constant B voltages.

PAC2 Amplifiers, when used in conjunction with tuning units, are ideal for supplying music or instruction to schools, hospitals, apartments, clubs, etc. They will modernize the many battery operated sets in your neighborhood or greatly increase the resale value of your traded-in sets. Send for folder R.R. describing this unit and many others.

Main Office: Canton, Mass.
Manufacturers Since 1882

Samson Electric Co.
MEMBER
RMA

Factories at Canton
and Watertown, Mass.

A Circulation Statement that you can understand

Following is *Radio Retailing's* paid circulation statement submitted to the Audit Bureau of Circulations for 6 months ending June 30, 1928. It does not include approximately 4,000 sample copies mailed monthly to identified retailers.

Retailing

	COPIES	PERCENTAGE
RADIO STORES		
Primary radio stores whose major lines are receivers, combination radio-phonographs, accessories and parts	4888	21.86%
MUSIC TRADES OUTLETS		
Phonograph and Music stores selling radio, 1,685 Department and Furniture stores with radio-music departments, 1,366	3051	13.65%
ELECTRICAL OUTLETS		
Electric appliance dealers and specialty selling organizations, 3,961 Electric light and power companies, 385	4346	19.44%
AUTOMOTIVE		
Automobile accessory stores, car dealers, filling stations, etc.	3027	13.54%
HARDWARE STORES		
Hardware and house furnishing stores	1195	5.34%
MISCELLANEOUS RADIO OUTLETS		
Drug, sporting goods, chain, plumbing, etc.	1664	7.44%

Wholesaling

JOBBERS		
(Music, electrical, automotive, hardware, etc.) Jobbers' salesmen, manufacturers' agents	2280	10.20%
MANUFACTURERS		
Manufacturers and fabricators of receivers, combination radio-phonographs, parts and accessories	846	3.78%
MISCELLANEOUS		
Including societies, clubs and other publications ..	587	2.63%
UNCLASSIFIED	474	2.12%
Total	22,358	100.00%

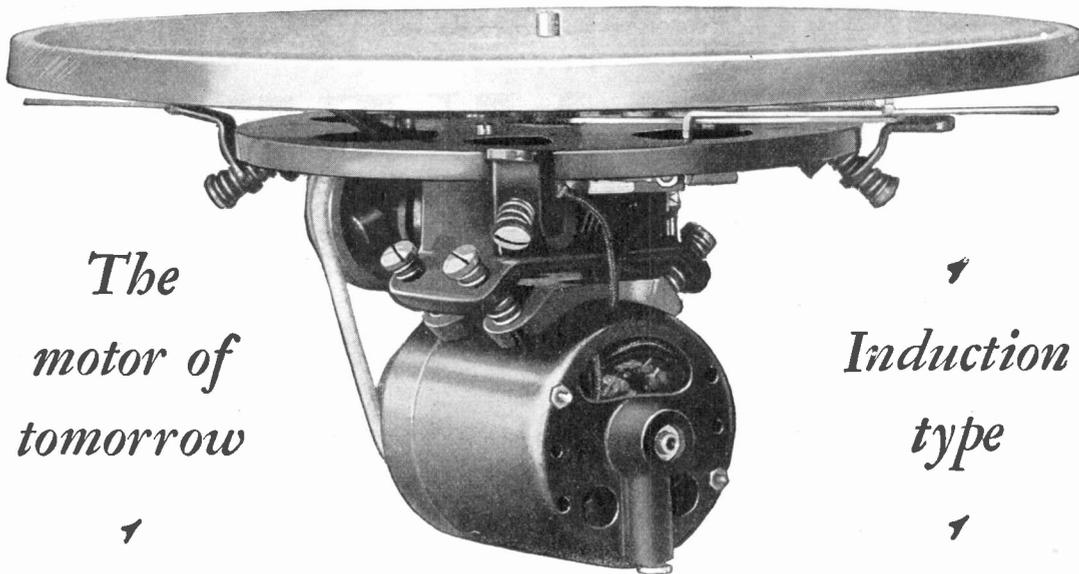
When buying advertising space in radio and music papers,
ask for an Audit Bureau of Circulations Statement

Radio Retailing

a McGraw-Hill Publication

Tenth Ave. at 36th St.
New York City

BRUSHLESS / HUM - M - LESS



*The
motor of
tomorrow*

*Induction
type*

Again Gordon triumphs with this *induction electric* phonograph motor

'Truly a motor-marvel is this new achievement in the phonograph field.

It eliminates noise. Brushless, it is so quiet that a physician's stethoscope would be required to hear it running, once it is installed.

It obliterates interference. Of *induction-type* in accordance with the recommendations of the A. I. E. E., any pick up in radio or power amplifier is absolutely impossible.

Spring drive, it smoothly starts itself, attains full speed within two turns of the turntable. Then maintains that speed constantly and evenly regardless of the fluctuations in line voltage.

Designed to operate on 110 volt A. C., a transformer, supplied at slight additional cost, adapts it for 220 volt A. C.

Thus the Gordon *Induction* Electric Phonograph Motor solves every previous difficulty, adds many desired advantages, supplies the superb answer for the radio and phonograph needs.

It is a workmanship-like motor in every particular. The finest materials are used for every part no matter how inconsequential. Splendidly engineered.

Manufacturers are invited to write for prices on this motor of tomorrow.

L. S. GORDON COMPANY
1807 MONTROSE AVENUE, CHICAGO, ILL.

STUDNER BROS., Inc., *National Sales Agents*, 67 West 44th Street, New York City
Export Agents, Ad. Auriema, Inc., 116 Broad Street, New York City · *Cable Address*, Auriema—New York

(Raytheon BH)

THE ONLY TUBE

*That Fits the Millions of
"B" Eliminators Now in Use*

ACME ACME ELECT APEX ARBROPHON ELECTRIC BOSCH WALTER BUELL CHAMBERLIN CLO CORNELL CROSLY DUBILIER DURKEE- EPOM ERLA F GENERAL INSTRUMENT GREBE GREENE-BRO JORDON-CARISCH KING and Standard) MALONE-L METRODYNE MIDWES MUTER NATIONAL OZARKA PARAGON PREMIER PRESTOLITE SPARTON STANDARD R STERLING STEWART UNITED ENGINE UNIV WALKER WARREN WHITE WISE-McLUNG	 AMPLEX APCO ERYLESS BENJAMIN GGS-STRATTON BUCK- /SH & LANE CASE AL CONSOLIDATED DONGAN DRAGON CHARGER ELECTRON ICA FREED-EISEMANN GILFILLAN GRANT HERBERT JEFFERSON MAJESTIC (Master, Super N-COPELAND MAYOLIAN MOHAWK MU-RAD D BATTERY OPERADIO R PRECISE PRECISION SIMPLEX SPARTANA STANDARD RADIO (Canada) TIMMONS TRIPLE A HT VALLEY VARION EBSTER ELECTRIC WELLS YORK ZENITH
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MORE than one hundred different makes of "B" Power Eliminators are specially designed to take only Raytheon BH Tubes.

The millions of these eliminators, now in use, make a steady and dependable market for millions of Raytheon BH Tubes for replacements.

You can make a lot of sales for yourself, and at the same time do your customers a real favor, by advising them to replace the Raytheon BH in their eliminators after each 1000 hours of service.

A slight decrease in distance or volume is usually a sign of diminishing power in the eliminator, which may be corrected by the replacement of the Raytheon BH Tube.

Ask your distributor for Raytheon BH in the attractive, sales-making display carton. On this carton of four tubes, costing you \$10.80, you make a clear profit of \$7.20.

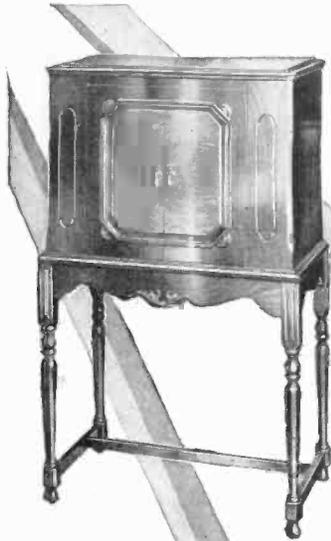
RAYTHEON MANUFACTURING CO., Cambridge, Mass.



(Raytheon BH)

LONG LIFE RECTIFYING TUBE

What a *Tone* to HEAR..and what a *Line* to SELL



The NOCTURNE
List Price \$295



The CONCERTO
List Price \$320

Each model is equipped with Dynamic Power Speaker. The Amrad chassis (balanced Neutrodyne) uses eight tubes, including power tubes, also a 4-way tone control that REALLY WORKS!

YOU will be impressed when you see the Amrad line, because of the exquisite beauty of the cabinets, made by leading furniture designers.

And when you hear the Amrad models of the Symphonic Series, you realize this thrilling tone is what your customers want.

Write for full information regarding open territory.

THE AMRAD CORPORATION
Medford Hillside, Mass.

J. E. HAHN
President

POWEL CROSLY, JR.
Chairman of the Board

Prices do not include tubes. Slightly higher West of the Rockies.

All Amrad models are purely electrical.



Right The OPERA
Combination Radio and Phonograph
List Price \$875



The SONATA
List Price \$475



The Symphonic Series

AMRAD



**NO BRUSHES
NO COMMUTATOR
NO SPARKING
NO INTERFERENCE**

At Last!

An Electric Turntable that cannot create noises in Radio-Phonograph Loudspeakers

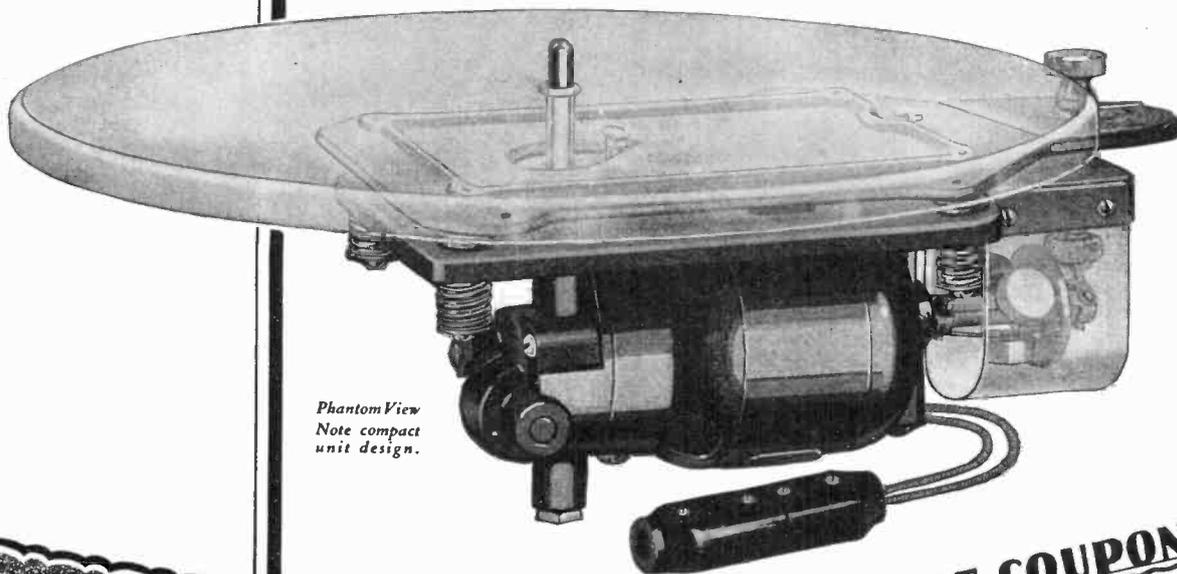
To Radio and
Phonograph
Manufacturers

*Inquiries are solicited
from manufacturers of
radio-phonograph or
phonograph equipment.
These units can be supplied
with or without turntables.
Sample units will be
supplied for inspection
and test. Write today!*

THE Bodine Type RC-10 Electric Turntable is a high-torque, spring-supported electric turntable with a reliable Bodine Induction Motor. There are no brushes or commutators to cause trouble or create crackling noises in the phonograph loudspeaker.

The surest way to eliminate noise and motor interference in electric phonographs is to use an electric turntable with an induction motor. Brushes and commutators will spark, no matter how carefully they are made.

For reliability and satisfaction, merchandise the Bodine Type RC-10 Electric Turntable. *Write for information and discounts today!*



*Phantom View
Note compact
unit design.*

BODINE

MAIL THE COUPON

BODINE ELECTRIC COMPANY
2242 W. Ohio Street, Chicago, Ill.

Please send me prices and dealer discounts
on the Bodine Type RC-10 Electric Turntable.

Dealer.....

Address.....

Name of Jobber.....

30 New Models

Zenith for 1928-29 is the most complete line of radio offered to the public. 30 New Models—A. C., Direct Current and 25 Cycle Models—3 different circuits—6, 8 and 10 tubes—with loop or antenna, dynamic speaker or cone speaker. Also models equipped with Zenith Automatic Tuning, the sensation of the year in radio. The “sales appeal” of Zenith Radio this year is tremendous. With prices ranging from \$100 to \$2,500 the Zenith dealer can satisfy every radio purse and taste.

ZENITH RADIO CORPORATION
3620 Iron Street CHICAGO



30 Models—3 different circuits—6, 8 and 10 Tubes including De Luxe, Automatic and Phonograph Models—with or without loop or antenna—battery or fully electric—\$100 to \$2,500

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

WORLD'S LARGEST MANUFACTURERS OF HIGH GRADE RADIO

Your Business Needs This High Grade Line

Kellogg Radio

You need the "Extra Profits" Kellogg brings. You have trade that wants the best—and is not content to buy "flashy" merchandise that lacks *real* quality. If YOU do not carry a good assortment of Kellogg Radio to satisfy *that* trade, someone else is going to get the business. The Kellogg line gives quality trade everything desired: the finest of reproductive quality; fine furniture; a famous name; mechanical perfection.

A Wide Price Range That Brings "Extra Profits" All Along the Line



Model 517
\$775



Model 514
\$495

The Same Famous
Kellogg
Tone
A Feature of All Models
Regardless of Price



Model 519, \$275
Model 516, \$375

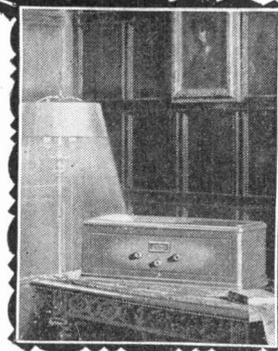


Table Model 515, \$169.50



Model 518, \$225

All List Prices Slightly Higher West of Rockies

Extra Profits

THERE'S something that we're all interested in!

A man comes in to buy a pretty good radio. You can sell him somebody's flashy \$250 console, or you can sell him a Kellogg at \$275, \$375, \$495 or \$775.

It's all up to you. And if you waste that kind of a prospect on a \$250 sale, you are missing the "Extra Profits" that might be yours.

Franchises Closing FAST! Wire for Details.

Kellogg Switchboard & Supply Co.,

Dept. C-547

Chicago

12 Straight Facts for Radio Dealers

1 An 8-Tube All-Electric \$125.

2 Models for D. C. and A. C. 25-40 and 60 cycle

3 8-Tube Super-power All-Electric \$160. using type 250 tube

4 Magnetic Speaker \$35.

5 Dynamic Speaker \$65.

6 Hand-Decorated Cabinets and Speakers



7 Easy to operate—Single Control

8 Selective—4 Variable Condensers

9 Magnified Tone Sweetness and Power

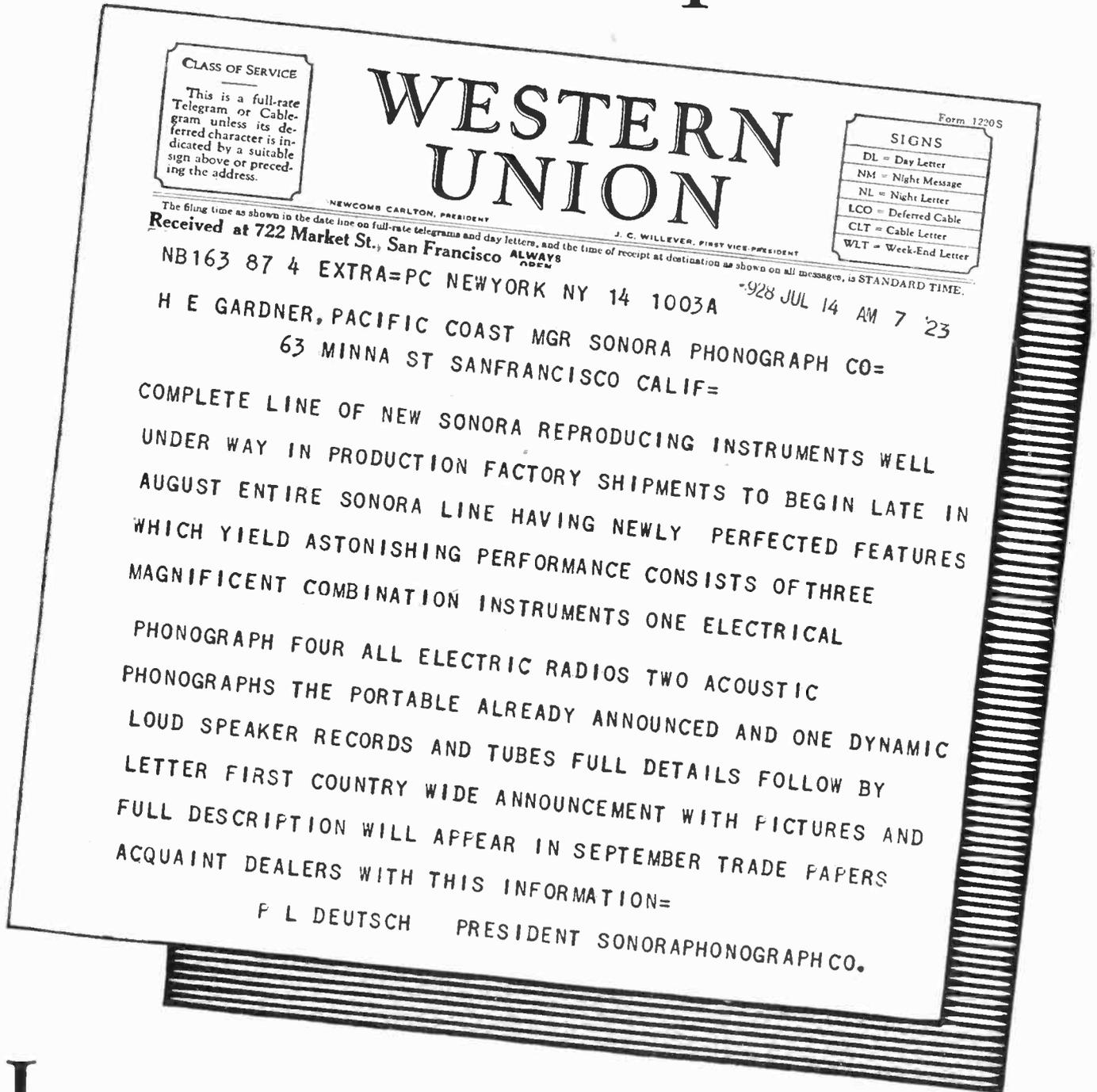
10 Trouble-proof—Built to require minimum of service

11 A nationally known and advertised famous name

12 Proved profitable to dealers since broadcasting began

Send for Descriptive Literature and Dealer Proposition
FREED-EISEMANN RADIO CORPORATION, BROOKLYN, N. Y.
 "Builders of Fine Radio Since Broadcasting Began"

Advance notice of the new SONORA products



IN THE September issue of the trade publications Sonora will present full details of its outstanding new products and its plans destined to make the new Sonora merchandise the industry's most formidable products. Register your name with us now so that we may forward you, at the earliest moment, advance detailed information about the new Sonora Line.

Reproduction of telegram sent to Sonora District Sales Managers



All-American Mohawk Corporation

LYRIC RADIO

New



MODEL 66

Combination Phonograph and Six-Tube Electric Radio. Radio chassis same as Model 60—in keeping with the unusually superb All-American Mohawk Corporation Radio Consoles. Complete with electric pickup, spring motor turn table; lift top, with built-in cone speaker and two record albums. For operation on 110-Volt A.C. 60-Cycle Cur.—\$245
With Electro Dynamic Speaker
Additional \$35.00



MODEL 88

Really the utmost in phonograph and radio combination. Furniture superb, Eight Tube Electric Radio Set; chassis same as Model 80; Radio Corporation of America Electric pick-up; General Electric Induction Motor, concealed velvet turn table; Electro Dynamic Speaker; compartment for record albums. For operation on 110-Volt A.C. 60-Cycle Current. This model furnished with Electro Dynamic Speaker only. Complete less tubes. \$425

Slightly higher prices prevail on All-American Mohawk Corporation Lyric Radios in the Western states.

NEW—a new, capable, progressive and resourceful organization resulting from the merger of the Mohawk Corporation of Illinois and the All-American Radio Corporation—new, advanced manufacturing facilities—new sets, of unsurpassed excellence, radio and phonograph combinations presenting new features—new refinements—new beauty of design and finish—new merchandising methods—new and forceful advertising ideas and plans—new low prices—new appeals to radio buyers—new and greater opportunities for dealers to do a bigger, more profitable business!

NEW—that's exactly what the public wants! Radio buyers are keenly on the alert for something new and better. You have it—in the All-American Mohawk Corporation line of Lyric Radios for 1928-1929. And back of it all—*reputation* established by two pioneers in the field of radio—*confidence* created by honesty of purpose, by fair dealing, by keeping faith with the Radio Buyers of America.

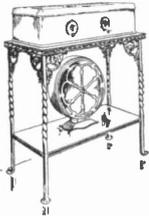
Tell your customers that you have something new and better. They'll listen eagerly. *Prove* it—you can do it with the All-American Mohawk Corporation Lyric Radio. Super excellence and greater value are convincingly evident in operation, beauty of appearance and price economy.

A few choice territories are still open to reputable dealers. Wire or write for complete particulars. Line up with a leader!

ALL-AMERICAN MOHAWK CORPORATION
4223 Belmont Avenue • Chicago, Illinois

SMITHCRAFT EXPRESSES THE MODERN TREND IN FURNITURE

And now ~ the Vogue of Radio Tables in Wrought Iron



Smithcraft Radio Tables accommodate all standard table model receivers with base dimensions 23-in. x 14-in. or less. You need no large stock of various sized tables to fit individual makes.



\$14.00

all colors

Slightly higher west of Rockies

Smithcraft Benches are upholstered with beautiful velour tops. These benches harmonize in color and design with Smithcraft Tables, making an attractive and charming combination.

\$7.00 *all colors*

Slightly higher west of Rockies



The beauty and utility of Smithcraft Wrought Iron Tables and Benches will appeal instantly to your trade. All that is truly artistic in modern furniture design is reflected in these unique creations.

Both Tables and Benches are available in a wide range of harmonizing color combinations. They are extremely light in weight, yet are rugged and durable. Altho designed primarily as radio furniture, they are ideal for general use in the home.

Color	Table Code	Bench Code
Antique Brown and Pale Gold....	A-1	J-1
Black and Silver Gray.....	A-2	J-2
Chinese Vermillion and Black....	A-3	J-3
Blending Greens.....	A-4	J-4
Yellow Ochre and Black.....	A-5	J-5
	Table	Bench
Height	29"	18"
Size of Top.....	23"x14"	10"x21"
Speaker Clearance between Shelf and Top.....	18½"	
Shipping Weight.....	23 lbs.	13 lbs.

JOBBERs—Valuable territory is still available. Write us for full distribution details.

DEALERS—If your jobber cannot supply you, order sample direct on your letter head—or we will ship C.O.D. if desired.

SMITHCRAFT

MASTER CRAFTSMEN IN METAL
THE A. L. SMITH IRON WORKS ~ CHELSEA, MASS.



Price Complete
\$15⁰⁰

Amazing Results in A.C. Voltage Regulation with the WEBSTER Auto-Potentialator

HERE at last is the successful solution of the puzzling problem of A.C. line voltage regulation. The new Webster Auto-Potentialator offers complete, instant and automatic regulation of A.C. current. It delivers to the A.C. set or A and B Eliminator an absolutely even flow of A.C. current of the exact voltage necessary for the most successful operation of any make of A.C. receiver. Think of it! Entirely automatic—contains no tubes or liquids—needs no complicated adjusting—never wears out! If the A.C. line is high, it reduces the voltage. If it is low, it increases it. This marvelous device protects delicate A.C. tubes from sudden surges or other line fluctuations, lengthens the life of the tubes and enables any A.C. receiving set to operate at the very topmost peak of its

efficiency because of its uncanny automatic regulation of the line voltage.

Scores of thousands of A.C. set owners have long awaited the Webster Auto-Potentialator. The business of selling these remarkable devices will be profitable and pleasant for you because of this tremendous demand. *Every set owner is a prospect.* To enable you to secure a sample Auto-Potentialator to show to your customers we suggest you fill out and mail the coupon below, in the event that your regular supplier is out of stock. Mail the coupon today—NOW! The list price is \$15.00. Mention your jobber's name when ordering. Be first in your city to supply the demand for this new Webster voltage regulator.

Also manufacturers of the famous Webster Amplifier, Webster "A" Power Supply Units, Webster Bone-Dri Chargers, the Webster Reliable B and Super B Units, the Webster Adaptor-former, and Webster A.C. Power Packs. Write for complete details of these Webster items.

The WEBSTER COMPANY
 854 Blackhawk Street, Chicago



THE WEBSTER COMPANY,
 854 Blackhawk Street, Chicago.

Please ship me..... Webster Auto-Potentialators,
 price \$15.00 each. I enclose \$..... My jobber
 is:

Name

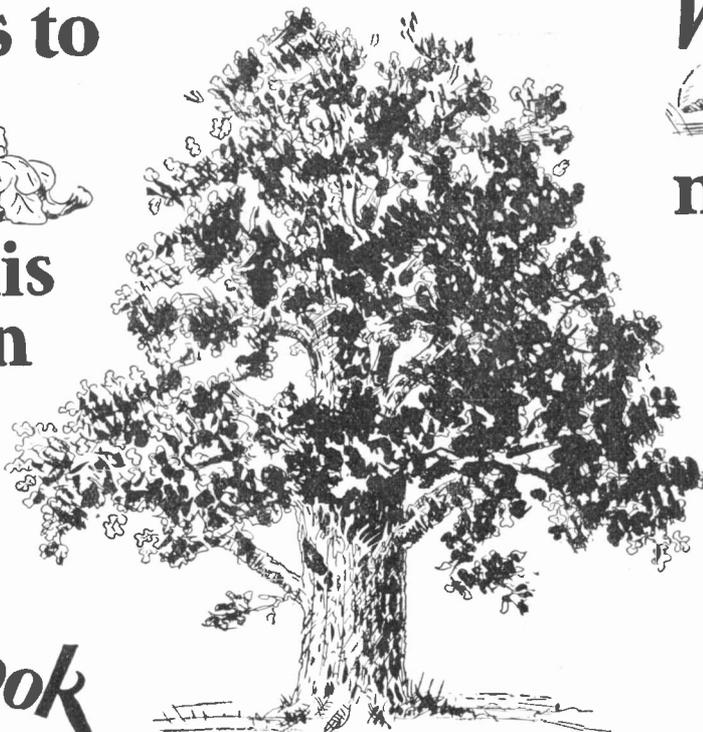
Address

City State.....

6 Weeks to



**grow this
pumpkin**



While these
mushrooms
grew
overnight

but it took

100 Years to Grow this Oak!

Plenty of "pumpkins" in radio again this year, and plenty of dealers will know more about "mushrooms" before New Years.

When family doctors are made in a month, and you can get a \$10,000 job from reading a \$2.00 book, we will believe that good radio sets can be built without experience and that dealers can prosper selling them.

In the meantime we will go on using the knowledge that seven years of radio manufacturing experience has supplied us, and selling our sets thru merchants who believe that success is built on sound policies and sound merchandise.

If you believe that experience counts and that quality will win for you, as it has for others, send the coupon.

Bremer-Tully

656-662 Washington Blvd.

I believe experience counts and that quality wins. What is your proposition?

Name _____

Street _____

City _____ State _____

RR-8

Mfg. Company

Chicago



PERRYMAN RADIO TUBES

"DISTANCE WITHOUT DISTORTION"

PERRYMAN A.C. Tubes

*are being sold as fast as we
can make them—for
two reasons:*



Perryman Tubes have the patented Perryman Bridge, which keeps the elements in permanent alignment at the distance of greatest efficiency. Every Perryman Tube is unconditionally guaranteed by the Perryman Electric Company.

1. No better A.C. Tubes are made by anyone at any price.
2. Our wholesale and dealer arrangements are founded on common sense—which means mutual profit.

Wholesalers Please Note

Proof that we have an interesting proposition for wholesalers will be furnished to you on request. Not by us alone, but by Perryman Wholesalers who have been with us for years and who will write you directly, telling you of their experiences with regard to sales, profits and cooperation.

Write for our 1928 proposition

**PERRYMAN ELECTRIC COMPANY
INCORPORATED**

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





ADLER-ROYAL

RADIO CABINETS

RADIO sells more easily when it is decorative, and if you please, *appropriately* decorative. That is one of the noticeable advantages of an Adler-Royal Cabinet—it fits gracefully into any furniture grouping, because it is more than just a fancy container. Every Adler-Royal

design is conceived and executed on the basic principles of true beauty—line, mass and color—each in its correct relation to a harmonizing ensemble. Such basic beauty is appropriate in any setting. It speeds the sale to say, "Cabinet by Adler-Royal." ☞ ☞ ☞ ☞

ADLER MFG. CO., Inc.



LOUISVILLE, KENTUCKY

The Sensation of the Chicago R.M.A. Show!



Rola Model 35

NO HIGHER COMPLIMENT could be paid any loudspeaker manufacturer than the great interest shown in the 1929 Rola speakers by those attending the Chicago Radio Manufacturers Association Show. Rola won a position of merited popularity through performance, unparalleled in the history of the radio industry. . . . The new Rola Dynamic Power Speaker is an outstanding achievement in realistic broadcast re-creation. It is built in the following models:

Rola Model 35. A console model with top dimensions 18 by 30 inches, equipped with the new Rola D-110 Dynamic Power Unit, operating from the 110-volt A.C. socket. . . . List price, \$110

Rola Model 30. A table model dynamic designed for efficient operation with output of 171, 210, and 250 tubes. . . . List price, \$75

IN ADDITION to the new dynamic power speakers, The Rola Company has further improved and refined its famous balanced-armature reproducers, increasing sensitivity, power, and range to an unheard-of degree in this type of instrument. This new speaker is built in the following models:

Rola Model 25. An attractive radio table representing the finest type of modern design and equipped with built-in Rola M Magnetic-armature Unit. List price, \$55

Rola Model 20. A cabinet type speaker unequaled for eye-value, performance, or dependability in the magnetic speaker class. . . . List price, \$35



Model D-90

RADIO SET AND FURNITURE MANUFACTURERS

Write for prices on the dynamic and magnetic units, ready for installation in console sets or radio furniture.

WRITE for the name of the nearest Rola jobber and detailed information on the new Rola 1929 speakers.

THE ROLA COMPANY
 OAKLAND, CALIFORNIA: 45th & Hollis Streets
 CHICAGO: NEW YORK:
 612 N. Michigan Avenue 47 W. Sixty-third Street

Wonderphone LOUD SPEAKER HORNS

Big Exponential Horns for long range work where maximum carrying power and excellent tone quality are desired. Reproduce the voice in clear, clean-cut tones. Substantially constructed of aluminum, and aluminum and steel; light, yet ample weight to prevent vibration.

Send for descriptive literature

UNIVERSAL HIGH POWER TELEPHONE CO.

6401 Carleton Avenue, Seattle, Wash.

49-Inch HORN LIST \$40.00

87-Inch HORN LIST \$70.00

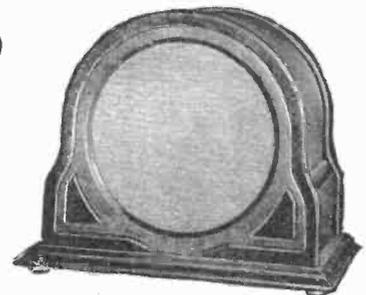


The New TRIMM Entertainer

\$25.00

West of the Rockies \$27.50

Canada \$33.50



Seven Big Selling Features

- Balanced Armature Unit.
- Ruggedly built to give perfect service over long periods of continuous operation.
- New spring features with double coil give positive control over the air gap.
- Absolutely free edge cone.
- All parts rustproofed before assembly.
- Volume with mellowness and entire absence of blasting or distortion.
- Cabinet of beautiful two-tone walnut, with bronze mesh screen front and back.

Send today for full information.



Readrite

UNIVERSAL TEST SET

Tests A.C. and D.C. Circuits
Quickly Locates Set Troubles

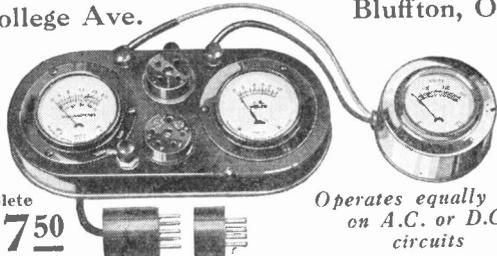
Standard with No. 215 Tube Tester, list price \$12.50, and No. 346 Voltmeter, range 0-300 volts, list price \$5.00. Optional with No. 347 Voltmeter, 0-500 volts, for \$1.00 additional. Tube Tester plugs into socket from which tube to be tested has been removed. A practical outfit for service man or set owner.

Readrite Meter Works

Established 1904

6 College Ave.

Bluffton, Ohio



List Price Complete
\$17.50

Operates equally well
on A.C. or D.C.
circuits

MASTER VOLTAGE CONTROL

Eliminates Free Service Calls

This voltage regulator (patent pending) is a necessity on all A-C sets. It protects A-C tubes from burning out by reducing excessive line voltage to the proper value.

Easy to Sell—

Simple to Install

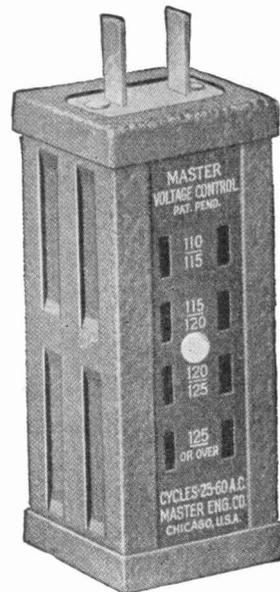
The various line voltages which are in daily use throughout the country have been compensated for in MASTER VOLTAGE CONTROL. These line voltages are clearly indicated so that the proper setting may be had to correspond with the line voltage of the set user in his district. All that is necessary to do is to ascertain from the power company the maximum line voltage and plug the A-C set into the marked outlet of MASTER VOLTAGE CONTROL to correspond to that line voltage.

Requires no guesswork in setting for correct voltage. Has no moving parts to get out of adjustment. No volt meters, no tools or a service man's time are required for installation. Once installed it requires no further attention.

ORDER FROM YOUR JOBBER
AT ONCE—
if he can't supply you send your
order to—

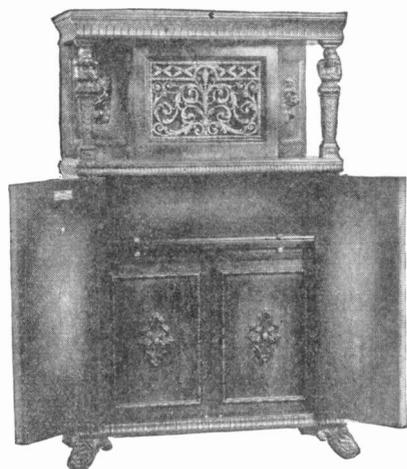
MASTER Engineering Co.

128 So. Michigan Ave.
Chicago



LIST PRICE

\$2.50



An ASTON Masterpiece

By those who are seeking the utmost in cabinet craftsmanship, this great Aston achievement will be heartily welcomed. The entire face of matched butt walnut, 100% figure, is richly embellished with heavy carving, which intensifies the beauty of the natural wood. Grille polychromed.

Read more about this great Aston in our catalog, which describes the whole Aston line. Write today.

ASTON CABINET MANUFACTURERS
Distinctive Originality in design of High Grade Radio Cabinets.
1223-1229 W. Lake St., Chicago, Ill.

Sell Radio Under Your Own Label



Longer Profits For You!
Quicker Stock Turnover!

PREMIER Radio comes to you under your own private label—free of heavy selling expense. Therefore, your profit margin is greater.

With your private brand, price is flexible. You can meet any condition of competition or market.

Selling your own label radio is the remedy for top-heavy inventories; no territory contracts necessary. It preserves your trade identity—the most valuable possession you have.

Material and manufacture determine the quality of a receiver—not advertising! In performance, quality, looks and saleability, Premier Private-Label Radio is equal to any receiver on the market. Write us for price quotation. No obligation.

Chassis Specification

All metal chassis, rigid, strong, stays put. Unconditionally guaranteed. Apparatus 100% shielded. Made for either type A-C Tubes: 5 No. 227 and 1 No. 171, or 5 No. 401 and 1 No. 403—Licensed under U. S. Navy Patents and Hogan Patent No. 1,041,002.

Console Model. A beautiful walnut finished cabinet. Size 26-in. x 40-in. x 16-in. deep. Equipped with "Peerless" Speaker.

PREMIER ELECTRIC COMPANY

Established in 1905 and Manufacturers Ever Since
1811 Grace St., Chicago, Illinois



Busy Clerks mean Busy Cash Registers

YOU are always trying to sell people the music in the air, yet, you know downright well the music sweetest to your ear is the ring of the cash register checking up another sale and the scurry of your clerk's feet as he hurries to wait on the next customer.

The busier your clerks are kept, the more merrily the cash register rings.

The best way to keep your clerks active making sales is to keep yourself and them absolutely up-to-date on everything in the radio line—and that is why you should subscribe for

RADIO RETAILING

Every month it brings you the up-to-the-minute authentic information from the nation-wide radio market. Our editors covering all parts of the country bring to you all the most effective sales campaigns and cost saving plans, etc., used by both leading and smaller dealers.

Get Radio Retailing. Keep it for your clerks to read or even better, subscribe for individual copies for each man or woman on your sales force.

It will pay you to do this for this big magazine on yearly subscription costs less per month than you pay for a cigar. \$1 per year—less than 9c per month. Send the attached coupon now—and you will get the August issue, which will contain a complete report of the big Radio Trade Show.

Clip here

This space is the exact size of a one-dollar bill.

Get one and try it then

—pin it on

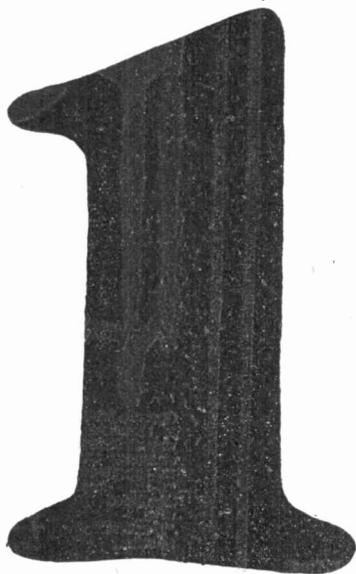
—stick it on

—or send it loose with the coupon

to

Radio Retailing
Tenth Ave. at 36th St.
New York, N. Y.

6 Sp.



Name

Street

City

State

Name of Company

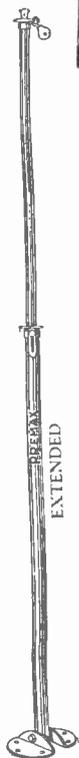
Besides Radio We Sell

For the dollar bill attached I want to subscribe to Radio Retailing for one year starting with the next issue.

This Special Offer is for cash with order only



Umbrella Aerial Connector



PREMAX Masts and Accessories

Meet Every Installation Condition

No matter what sort of conditions you encounter, Premax equipment will enable you to put up the neat, efficient kind of aerial your customers expect—and your sets demand.

The installation idea illustrated here, for example, is a practical adaptation of the well-known umbrella-type, single-mast aerial used by the U. S. Army.

A Premax telescoping steel mast provides an easily erected support for the Premax Umbrella Connector which automatically connects all wires, while insulating them from the mast itself. Premax stand-off or insulator brackets are used to anchor and insulate the outer ends.

Get the complete story of handy Premax aerial accessories, together with descriptions of many other practical and approved methods of aerial erection, in the Premax Service Handbook sent free on request.

NIAGARA METAL STAMPING CORPORATION

Dept. RR 8-28

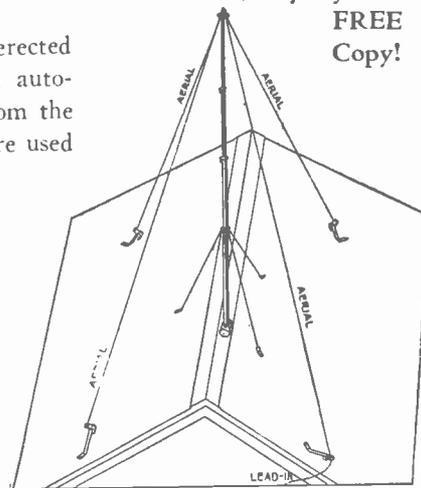
Niagara Falls, N. Y.



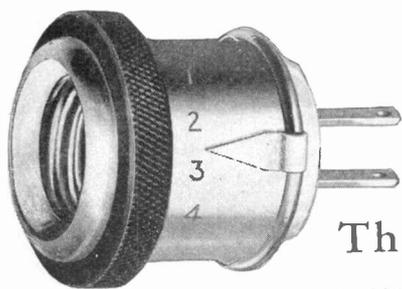
Insulator Bracket

This is IDEA No. 12 from the PREMAX HANDBOOK

Ask for your FREE Copy!



Protects A-C Sets—Improves reception!



Sold in a display carton, 10 to a box. \$2.25 each list. 40% discount.

Excessive voltage harms A-C sets and ruins tubes. They are built to operate on a line pressure of only 110 volts. In many cities the normal line voltage is from 112 to 118 volts. In most cities, too, the voltage so varies that, at certain times of the day, it is high enough to burn out the tubes and seriously to harm the step-down transformers.

The WIRT A-C Voltage Regulator No. 211

protects sets from "surges" and excess voltages. It prevents tubes and other parts from burning out. It banishes A-C "hum." At the same time, it enhances the tonal quality of the set and gives more perfect reproduction of music and speaking voice.

Assure satisfaction of installations, *save your service time*, banish customer troubles—*make added profits* by advising and selling the WIRT A-C Voltage Regulator No. 211. Standard discounts. All jobbers can fill your orders. Or write direct to:

Makers of
"DIM-A-LITE"
and
"DIM-A-LAMP"

WIRT COMPANY

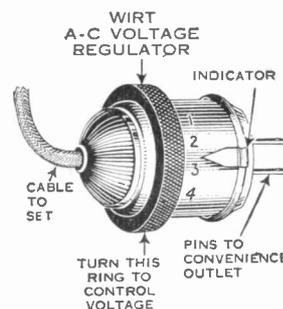
5221 Greene Street

Philadelphia, Pa.

New York, N. Y.
Hathaway & Co., Inc.
16-22 Hudson Street

Chicago, Ill.
Geo. Richards & Co.
557 W. Monroe Street

San Francisco, Calif.
James J. Noble Company
915 Bryant Street



Model 533

A *New* Tube
Checker

Requires no Batteries



Plug it into the A. C.
Light Socket

It operates direct from any A. C., 50 to 60 cycle—90 to 130 volt source of supply. Proper voltage regulation is quickly obtained by means of the voltage adjusting dial and the voltage indicator.

Tests Every Type of Tube—
A. C. or D. C.

having filament voltages of 1.5, 2.5, 3.3, 5 or 7.5 volts, including filament type rectifying tubes.



Promote more confidence in your store by checking tubes at the time of sale. The Weston Model 533 Tube Checker will prevent come-backs and make satisfied customers.

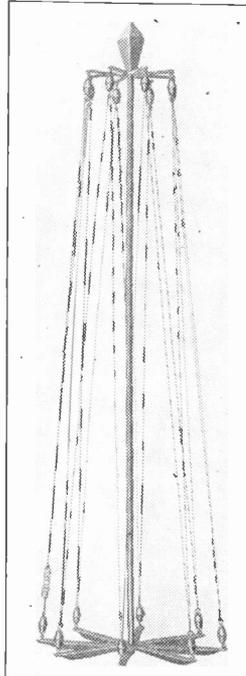
*Your jobber will supply you
or write direct to*

WESTON ELECTRICAL INSTRUMENT CORPORATION
581 Frelinghuysen Ave., Newark, N. J.

WESTON
RADIO
INSTRUMENTS

NOW

The Wonder Antenna



Positively Improves Radio
Reception

**MAKES ANY
GOOD SET
BETTER**

Compact
Easy to Install
Ornamental

**HIGHLY ENDORSED
BY SKILLED
RADIO ENGINEERS**

*The Sentinel
of the Air!*

Wonder
Antenna Company
ESCANABA, MICH.

Money Makers



HAVE you heard the sweeter, purer tone of Televocal Quality Tubes? A complete line nationally advertised.

*Write for full description
and prices.*

Televocal Corporation
Televocal Building
Dept. E-3, 588 12th Street,
West New York, N. J.

Televocal
Quality Tubes

At these radio shows the trade and public meet. Set manufacturers will display many new models for the first time. Parts manufacturers will show the latest in accessories. These displays set

the radio vogue, affording the trade and public an opportunity to learn what's what in radio for the 1928-1929 season. Dealers should commence talking these shows now and tell their customers to

SEE THESE SPECIAL FEATURES

Television; "Televox" the mechanical man; the Radio Controlled Train; the Cardiograph, that draws pictures of the human heart's actions; and many electrical and radio developments from the experimental laboratories of the General Electric and Westinghouse Manufacturing Companies.

**5th ANNUAL
RADIO
WORLD'S FAIR**

MADISON SQUARE GARDEN

NEW YORK

SEP 17th to 22nd

INCLUSIVE

**WORLD'S
PREMIER
RADIO
SHOWS**

**7th ANNUAL
CHICAGO
RADIO SHOW**

COLISEUM

CHICAGO

OCT 8th to 14th

INCLUSIVE



SPECIAL BUSINESS SESSIONS
for the trade 11 A. M. to 1 P. M.

OPEN DAILY TO THE PUBLIC
from 1 to 11 P. M.

RADIO MANUFACTURERS SHOW ASSOCIATION

U. J. HERRMANN *Managing Director*

G. CLAYTON IRWIN JR. *General Manager*

Selling

Majestic

ELECTRIC RADIO

(Grigsby-Grunow Company, Exclusive Manufacturers)

is just a matter of
getting the prospect to
LOOK AT
LISTEN TO and
PRICE

Majestic

GRIGSBY-GRUNOW COMPANY

4540 Armitage Ave., Chicago

CASE

A C NEUTRODYNES

CASE — master builder of fine radios for five years now offers a new line of 8 and 9 tube (including rectifier) AC Neutrodynes incorporating everything new and everything good in radio

CASE sets are noted for their greater power stage by stage assuring greater selectivity and sensitivity. Every set housed in a beautiful cabinet.

Send today for full details on this fully licensed, fast selling line—let us tell you about our common-sense, money-making sales promotion plan.

CASE ELECTRIC CORPORATION

Division United States Electric Corporation

MARION, IND.

SEARCHLIGHT SECTION

SURPLUS STOCKS—BUSINESS OPPORTUNITIES

UNDISPLAYED—RATE PER WORD:
Positions Wanted, 6 cents a word, minimum \$1.25 an insertion, payable in advance.
Positions Vacant and all other classifications, 10 cents a word, minimum charge \$2.00.
Proposals, 40 cents a line an insertion.

INFORMATION:
Box Numbers in care of any of our offices count 10 words additional in undisplayed ads.
Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

DISPLAYED—RATE PER INCH:
 1 to 3 inches.....\$6.65 an inch
 4 to 7 inches..... 6.40 an inch
 8 to 14 inches..... 6.20 an inch
 Rates for larger spaces, or yearly rates, on request.
 An *advertising inch* is measured vertically on one column, 3 columns—30 inches—to a page.

Radio Retailing

SALESMEN WANTED

Energetic Salesmen

To sell an attractive line of radio cabinets on a commission basis, for New York, New Jersey, New England States, Eastern Pennsylvania, Baltimore and Washington. American Furniture & Cab. Co., 231 Race Street, Phila., Pa.

REPRESENTATIVE AVAILABLE

FOREIGN representative with nine years' thorough experience covering Europe, Asia Australia and New Zealand, seeks to connect with reliable manufacturer or manufacturers of non-competing lines, requiring representation abroad; knowledge eight languages. RA-77, Radio Retailing, Tenth Ave. at 36th St., New York.

SALES EXECUTIVE, now representing two leading manufacturers in the metropolitan district, is receptive to handling one or two additional lines. Must be as good as I handle now. They are the best. Proven record of past performance in radio. Highest credentials. PW-76, Radio Retailing, Tenth Ave. at 36th St., New York.

DISTRIBUTORS

With large selling force of proven sales ability wanted to sell the GREATEST SIGN ON THE MARKET. Absolutely no sales resistance. Sells on sight. Territorial rights now being allotted to good live wire organizations. EXCEPTIONAL OPPORTUNITY TO RIGHT PARTY. Apply by letter only to:

ALBION SIGN CORPORATION
 22 N. 7th Street, Philadelphia, Pa.

Dealers !!!

Send for our catalog of radio bargains.
Every item a real money-maker

AMERICAN SALES CO.
 19-21 Warren St., New York City

Are You On the Preferential List?

Over 12,000 live dealers receive our BARGAIN BULLETINS regularly. We are the pioneer mail order radio house in the country. The national products sold by us at substantial reductions are the talk of the industry.

Let us put your name on our list. There is no charge for this service and no obligation, of course.

RADIO CIRCULAR CO., INC.
 225 Varick St., N. Y. City, N. Y.

Gentlemen: Please place my name on your Preferential List to receive your BARGAIN BULLETINS.

Name

Address

City State

Use this coupon today. We are always making good "buys" and this is our means of passing the news to you.

*Keep Posted!
 Radio "Buys"
 Make More Sales!*

✂ Use the Coupon.

SEARCHLIGHT SERVICE

Covers the advertising of

- Agencies Wanted
- Agents Wanted
- Auction Notices
- Bids Wanted
- Books and Periodicals
- Buildings for Sale
- Business Opportunities
- Civil Service Opportunities
- Contracts to Be Let
- Contracts Wanted
- Desk Room for Rent
- Desk Room Wanted
- Educational
- Employment Agencies
- Evening Work Wanted
- Foreign Business
- For Exchange
- For Rent
- Franchises
- Industrial Sites
- Labor Bureaus
- Machine Shops
- Machinery Wanted
- New Industries Wanted
- Partners Wanted
- Patent Attorneys
- Patents for Sale
- Plants for Sale
- Positions Vacant
- Positions Wanted
- Property for Sale
- Proposals
- Receivers' Sales
- Representatives Wanted
- Salesmen Want Connections
- Salesmen Wanted
- Second Hand Equipment
- For Sale For Rent
- Exchange Wanted
- Specialties
- Tutoring
- Vacation Work Wanted
- Water Front Property
- Work Wanted
- Miscellaneous for Sale for Rent or Want Ads.

Can we serve you?

0150

To Employers Who Advertise for Men:

The letters you receive in answer to your advertisements are submitted by each of the applicants with the hope of securing the position offered.

When there are many applicants it frequently happens that the only letters acknowledged are those of promising candidates. Others do not receive the slightest indication that their letters have even been received, much less given any consideration. These men often become discouraged, will not respond to future advertisements and sometimes even question if they are bona fide.

We can guarantee that *Every Advertisement Printed in the Searchlight Section Is Duly Authorized*. Now won't you help keep our readers interested in this advertising by acknowledging every application received, even if you only return the letters of unsuccessful applicants to them marked, say, "Position filled, thank you." If you don't care to reveal your identity, mail them in plain envelopes.

We suggest this in a spirit of helpful co-operation between employers and the men replying to Positions Vacant advertisements.

Searchlight Department

McGraw-Hill Publishing Company, Inc.

"Put Yourself in the Place of the Other Fellow"

WANTED

WE PAY CASH
for your
SURPLUS RADIO STOCKS
What have you for sale?
AMERICAN SALES CO.
21 Warren Street, New York City
Established 1919

WANTED
Surplus Radio Stocks
HIGHEST CASH PRICES PAID

Write or wire
FULTON RADIO CO.
218 Fulton St., New York City, N. Y.

WE HAVE CASH
for
Your Radio Surplus Stock

Write or Wire Immediately
VENUS RADIO CORPORATION,
142 Liberty Street, New York City, N. Y.

WANTED
New or Used Transmitting Apparatus Both Commercial and Amateur. What have you?

Fort Orange Radio Distributing Corp.
Albany, N. Y.

Radio Lines Wanted

Owners of popular price radio store opening in Seattle want lines for stock. Bradstreet rating. References. Write at once to

NATIONAL SPECIALTIES CORP.
Seattle, Wash.

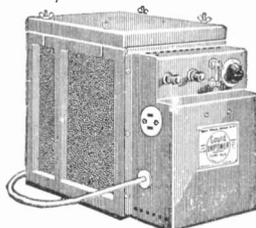
Get In On This Money Maker at our Special Price!

THE NEW GOULD

KATHANODE **Unipower** [with Built-in Relay]
GOULD PRODUCT

Automatic Radio "A" Power from your Light Socket

NATIONALLY
ADVERTISED
List Price
\$39.50 each



EXTRA SPECIAL
\$9.75 ea.
LOTS OF THREE
\$8.50 ea.

These units are brand new, guaranteed, and packed in original factory cases complete with extra fuse.

Model AC-6-K, (6 volt) Kathanode Unipower is the highest quality "A" Power Unit built. Furnishes rich smooth unflinching "A" current without any trace of hum for the largest power tube sets, 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.

Its Kathanode construction insures longer life and freedom from service expense and when sold it will take care of itself. It is very economical and will outlast several storage batteries. Its Kathanode construction is an exclusive patented feature, being used by the U. S. Government in their 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.

TERMS: 20% cash with order, balance C.O.D., f.o.b. New York. 2% discount for full remittance with order.

AMERICAN SALES Co., 19-21 Warren St., N. Y. C.

These items represent only a few of our real buys. Send for our latest complete catalog, just off the press.

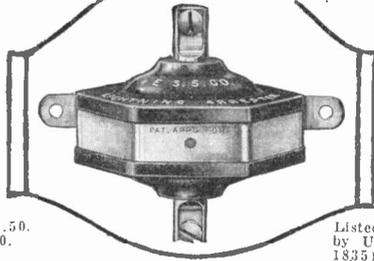
- The Buyer—
- The Employer—
- The Agent—
- The Seller—
- The Employee—
- The Dealer—

You Can Reach Them All through the SEARCHLIGHT SECTION

Searchlight advertisements are quick acting. They usually bring prompt returns. There is no better way to reach the men of the *Radio Retailing* field at small cost.

For Every Business Want "Think SEARCHLIGHT First"

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

The CARAVAN Regrets

that it has disappointed many of its new-found friends throughout the country who have been kept waiting for their Portable-Home Receivers.

The Caravan has held production to a limited quantity pending results of engineering trips, particularly in the south and southwest, where reception has always been most difficult. The results of these trips are now being incorporated in the Portable-Home Receiver, and full production will begin shortly.

The CARAVAN MUST Bring the World to You!—where ever you are.

Write for descriptive literature and distributor offer.

CARAVAN RADIO LABORATORIES
4725 Clifton Ave., Chicago, Ill.

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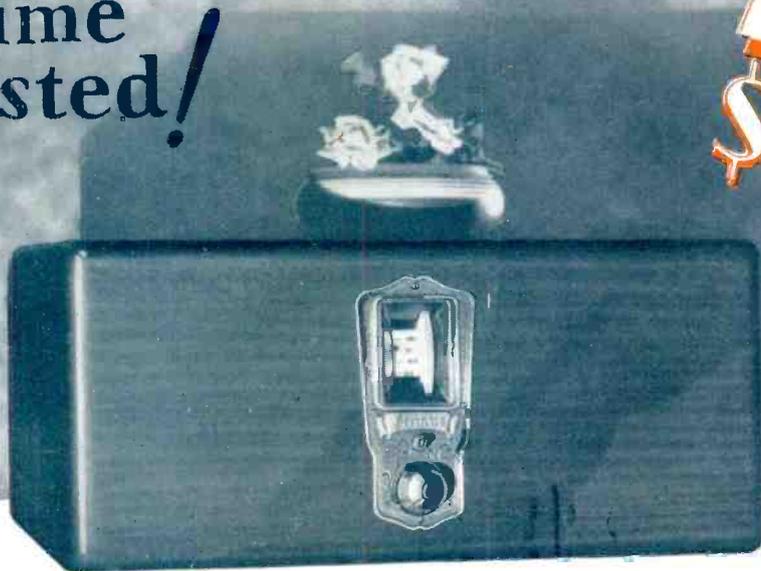
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Steinite

ELECTRIC AC RADIO

Time Tested!

\$75



Beautiful Wood Cabinets

Uses 6 AC tubes plus 1 Rectifier tube

And Now... Steinite Advertising Begins!

WITH a steady stream of sets reaching the nation's distributing centers, the Steinite advertising campaign swings into action . . . Wherever Steinite advertising has appeared there has been a significant response . . . thousands came, saw and agreed that this amazing set represents America's greatest value.

Steinite advertising this year will be

effective to a sensational degree . . . because the message it carries is one no radio buyer can ignore. Mail the coupon for full details of a great line—at sensational prices—backed by a smashing advertising campaign.

Beautiful Console Sets • \$115 • \$130 • \$150
Polyphonic Speakers—Table Model \$20 • Console \$45



The STEINITE RADIO COMPANY

506 S. Wabash Ave.

CHICAGO

Watch for additional extraordinary announcements, meanwhile
Factories:
Atchison, Kans.

Mail the Coupon

STEINITE RADIO COMPANY *Mail this Coupon TODAY!*
506 South Wabash Avenue, Dept. E.H. Chicago

Please send me complete information on the New Steinite Line.

Name My Jobber's Name and Address is
Street Address
City State

**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-220**
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



- A Radiotron for every purpose**
- RADIOTRON UX-201-A**
 - RADIOTRON UV-199**
 - RADIOTRON UX-199**
 - RADIOTRON WD-11**
 - RADIOTRON WX-12**
 - RADIOTRON UX-200-A**
 - RADIOTRON UX-220**
 - RADIOTRON UX-222**
 - RADIOTRON UX-112-A**
 - RADIOTRON UX-171-A**
 - RADIOTRON UX-210**
 - RADIOTRON UX-240**
 - RADIOTRON UX-250**
 - RADIOTRON UX-226**
 - RADIOTRON UY-227**
 - RADIOTRON UX-280**
 - RADIOTRON UX-281**
 - RADIOTRON UX-874**
 - RADIOTRON UV-876**
 - RADIOTRON UV-886**
- The standard by which other vacuum tubes are rated*



Nation-wide broadcasting, for audiences of millions, has been made possible by the development of RCA Radiotrons for all uses in both transmitting and receiving instruments. They are the acknowledged standard in vacuum tube design in the radio industry.

Radiotrons are the heart of the receiving set. To maintain fine reception the vacuum tubes in your set should be replaced with new Radiotrons at least once a year. Do not use new tubes with old. Best results are obtained by changing all tubes at one time.

RCA Radiotron
MADE BY THE MAKERS OF THE RADIOLA

RADIO CORPORATION OF AMERICA - NEW YORK - CHICAGO - SAN FRANCISCO



You stake the reputation of your store when you offer your customers a vacuum tube. RCA stakes its reputation, its resources and its skill on every RCA Radiotron that leaves its factory-laboratories. That is why you are safe in recommending RCA Radiotrons for every socket in the receiving sets you supply. The complete line of RCA Radiotrons offers a tested tube for every purpose.

RADIO CORPORATION OF AMERICA
NEW YORK CHICAGO SAN FRANCISCO

Radiotrons are backed by more national advertising than any other make of vacuum tube. The public knows and prefers RCA Radiotrons. Forceful counter and window displays folders, etc., help you to build larger sales.

RCA Radiotron

MADE BY THE MAKERS OF THE RADIOLA