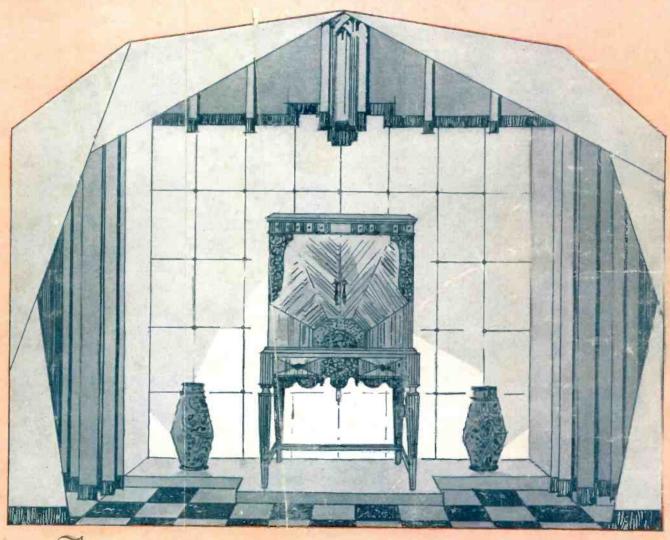
ANNUAL TRADE SHOW NUMBER

Recadio Industry The Business Magazine of the Radio Industry

A McGraw-Hill Publication

JUNE, 1928



PAN ENTIRELY NEW LINE OF DISTINCTIVE RADIO CABINETS BUILT TO INCORPORATE ANY MAKE CHASSIS ...

EXHIBITION HALL STEVENS HOTEL

CHICAGO · ILLINOIS · JUNE 11 to 16 Inc.

Radio masier

RADIO MASTER CORP. BAY CITY MICH.

The NEW SANDAR SPEAKERS

DYNAMIC



Other Dynamic Models

END-TABLE MODEL (75)

A charming end-table console model of richly finished two-tone walnut, certain of active sale wherever shown. For A. C.—D. C.—or Storage battery operation - \$75

TABLE CONSOLE (77)

A magnificent console model of two-tone walnut, with panels and grill handsomely carved. For A.C.—D.C.—or Storage battery operation \$110

DYNAMIC CHASSIS (73)

An extremely compact reproducing unit, especially designed for radio and phonograph consoles. For 6-volt Storage battery operation, \$35—for D. C. operation, \$40—for A. C. operation, \$45

ALL SANDAR Speakers—both Dynamic and Balanced Armature types—are licensed under LEKTOPHONE PATENTS.

Introducing the 1928-1929 Models

WITH the advent of the new radio season, Sandar—the one radio speaker especially designed for low-tone beautification—is assured of even greater public acceptance than before. Sandar's famous, mellow, bass reproduction—unequalled by any other speaker—is now still further improved, thanks to unceasing engineering research.

And now, too, come Sandar DYNAMIC Speakers to add further laurels to Sandar low-tone supremacy—and Sandar value-giving.

Here, indeed, is the speaker line for the progressive radio dealer. There's a model for every purse and purpose—for every type of set—for every source of current supply—all designed to give the wanted low-tone reproduction for which Sandar is pre-eminent.

Get in touch with your Sandar distributor or

See the SANDAR Line BOOTH 101 R. M. A. SHOW

Hotel Stevens, Chicago (Demonstrations—in Roora 430A)

SANDAR

BALANCED ARMATURE



Other Balanced Armature Models

PANEL MODEL (63)

An attractive portrait frame effect. Two-tone walnut panel with richly carved ornamentation.

TABLE CABINET (61)

An unusually graceful table-type Sandar. Beautiful, two-tone walnut cabinet, with uniquely carved grill - - - - \$35

BUILT-IN-TABLE MODEL(69)

An exquisite two tone walnut console model. Speaker built in helow table to be occupied by receiver. Dimensions, 30 x 24 x 14 - - - \$45

SANDAR CHASSIS

Designed especially for installation by manufacturers, distributors and dealers. Unusually compact. Chassis (Model 43), \$15. Mounted in wood chamber (Model 43-B) - \$18

RADIO'S FINEST LOW-TONE SPEAKER

SANDAR CORPORATION DIVISION OF FARRAND MFG., CO., INC., METROPOLITAN BLDG., LONG ISLAND CITY, N. Y.

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HENRY W. BAUKAT, Technical Editor

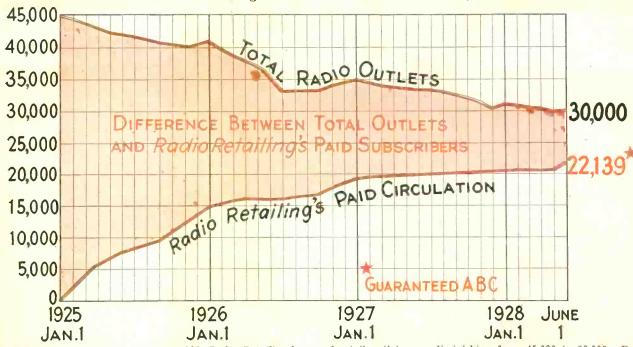
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Radio

William C. Alley Managing Editor

Editorial Staff HARRY PHILLIPS LEWIS F. KENDALL, JR. OVID RISO C. GRUNSKY, San Francisco PAUL WOOTON, Washington

Radio Retailing's Paid Circulation Now 22,139



S TARTING from scratch in January, 1925, Radio Retailing has built up its paid circulation to 22,139 in a period of three years and a half—a record of which any publication may be proud.

In that time, also, this publication has qualified for membership in the Audit Bureau of Circulations and the Associated Business Papers, the only radio magazine belonging to both organizations—tangible recognition that the editorial, advertising and circulation policies of Radio Retailing are founded on a sound basis.

It is interesting, as well, to note that this uninterrupted increase in paid circulation has occurred at a time when the total number

of retail outlets was diminishing from 45,000 to 30,000. During all this time, when the field was narrowing down radically, Radio Retailing's paid circulation has shown a steady growth.

The ratio of number-of-outlets to Radio Retailing's paid circulation, therefore, has constantly shrunk. At the present time, Radio Retailing's paid circulation amounts to very nearly 80 per cent of the total number of radio outlets—not only "complete coverage," but complete coverage through paid circulation—an achievement almost without parallel in the music trades and the radio publishing fields.

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Member Audit Bureau of Circulations and Associated Business	Res Papers All Material in This Publication Copyrighted, June,	1928

McGRAW-HILL PUBLISHING COMPANY, INC., Tenth Ave. at 36th St., New York, N. Y.

JAMES H. MCGEAW, President JAMES H. MCGRAW, JR., Vice-Pres. and Treas. MALCOLM MUIR, Vice-President DWARD J. MEHREN, Vice-President SON BRITTON, Vice-President GAR KOBAK, Vice-President H. THOMPSON, Secretary

NEW YORK DISTRICT OFFICE, 285 Madison Ave. Electrical World Electrical West Ingenieria Internacional Engineering and Mining Journal Chemical & Metallurgical Engineering American Machinist Electrical Merchandising Power Electric Railway Journal Bus Transportation Engineering News-Record Conl Age
Copyright, 1928, by McGraw-Hill Publishing Company, Inc. Cable Address: "Machinist, N. Y."

Annual subscription rate is \$2 in United States and Canada.

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



No. 635 Stromberg-Carlson Treasure Chest.

Innouncing 3 the NEW Stromberg ~ Carlson

An A.C. TUBE Receiver with the famous Stromberg-Carlson TONE at a surprisingly ATTRACTIVE PRICE

This new Receiver marks the success of long experimentation by Stromberg-Carlson engineers in producing a Receiver having the convenience and simplicity of A.C. Tubes with all the glorious tone quality for which Stromberg-Carlsons are celebrated.

Designed and priced for the average home this new Stromberg-Carlson rounds out a dealer's line of high quality Receivers. Handsome in cabinet work—a beautifully grained American Walnut; extremely sensitive; highly selective and producing fine volume over the entire tuning range from 200 to 550 meters it provides a remarkable instrument at a very reasonable price.

Like other Stromberg-Carlsons the provision for phonograph operation gives it added value. It is totally shielded, tunes with a single selector (illuminated), is entirely self-contained and operates from any A.C. lighting current, using no batteries nor liquids.

Altogether, a Receiver which opens immense new sales possibilities because of its price, and gives additional desirability to the Stromberg-Carlson line.

Stromberg-Carlson Telephone Mfg. Co., Rochester, N.Y.

Features of Construction

The new No. 635 Stromberg-Carlson Treasure Chest employs 7 Radiotron tubes consisting of five UY-227 one UX-171-A and one UX-280. Chasis base of sheet steel of sufficient height to enclose all wiring. High quality audio amplification system. Uniform amplification throughout the entire broadcast band.

All windings enclosed in compact metal casings and filled with sealing compound to protect against moisture and mechanical damage. Metal casings finished in beautiful rich mahogany.

Handy Phonograph Pick-up Jack. Volume control, single knob varying two resistor units.





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

Get it Better with a Grebe

See

The Complete Grebe Line

Grebe Synchrophase

A-CS ix (16)

List Price

A-CS ix (less tubes) \$22750

An A-C operated receiver with distinctive Grebe improvements for better local and distance reception that will instantly appeal to the buyer.

Grebe Synchrophase

List Price

Seven

(less tubes) \$145

A receiver of such superiority that it will always be an outstanding leader.

Grebe Synchrophase

Five

List Price (less tubes) \$105

A ready seller that offers unusual opportunity for quick turnover and substantial profits.

Grebe Natural Speaker List

A Grebe-made speaker that affords the final touch of perfect reception to any receiver.

Grebe No. 1750 Speaker \$1750

Grebe quality in a speaker that may be sold at a low price without sacrifice of volume or tone quality.

at the Trade Show of the Radio Mfrs. Assn. Stevens Hotel, Chicago June 11 to 15 incl. 1928



Grebe Synchrophase A-C Six

Send for Booklet RR

It fully describes the exclusive selling points of the Grebe Synchrophase A-C Six.

We're looking forward to seeing you at our Booth 65A at the Trade Show.



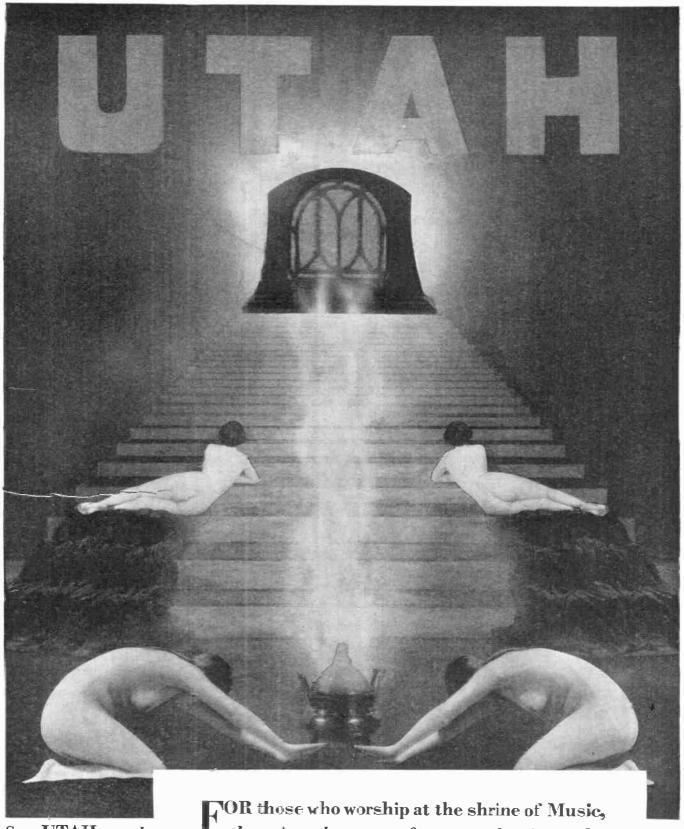
A-C Six RADIO



A. H. Grebe & Co., Inc., 109 West 57th Street, N. Y. C.

Factory: Richmond Hill, N. Y. Western Branch: 443 S. San Pedro St., Los Angeles, Cal.
Makers of quality radio since 1909

Grebe Natural Speaker



See UTAH at the
R. M. A.
TRADE SHOW
BOOTH B96
Stevens Hotel · Chicago

POR those who worship at the shrine of Music, there is only one perfect reproduction—the Utah. A single demonstration will convince you of its superiorities over ordinary reproducers!

There is a Utah to meet every requirement of



purse or taste, each beautifully designed and a real value in its own classification. Stock the complete Utah line and you can fulfill every demand in up-to-date radio reproduction.

UTAH RADIO PRODUCTS COMPANY 1615 South Michigan Avenue · · Chicago See!
UTAH'S complete line of
DYNAMIC
SPEAKERS

FREED-EISEMANN

presents the New

WE did two things before we started the wheels going around on this 1928-1929 line: first we found out what our dealers wanted. They said, "One standard chassis. A set which will cut down service. A set which will perform under all electrical conditions in the United States. Light Socket operation, of course. Low price for high value."

Then we went to the public—the people who buy radio sets. We asked the same question: "What do you want in radio?" The answer was, "A receiver which will bring in the broadcast even clearer and louder than it is in the studio, so we can tune it down to exact likeness with the music, the speech, the song. Homelike tone. Beauty! Perfected electrical operation!"

Then we made it.

Now we present it-the new Freed-Eisemann Magnifying Radio. Just as a magnifying glass makes objects clearer and larger, this magnifying receiver can bring the broadcast into the home clearer and louder than it is in the studio. This is the same reserve power that makes a man love to drive a powerful car; he doesn't always need the power—but it is there when he wants it.

The magnification without distortion rests primarily on an entirely new and differently designed audio system. No other set has it.

Freed-Eisemann, steadily becoming more sucessful during the past years, now starts its greatest season. Insure your profits by handling a line backed by years of *Electric set* manufacturing. We have been building radio sets since broadcasting began. Join with us for success.

The Perfected Electric Radio!

Here is shown the Freed-Eisemann Great Eighty (Model NR80) in hammered silver effect metal chest, with the new matching Magnetic Speaker. A magnificent 8 tube (7 and rectifier) neutrodyne receiver with 4 tuning condensers under single control; illuminated dial; three stages tuned radio frequency, two stages audio frequency; output transformer supplementing audio stages; matched coil inductances; fully neutralized radio stages; individual copper compartments for each coil. Made in models for either Direct or Alternating house current, 25, 40, 50 or 60 cycle.

list, without tubes or speaker

Prices higher west of the Rockies





American Greated Furniture House

American Greated Furniture House

Service States that the satisfaction

we are glast to state that the satisfaction

service required certainly proves the

freed-Risemann product emphasically belones

service required certainly proves to even

We are looking forward to even

more satisfactory snoess with cover and

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We are looking forward to even

more satisfactory snoess with cover and

Since of the satisfactory snoess with cover and

great 80.

Through since of this

Same Success for you?

Same Success for you?

COUPON, please!

PREED-EISEMANN makes it easy for dealers this year with one standard chassis only, modified for operation on DC and AC current or for operation with the great new Dynamic Speaker. The set is adaptable for table or console housing. Easy to sell: easy to service (if it ever needs it). The line also includes magnetic and cone speakers.

We are going to make this a Freed-Eisemann year in radio with the finest job we have ever turned out, at an easy selling price, backed by advertising and plenty of it. See the Great Eighty at Chicago, Booths 94 and 95. Demonstration Room 512—offices 1800-1801-1801A, Stevens Hotel. Coupon below will bring you the details of our proposition to distributors and dealers, which is based on our knowing that our success rests on making it possible for our distributing organization to make money. If you agree with this idea, send the coupon.

FREED-EISEMANN RADIO CORPORATION, Junius St. and Liberty Ave., Brooklyn, N. Y.			
Something new at last in Radio! I'm willing to be shown. Send me your proposition!			
Name			
Address			

8

MPAIS

TO THE STATE OF TH

and Phonograph-Radio Combinations

Thomas a Edison_

watch for the Great
Announcement

THOMAS A. EDISON, INC., ORANGE, NEW JERSEY



The Duplex Receiver (with phonograph jack)



"250" Power Amplifiers



B Dynamic Loudspeakers



The most Beautiful Cabinets



biggest discounts!



* thats why Splitdorf sales have already increased 300%



250" Power Amplifiers



The Duplex Receiver (with phonograph jack)

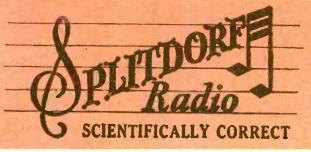


Dynamic Loudspeakers

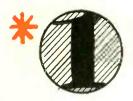


the most Beautiful Cabinets

the biggest discounts



* Seven times the power! any technical man.



Dynamic Loudspeakers



250 Power Amplifiers

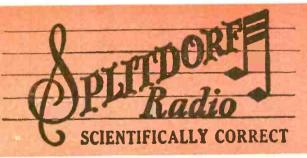


The Duplex Receiver (with phonograph jack)



the most Beautiful Cabinets

the biggest discounts.



Carrying Power! and Tone! write for details.



The most Beautiful Cabinets



Dynamic Loudspeakers



250 Power Amplifiers



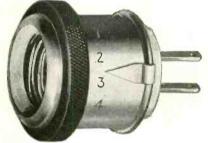
The Duplex Receiver (with phonograph jack)

the biggest discounts!



* Splitdorf cabinets always are! write for details_

Protects A-C Sets, saves tubes cuts service time, too!*



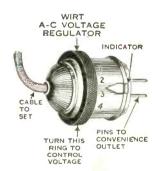
Sold in a display carton 10 to a box \$2.25 each list 40% discount

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 extraneous tube noises. It also 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:



*A New Jersey dealer writes us that the Wirt A-C Volt-age Regulator will save him hundreds of dollars in service calls



5221 Greene Street

Philadelphia, Pa.

MAKERS OF "DIM-A-LITE" AND "DIM-A-LAMP"

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

USE THIS COUPON

The Wirt Company

Dept. R. R., 5221 Greene Street, Philadelphia

Please rush me 1 carton of 10 Wirt A-C Voltage Regulators, No. 211 and charge them to me through the jobber named below.

Name and Address

Jobber's Name and Address.

FARRAND JUNIOR CLOCK TYPE

(Model 64)

(Model 64)

A new Farrand Speaker—new in exterior, new in unit construction, new in value standards—that bids fair to become the mostpopular of all Fatrands—past or present. In beautifully finished, clock—motif, bronzed cabinet, 10 inches in beight



Farrand

Presents for the Coming Season

The most remarkable line in Speaker History!

OW Farrand Speakers for every price class - now Farrand Speak. ers for every reproduction requirement -now Farrand DYNAMIC Speakers that set aside all former Dynamic standards of performance and value. Only Farrand "know how" and manufacturing facilities—the largest speaker plant in the industry - can produce such vast acoustical advancements, such diversity of design, such dominance in value. Communicate with your nearest Farrand distributor NOW-today -for full details.

FARRAND MFG. CO., Inc., Metropolitan Bldg., Long Island City, N. Y.



FARRAND GOTHIC Model 60. Two-tone walnut



FARRAND PANEL Model 62. Two-tone walnut, portrait frame effect. \$25



Model 68. Two-tone walnut table, 30" in height. \$45



FARRAND Box CHASSIS Model 42-B. For dealers, distributors, and console manufacturers. \$18

BALANCED ARMATURE



See the complete Farrand line — Booths 58 and 59 at the

R. M. A. TRADE SHOW Hotel Stevens, Chicago (Demonstration-Room 430A)



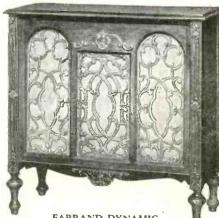
FARRAND DYNAMIC CHASSIS

For 6-volt Storage battery \$35 For D. C. operation . . 40 For A. C. operation . . . 45



FARRAND DYNAMIC

Tiffany Table Model. Charming upright console of two-tone walnut. \$75



FARRAND DYNAMIC

Console Grande Model, Exquisite two-tone walnut console. \$110

-and DYNAMIC TYPE

PIERSON RADIO FURNITURE

FROM THE CHEAPEST THAT'S GOOD







You Can Depend On Pierson FOR ALL YOUR RADIO FURNITURE REQUIREMENTS

Every Radio Dealer realizes that his biggest and surest profit in Radio from now on lies in RADIO FURNITURE. Eye Value will sell Radio this Season.

If this is a new departure for you, isn't it a bit confusing? You read all the claims made by different producers of Radio Furniture and you do not know what to look for nor who to believe.

YOU ARE SAFE WITH PIERSON

When it comes to Radio Furniture, there is a Leader, just the same as in everything else. Pierson leads, not only by virtue of seniority, but also by virtue of Quality, Design, and Finish.

Pierson prices afford the greatest value to the public, and the greatest profit to dealers, because Pierson always maintains prices and fixed discounts.

Every Pierson Cabinet bears an indeterminate Guarantee, protecting you and your Customer always. To carry so broad a Guarantee from a house so old and well established as Pierson, means only one thing:—

EVERY CABINET MUST BE RIGHT.

BE FIRST WITH PIERSON

Pierson maintains always, a complete Research and Design Department. Pierson never imitates but always originates (as a Leader must). This means that Pierson Cabinets command a better price and a better profit. Also it affords Leadership to the Pierson Dealer in every community.

If you have sold Radio Furniture in the past, you know these statements are true—if you are just venturing into Radio Furniture, we simply say—INVESTIGATE

MODELS FROM \$10.00 UP TO \$500.00



ROCKFORD, ILL.

AT R.M.A. SHOW BOOTH

115



Berkey& Gay Radio Furniture

Styles— Sizes—

Prices—

—to meet every sales need. Cabinets designed to accommodate almost every make of radio set.

Nationally Advertised

This is the only radio furniture made which has a Shop-Mark known for seventy-five years and nationally advertised for forty years. The Berkey & Gay Shop-Mark creates confidence in you and your furniture.

See Them at the Radio Show

Berkey & Gay radio furniture will be shown for the first time at the June Radio Show at the Stevens Hotel in Chicago.

Write for Complete Data

Illustrations, prices and terms will be gladly furnished to dealers and jobbers. Address—

RADIO ALLIED MFRS. CORP.

1338-40 S. Michigan Blvd. Chicago, Ill.

> Radio Sales Division for BERKEY & GAY Furniture Company



THE most profitable sale in a radio department is the sale of radio furniture. Keep that in mind when you come to the Radio Show. And this—people know that the name Berkey & Gay has meant furniture style leadership for seventy-five years. They are sure to prefer radio furniture that bears this distinguished Shop-Mark.



Furniture's Proudest Coat of Arms America's Oldest and Best - Known Furniture Trade Mark



The Radiomode Policy

Nationally Advertised

—a definite and lasting impression of quality.

Radiomode Policy

—means protection to you through satisfaction of your customers.

Eye Value

—characteristics of design intended to please the most discriminate tastes.

Complete Circular

—write for this today and learn details of opportunity we offer.



OMORROW'S mode in radio furniture is exquisitely expressed in every item of our complete line . . . To achieve this and, at the same time, to meet every requirement of purse or taste, is indeed an accomplishment worthy of any business. We are —and aim always to be—the strongest furniture selling organization in the field. Further, to display only radio cabinets that represent the finest creations of the furniture style leaders.



..Style..Satisfaction..Protection



HERE is no more flexible business... nor more profitable radio necessity, than high quality cabinets... Your position as a live and progressive dealer demands that you handle a line representative of the best. Inspect our various models—investigate our prices and you will quickly recognize the opportunity we offer. A full display will be on exhibition at The Stevens Hotel,

June 11-15.

e*ke

RADIO ALLIED MANUTACTURERS CORPORATION
1338-40 South Michigan Avenue, CHICAGO, ILLINOIS

Style

—creations exemplifying the utmost in furniture - craft at prices within range of every purse.

Satisfaction

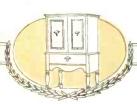
—only until the ultimate purchaser has been convinced, will our transaction be ended with you!

Protection

—our broad guarantees of design, quality and workmanship insures safe dealing for you.

The R.M.A. Show

—don't fail to see our complete line at the Show, The Stevens Hotel, June 11-15.



For those who are pleased by only the finest things

The name ASTON is now recognized as the hallmark of supreme excellence in cabinet craftsmanship. For in ASTON cabinets are combined a basic soundness of construction and a beauty of design that have inevitably brought the highest recognition.

The cabinet here illustrated is a fitting piece to occupy the most handsomely appointed music room. Of carefully selected five-ply walnut throughout, its front of matched butt walnut is richly embellished with heavy carving. The grille is polychromed.

Nor has any detail been overlooked in making this cabinet convenient. A sliding tray gives easy and immediate access to the radio set, while a sliding shelf is ideally placed for convenience in operation. Ample storage space is provided.



Write for our catalog. It will give you full details about this distinctive cabinet as well as description of many other pleasing ASTON models.

ASTON

CABINET MANUFACTURERS

1223-1229 W. Lake St., Chicago, Illinois

Distinctive Originality in design of High Grade Radio Cabinets

Exhibit at the R.M.A. Trade Show, Hotel Stevens, Week of June 11th Booth 12 Room 424



The Caswell-Runyan Co.

HUNTINGTON, INDIANA

CONSOLES WITH PERSONALITY

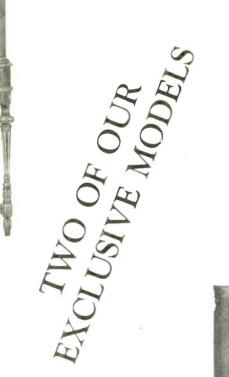
Sold Direct to Jobbers

FURNISHED WITH INSTALLATION PANELS FOR ANY STANDARD SET



Number 25, List \$112.00

PHOTOS
DESCRIPTION
PRICES
UPON
REQUEST



FULL LINE SHOWN AT JUNE SHOW BOOTH B-82 ROOM 451-A



Number 35, List \$72.00



A Revolutionary FEDERAL

No. 99, Federal Cabinet—51" high, 24" wide, 18" deep—the de luxe piece of the season—butt waintst vener over 5-ply construction. Moulded de-

See Federal FIRST!

The tremendous financial, manufacturing and marketing resources of Federal Furniture Factories, Inc., have produced a new series of Radio Cabinets that will revolutionize this division of the Radio Industry.

Open and closed views of three typical models in this great new series are shown on these pages.

Real artistry of design in every model will make them the most popular cabinets of the 1928 season.

Real craftsmanship in construction guarantees lasting consumer satisfaction.

No. 36. Federal Consolette—51" high, 52" wide, 1672" deep—5-ply construction, matched walnut veneers. Doors made with matched walnut veneer. Double stretcher adds to strength and appearance.



No. 99. Open. As high-class inside as outside. Beautifully designed grill for speaker unit. Made to accomodate any standard set. Sold with or without RCA 100-A Speaker.



FEDERAL

FEDERAL FURNITURE FACTORIES I



New Series of CABINETS

At Chicago Radio Show!

Perfect acoustical qualities guarantee full reproduction value of any speaker employed. New price levels throughout guarantee tremendous turnover and profits.

All Federal Cabinets are made to accommodate practically every known set, including all of the popular models. Each cabinet is available, equipped with

RCA 100-A Speaker if desired.

Be sure to see this complete

new Federal Series at
the Chicago Radio

Show. Come to

Booth FF-3.

No. 36. Open. Achighly practical piece of radio furniture. Very compact. Made to house all standard sets. Grilled speaker compartment built in. Sold with or without RCA 100-A Speaker.







No. 37. Open. Note double sliding doors, which expose speaker grill and receiver dials. Made for all standardsized sets. A vailable with or without RCA 100-A Speaker.



CABINETS

206 Asxington Avenue

New York City



WASMUTH-GOODRICH Radio Furniture

THE MADRID Made in walnut and mahogany finishes. Contains RCA 100-A Speaker. Accommodates any radio set. Height 29"; width 30"; depth 15".

THE SEVILLE

Butt walnut front, attractively overlaid in rippled maple. Equipped with RCA 100-A Speaker. Accommodates all makes of radio sets. Height 42"; width 32"; depth 16".

has been enthusiastically accepted by many of the finest radio distributing houses as their furniture line for the

> coming season. Your territory may still be open.

IMPERIAL

Combination PHONO-RADIO Cabinet. Handsome, massive walnut cabinet. Striped walnut veneer front with maple overlay. Equipped with GE Electric Phonograph Motor and Cone Speaker. Efficient electric pick-up. Sliding drawer accommodates any radio set Special compartment for records. Height 50"; width 32"; depth 20".

Be sure to call at Booth B-15, R.M.A. Radio Show Stevens Hotel, Chicago, June 11 to 15

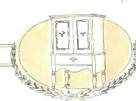
The models shown here, and many others, await your most critical inspection. In them you will find the profitable alternative for vanishing accessory business. Be sure to see them at the Show!

WASMUTH-GOODRICH CO.

New York City + + + + + Peru, Indiana

> Symphonic Sales Corporation National Sales Managers 370 Seventh Avenue, New York City





FURNITURE EXHIBIT



ADLER-ROYAL RADIO CABINETS

In Adler Royal Radio Cabinets you find a noticeable excellence which has made them the standard of comparison — a leadership acknowledged by the industry and accepted by the public as authority itself.

Each year the advanced creations of Adler artisans have won increasing acceptance from the leading creators and distributors of radio. So marked has been the preference of the public that dealers everywhere have come to know that it speeds the sale to say "Cabinet by Adler-Royal". In the new season's cabinets you will again find that striking advance in beauty and utility of design which distinguishes them from the ordinary and marks them as appropriate settings in which display the extended improved radio. Birds of a feather—

JRING CO., Inc.

LOUISVILLE, KENTUCKY



FURNITURE EXHIBIT



Meets the most exacting demands for beauty and quality in a pleasing variety of models. Cabinet work of character . . . walnut throughout . . . matched butt walnut veneer doors . . . rich piano finish.

Model R 43 has sliding drawer receiver compart-Ample space for cone speaker and ment. eliminator.

Model R 40 with Peerless Reproducer.

Model R 41 with Radio No. 100 A Reproducer.

RADIOLA FADA CROSLEY ATWATER KENT

and all other Standard A.C. or D.C. Receivers

> Write for Complete Catalog and Franchise Details.

Nationally Advertised Sell the Excello Nationally Preferred Radio Consoles

EXCELLO PRODUCTS CORPORATION

4834 W. 16th St., CICERO, ILL. (Suburb of Chicago)

Pacific Coast Representative: Pacific Sales Corporation, 426 Larkin St., San Francisco, Calif.



MR. ATWATER KENT Says:

of Pooley Radio Cabinets is certainly very interesting and should appeal to all those who want the highest type of modern radio furniture.

"For this reason,
I heartily approve of
their use with Atwater
Kent Radio for 1928-29"

(signed) A. Atuator Kent.



THE POOLEY COMPANY
1600 Indiana Avenue Philadelphia, U.S.A.

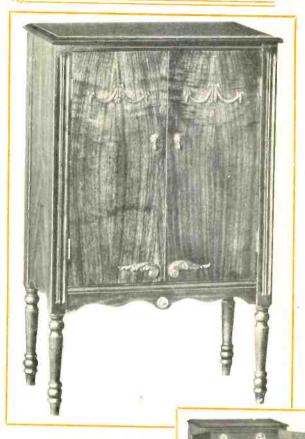
See the new Pooley line at the Second Annual Trade Show, June 11th to 15th inclusive, Booth B-40, Stevens Hotel, Chicago. If you cannot get to the Trade Show, look over the line at the Pooley distributor's in your territory.



New



Practical



A high Quality Cabinet. Top. ends, doors, and panels made of fine Walnut Veneer. Beautifully finished in walnut, or mahogany. Made for new Radiola 18—has 100-A RCA Speaker. Illustration to right shows cabinet with doors open and set installed. Complete with cable extension, speaker cable, and extra switch wires. List Price \$69.50.



Grand Rapids is one of the largest furniture and radio cabinet centers in the country. Hubbell is located here where the country's finest furniture is made and Hubbell is producing only quality Radio furniture that makes sales and money for dealers anywhere.

Every radio dealer and every radio department manager will want to stock Hubbell's fast selling radio furniture. The turnover on this line for 1928 has been exceptionally great.

Every new set sold immediately makes a prospective purchaser for a Hubbell Cabinet, Spinet, or Table Speaker. Present set owners offer a tremendous potential market.

Make sure of this business with Hubbell.



No. 18-A Spinet for Radiola 18 with RCA 100-A Speaker

Our No. 18-A Chest Spinet with speaker compartment and RCA 100-A speaker unit installednow comes completely assembled. Note the attractive stretcher, which adds greatly to the rigidity of the cabinet and appearance. Very well finished. List Price—\$50.00 with Speaker. List Price—\$55.00 without Speaker.



No. 17-A Speaker Table

now comes with the solid top and speaker compartment. The dainty stretcher adds to appearance and strength greatly. Well finished. Shipped assembled. Provision made to mount 100-A speaker very easily and efficiently. List Price—\$15.00 cabinet only.

Popular



Disting ive

59 Market N.W., GRAND RAPIDS, NIC.



Now You can Meet the Demand for

BETTER RADIO CABINETS AT LOWER PRICES

Glad News for Live Radio Dealers



The unequalled facilities and resources of the world's largest table manufacturers are now applied to the production of a complete line of radio cabinets to sell at unprecedented low prices





CANTERBURY—Made of five-ply Walnut and Qtd. Gum, finished Antique Walnut, shipped set-up packed singly, top 33 x 17", height 42", set compartment 28 x 14 x 10", speaker compartment 28 x 14 x 193 8".



STRATFORD—Made of five-ply Walnut and Old. Gum, finished Antique Walnut, shipped set-up packed singly, top 313 & x 1738", height 33".



FLEUR DE LIS — Made of fiveply Walnut and Gumwood, finished Antique Walnut, shipped set - up packed singly, top 26 x 14", height 41", set compartment 21 x 11 x 10".

THINK what this news means to you, Mr. Dealer! In every neighborhood scores of intending buyers of radio cabinets have been holding out for better values than small manufacturers can possibly hope to offer. These people are not expert judges of radio receiving sets but they do know and can judge the worth of a piece of furniture.

As purchasers of fine walnut and mahogany in the trainload quantities required for the manufacture of 250,000 tables each year sold by every prominent furniture dealer in America,

ST. JOHNS TABLE CHAP NY

we are able to buy at the lowest prices.

With a woodworking plant covering fifteen acres, employing 350 skilled cabinet workers and equipped with a million dollars worth of automatic machinery, we are able to cut costs through every step of manufacture while the finished product carries only a fraction of our overhead expense.

Consider these enormous advantages. Then investigate. See the benefits they offer you in lower prices and bigger profits.

Don't fail to see the St. Johns exhibit at the R. M. A. Show, Hotel Stevens, Chicago, June 11th—15th, space 16. Also Demonstration Room 548-A



G. M. PETRIE, President

CADILLAC, MICH.



OTTAWA SPEAKERS

TTAWA

an Old Reliable Name in the Furniture Field

OCATED in Holland, Mich., the Ottawa Furniture Co, has two large furniture manufacturing plants. One is devoted entirely to Radio Furniture and Speaker Cabinets.

Holland is known from coast to coast as one of the leading furniture centers of the country. Ottawa is an old re-liable name in the furniture field—the name dates back to Ottawa Indians of the early American historical days.

Ottawa has gathered around itself a large group of experienced and skilled woodworkers—rugged men—many of Dutch ancestry—men whose delight is to turn out perfect products made of wood.

These skilled workmen make wonderful wood housings for your radio Speaker or Receiver.

You can buy from Ottawa with complete confidence and satisfaction.



ADJUSTABLE DOORS OPEN LIST PRICE \$35.00 MAHOGANY OR WALNUT

AN FORD BROTHERS, established in 1897, and who have successfully merchandised radio products for over five years, will handle the national sales of Ottawa Speakers; Executive Radio Sales Office, 202 East Washington St., Ann Arbor, Mich.



CLOSED-

$m M_{ODEL~55}$

Ottawa Cabinet Speaker, furnished in Adam Brown Mahogany or beautiful Butt Walnut with attractive cut moulding around fret work and doors. Volume can be regulated by placing doors in different angles permitting quality of tone at all times. Equipped with latest type cone speaker designed to compete with any speaker in bringing out the low and high notes in that allowed the speaker with any speaker in bringing out the low and high notes in that pleasing mellow tone every one likes today. Quality and Tone



MODEL 340 LIST PRICE \$35.00

MAHOGANY OR WALNUT



7OU are in-Y vited to visit us in our rooms STEVENS **HOTEL** Radio Trade Show, Rooms Nos. 1605A, 6A.

OLONIAL speaker table made of mahogany or butt walnut. Latest type built-in cone speaker, attractive grill, exclusive design hinged doors that swing 270° which can be used to a great advantage in regulating volume, open ends for books or magazines, demountable legs which screw firmly into corner posts just below lower shelf. Suitable for use with any table model A.C. receiver. Quality of reproducing unit

OTTAWA FURNITURE CO.

HOLLAND

-RADIO DIVISION- MICHIGAN



Announcing —a new and novel line of Red Lion Cabinets

ATWATER KENT RADIOS

In keeping with the progress of radio in general, and of cabinets in particular, we are offering a new, attractive and decidedly novel line of Red Lion Cabinets for Atwater Kent Radios. These models will be in addition to the ever-popular Red Lion Desk Models—to which have been added several new features of unusual utility.

You are cordially invited to attend the first showing of these new Red Lion Models at the R. M. A. Trade Show—Chicago, June 11-15

RED LION CABINET COMPANY, RED LION, PA.

Makers of the famous Red Lion Furniture





ART MODERNE

gain looking ahead in trends of the fickle public taste regarding furniture, Watsontown will introduce to the trade Radic Furniture designed in the Moderne Manner. The better shops are introducing the startling beauty of this new art in Furniture to the Public. Included in this year's ine will be one of the most up-to-date combination phonograph-radio cabinets, which will house practically any make receiver.

Visit our Trade Show Exhibit and see the beauty of this furniture. It will Profit you for the profits go to those who lead and not to those who follow.

A SURPRISE AWAITS YOU

Booth 74

Demonstration Room 561

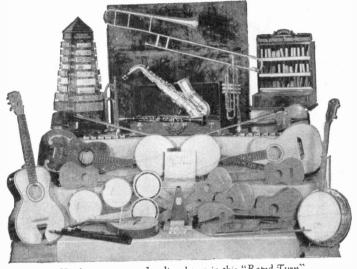
R.M.A. Trade Show . . . June 11-15

Stevens Hotel, Chicago

WATSONTOWN TABLE AND FURNITURE CO.

Watsontown, Pa.

Mr. Radio Dealer!



The fast-setting merchandise shown in this "Rapid Turn" unit (actually a small, complete musical department) will show you, on a small investment, a profit of over \$250.00.

Putting a Hump in the Summer Slump!

WOULDN'T you like to eliminate the usual summer sag from your sales curve this year? Wouldn't you like to at least level it up and perhaps even create a profitable hump where last year you only had slack business?

Here is a good way to do it: Add a new and profitable department to your business! A department that fits in logically, which will appeal to a large portion of your present customers and attract new trade to your store as well. A line of band and string instruments can do the trick for you.

If radio sales or talking machine sales fall off, sell people musical instruments—ukuleles and guitars for the summer camps and beaches, banjos, saxophones and trumpets for amateur orchestras.

You will be amazed to see how your profits will increase and how attractive this class of merchandise will look in your window and in your store.

To make it easy for you to get started with this profitable sideline we have made up this "Rapid-Turn" assortment which we know from experience will give you an adequate display and selection, plus a good profit, yet with a minimum investment on your part.

Study this assortment. Realize the amount of extra business it will bring you this summer. Then use the attached coupon.

Eight Advantages in Selling Musical "Small Goods"

1 - Small investment - the unit cost is camparatively

2—Rapid turnover—you don't need a quantity of each.
3—Profit—a good long one.
4—Cash—no time payments to bother with.

5—Staple — no deterioration or style changes to worry

about.
6—Year round—this class merchandise sells steadily.
7—Little space—this merchandise is not bulky.
8—No extra sales expense—your regular salesmen can sell "small goods."

Lyon & Healy

DISTRIBUTORS OF GUARANTEED MUSICAL MERCHANDISE

Jackson Boulevard and Wabash Ave., Chicago

6-6-6

1	MAIL THIS COUPON TODAY!
	LYON & HEALY Jackson and Wabash, Chicago, Illinois Please give me full particulars regarding your special "Rapid Turn" Unit assortment.
	Name
	Street. City

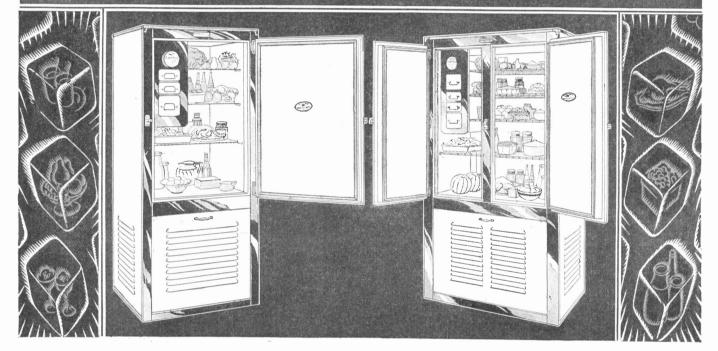


FOR THOSE WHO



WANT THE FINEST

DEPENDABLE ELECTRIC REFRIGERATION



Others are profiting . . . so why not you?

We have statements from radio dealers on file which bear out our previous assertion that Copeland Dependable Electric Refrigeration is a logical proposition for the radio dealer! & They tell us that Copeland rounds out their business nicely because the heaviest sales of Copeland begin just at the time that radio sales start to fall off. They tell us that their knowledge of specialty selling, home installation work and servicing gives them a running start on the road to additional profits.

⊗⊗ There is not a single requirement in the refrigeration field that cannot be supplied by Copeland. For Copeland manufactures three lines of domestic electric refrigeration, providing from 5 to 20 cubic feet of storage space and selling at \$195 to \$720 f. o. b. factory; De Luxe models in pure white or optional color trims and electrically lighted, are included. Copeland also manufactures water coolers, separate refrigeration units for present ice boxes, multiple installations for apartments and units for commercial refrigeration. $\otimes \otimes \otimes$ Copeland is a recognized leader and can show a year-to-year growth that is the envy of the industry. Some few dealer-

ships are still available and we urge you to send the coupon or write us at once. Learn all the details of the unusually attractive Copeland franchise; write us today!

Dealers Attending Chicago Radio Show

If you are interested in a desirable electric refrigeration franchise call the Copeland Refrigeration Company of Chicago, Michigan Avenue at Wacker Drive. Telephone Central 0944.

MAIL	THIS	COUPON-	

Copeland, 630 Lycaste St., Detroit, Michigan. Please send me the story of how Copeland will tie up with my radio business.

Name______Address________R.R.



The Irresistible Appeal of National Cabinets

- is a great sales asset for any radio

ATIONAL Cabinets have an alluring beauty, a smart appearance, that sets them apart as a distinct step forward in radio cab-

inet building. National cabinets will be made in five styles and sizes to meet the requirements of every price class in the de luxe cabinet field.

We will be glad to send you full information on the new National Cabinet line. Write or wire today for full information.



MODEL 40 **SHOWING** DOORS OPEN MODEL 40 CABINE'T Write for

The National Cabinet Company

details today

New Philadelphia, Ohio

Aluminum Contributes to Radio Lightness, Beauty, Finer Results

Manufacturers of the finest sets are using Aluminum in constantly increasing quantities. Their tests have demonstrated that Aluminum is the one metal that most efficiently meets the widely differing conditions encountered in radio design.

Its lightness; its permanent beauty; the fact that it does not rust or corrode; its high electrical conductivity; its efficient shielding quality; its "workability"--all are advantages that combine to make Aluminum the ideal metal for radio.

In many of the most advanced receiving sets Aluminum Shields are used to achieve better



tone quality, greater selectivity, closer tuning-in

short, finer reception.

Aluminum shielding reduces interference. It eliminates electrostatic and electro-magnetic interaction between various stages of radio-frequency amplification. It eliminates modulation of radio frequency stages by feed-back from audio-fre-

quency amplifier. It makes possible more compact design.

Aluminum performs these functions efficiently and adds



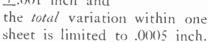
less to the weight of the set than any substitute met-

al. Moreover, it is easily worked into special shield shapes—cans, boxes or casings. Thus it presents few limitations of size and

It allows the engineer great freedom to design his shielding to meet, ideally, the various requirements of his set.

LUMINUM is widely used for A variable condenser blades. Aluminum Company of America produces special sheet Aluminum for this purpose that is accurate and uniform beyond anything hitherto attained. Gauge tolerance in

thickness is $\pm .001$ inch and



Aluminum Company of America also makes finished condenser blades from this highly accurate and uniform sheet.

THE leading manufacturers of I foil and paper fixed condensers now use Aluminum foil because of its high electrical conductivity and its great covering area (a pound of Aluminum foil .0003 inch thick covers 34,000 square inches). Terminals can readily be soldered to Alu-



minum foil condensers by a process recently developed by

Aluminum Company of America.

ALUMAC Die Castings of Alcoa Aluminum combine lightness, strength, accuracy and high conductivity. They have equal strength with less than half the weight of other casting materials. They are used with complete success for loud speaker frames and bases, condensers and condenser frames, drum dials, chasses—and even for cabinets.

There is a fund of information on the use of Aluminum in radio, and on radio in general, in the new edition of "Aluminum for Radio." Your copy of this interesting book

will be mailed on request.

ALUMINUM COMPANY OF AMERICA

ALUMINUM IN EVERY COMMERCIAL FORM 2462 Oliver Building



Pittsburgh, Pa.

ALUMINUM

The mark of Quality in Radio





Dial Light



Planning Next Season's Receiver!



No. 3993-Relay

No. 3888 D.P. D.T. Flush Switch

No. 2912 Flush Jack

BRYAN

No. 2912 and Plate

What dependable, economical switches, receptacles, plugs, dial lights, etc., will you buy?

The Bryant Electric Company asks your consideration with experience of 39 years in the successful manufacture of wiring devices and in efficient factory production.

Write today for a copy of our catalog

illustrating and describing over three thousand "Superior Wiring Devices."



No. 5141-Switch

No. KT-Cap







Cord Connector

The Bryant Electric Company

Bridgeport, Conn. New York Philadelphia

San Francisco

Manufacturers of "Superior Wiring Devices" since 1888 No. 5143-Switch





Built by a New and Different Process!



A New Standard of Quality In A-C TUBES

W. C. A. Tubes represent the height of A - C tube perfection. They are the result of a development in the manufacture of heater type A - C Tubes that are positively trouble-proof.

W.C.A. Tubes solve the perplexing experiences of last season. Built by an entirely new process, they are absolutely dependable and far superior to any other similar type tube in existence.

Our entire production is concentrated on this one type of tube. Quality, not quantity, is our watchword.

The following superior features make W.C.A. Tubes the outstanding engineering success in heater type tube construction:

- 1. Built for performance, tone and quality.
- 2. Built to outlast any other A-C Tube made.
- 3. Built to stand greater electrical surges and more overload than other A-C Tubes.
- 4. Built strongly enough to withstand jars and jolts in shipping.

Manufacturers and jobbers who demand quality rather than price—and want the most efficient type A-C-227 tube made, are invited to write

WIRELESS CORPORATION of AMERICA

Established 1920-Incorporated 1922

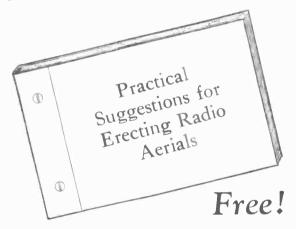
1744 N. Robey St.

Chicago, Illinois

Give the Sets You Sell a Chance To Perform as They Should

Many radio sales have been lost in the past because performance in the home hasn't come up to the demonstration in the store.

Between crowded station channels and supersensitive sets, interference has become a serious handicap to sales. With any normally selective set, the directional properties of a good straight line aerial will give your customers better reception and lessened interference—will cut down dissatisfaction and unreasonable complaints.



for Your Installation Man

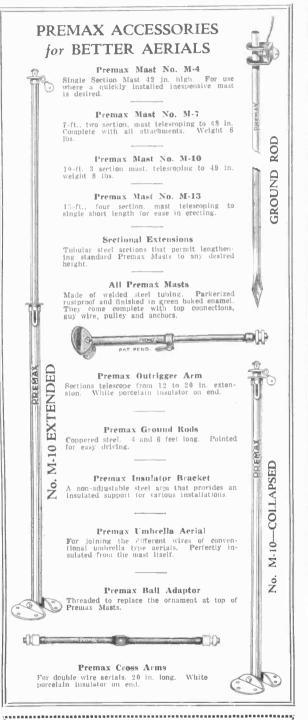
To help your installation men put up the neat and efficient aerials demanded by your customers, Premax has published a handy manual which illustrates and describes approved methods of aerial erection. No matter what sort of conditions your men encounter, the Premax Manual will show the quickest, easiest way to put up a real job.

A copy of this manual will be sent without cost to any radio dealer. Just mail the coupon below

NIAGARA METAL STAMPING CORPORATION

Dept. RR-168

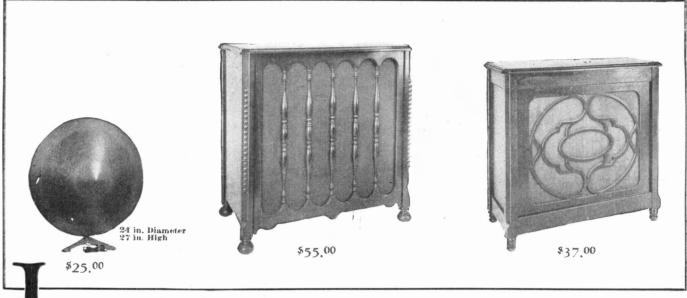
Niagara Falls, N. Y.



NIAGARA METAL STAMPING CORPORATION

Please send me ($\,$) Premax Manuals on better serial erection.

Dept. BR-628 Niagara Falls, N. Y.



Justified—Popular Demand!

Because-

of that tangible something - TONAL QUALITY.

of richness in the subdued mahogany color and genuine Spanish Leather appearance—harmonizing with any home decoration.

It is adaptable to wall or pedestal use.

A balanced armature improved unit is incorporated in this season's model.

Of its comparable value at \$25.00 list.

Past experience has shown the unusual acceptance of B. B. L. Speakers; we are offering an attractive association for Distributors and Dealers.

Has—

Caused us to produce an end table type of speaker.

Insisted that we make the speaker better than simply a furniture product for merchandising.

Made it imperative that we match the high standard set by Adler Cabinets with tonal quality, which has been accomplished by the discovery and use of our flexible and semirigid vibratile tonator interior.

Required a utility table which would accommodate all table model radio sets or fill the need of additional end or arm chair tables.

Caused us to produce four models which lend themselves to period decoration and which are priced from \$37.50 to \$95.00 list.

Visit with us at

Rooms 605-606 Blackstone Hotel, Chicago, during Radio Trade Show, June 11th and 15th, where you may hear and compare these new models.

B. B. L. SPEAKER, 101 West 31st Street, New York City

INCORPORATED

B. B. L. Speaker, Inc. Please send me details for selling B.B.L. Speakers in this territory. 101 W. 31st St., N. Y. C.		Gentlemen:—	
101 W. 31st St.,	B. B. L. Speaker, Inc.		. 4.
N. Y. C.	101 W. 31st St.,	•	
	N. Y. C.	Mary	• • • • • • • • • • • • •
Distributor 🗆 🖸 🗐		Distributor 🗆 🔻 Peiler 🖂	

Here's the



The Full Story

in eight important pages. Every page contains news which vitally concerns vou as a Radio Dealer.

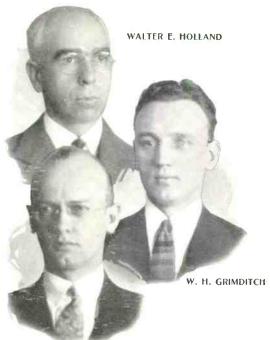
> By far the biggest selling opportunity ever offered in Radio. Read every word of it.

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TO YOU PERSONALLY		

Page 1

analiscovery eccenteration

NEUTRODYNE-PLUS" a New Term in Radio



L. J. PEARSON

For three years the Philco experimental staff has been working on a new radio receiver; a staff headed by three men who are recognized as among the foremost authorities in radio engineering: Walter E. Holland, W. H. Grimditch and L. J. Pearson, each of them nationally known for his mastery in his particular field of radio research.

Philco Combines the Achievements of Radio's Greatest Scientists

The Philco is licensed under the patents of The Radio Corporation of America, The General Electric Company, The Westinghouse Electric & Manufacturing Company, The American Telephone & Telegraph Company, Latour Corporation, Lowell & Dunmore, Hogan, the Hazeltine Corporation, PLUS the Philco discoveries by the Philco staff of engineers.

This combination of Tone-Quality plus selectivity and range has been sought for years. All radio sets heretofore either secured selectivity at the expense of tone or tone at the expense of selectivity, and most of them compromised between the two. Now, the combination of tone with selectivity and range has been achieved in the Philco Set!

TERM to describe a novel development due to remarkable enlargement of the Neutrodyne principle—a discovery by Philco radio engineers.

Impartial radio scientists agree that neutrodyne produces the finest tone quality known to radio. Superbly clear—no howls or squeals—absolutely free from those disturbing oscillations which destroy purity of tone. To this, Philco engineers have added something new: *super-power*, greater than has ever been known to neutrodyne before.

The Result?

A perfected tone quality *plus* the acme of distance and selectivity.

Genuine RE-production. A tone quality never heard before. Close your eyes and you will hardly realize that you are listening to a radio, the sound waves are so perfectly RE-produced.

Piano tones sound like the piano. Individual instruments in an orchestra retain their identity. Drums are not lost—they're *there*. The human voice comes out as if the speaker or singer were before you. Never before such LIFE-like *RE*-production.

Plus Power

Yes, for the first time, *full power*—super power. Together with that superior tone quality, you get selectivity and range so controlled as not to take away from the tone quality.

And this power means

Remarkable Distance-getting: Stations thousands of miles distant may be heard, in many cases just like local stations. You will get stations you never knew existed—low-power stations that the average set can pick only locally. As one radio expert said: "Philco is going to make many a small station famous."

Wonderful Selectivity: Yes, marvelously sharp tuning! Even with a hair's-breadth turn of the control you can often shut out completely a powerful station and bring another—miles away—booming in. Even local stations are confined to narrow limits. You can get distance, in cities like New York and Chicago, because you can tune out local interference. You'll never know what real selectivity means till you take a turn at the Philco dial. A new experience in radio awaits you!

We know that you have read things like this before. We wish it were possible for us to tell you the facts more convincingly. All we can say is: "Hear the Philco and judge for yourself. Tune it yourself. We'll let you be the judge."

PHILEO Page 2

NO AERIAL NEEDED

Therefore the Philco is Movable

-yes, the Philco Radio Set can easily be moved from room to room-merely plugging into the light socket. Why? Because Philco engineers have so designed this new radio receiver that an aerial is not necessary to get perfect reception of local stations - yes and even many distant stations. Special provision has been made for a portable ground.

And if you decide to use an aerial, only twenty feet of wire will bring you in stations from a remarkable distance. Longer

aerials can be used to attain even greater results.

All Electric—Entirely Dry

- the new Philco Set is an all-electric AC Radio receiver. You simply plug it into the light socket and tune it in. No batteries. Requires no water, acids or liquids of any kind. Entirely dry.

Smooth Volume Control

Smooth, positive, uniform control of volume - Philco has solved You can gradually reduce the Philco tone to a whisper, then step it up to full intensity - and you do it all with the volume knob alone. No detuning -you don't touch the tuning dial; no interference with Philco tone quality or selectivity-and still perfect control of volume.

A Kange Control

An exclusive Philco device which permits the separation of strong overlapping local stations, in cities like Chicago, New York and elsewhere. With this range control, powerful local stations may be confined exactly to their high point on the dial, separating them clearly from nearby local stations of equal or greater power, and making possible clear, undistorted reception of local stations at all times.

Four Condensers

This, plus new and startling Philco developments in the design of the radio frequency circuit, means a maximum of amplification and remarkable selectivity, actually making possible eight-tube performance with six tubes. And the big advantages of fewer tubes will be greatly appreciated by everybody in the Radio Trade - less expense, less trouble, reduced service and, of course, purer tone quality.

No Bothersome AC Hum

Philco has done away with the annoyance of the characteristic AC hum so well that the keenest ear can scarcely detect it, even

Illuminated Dial—One Control

All the convenience and simplicity of illuminated one-dial operation is available to the Philco user. The four tuning condensers are counter-balanced and mounted on a one-piece drawn steel case - an expensive but exceedingly rigid support.

PHONOGRAPH JACK

-built in. A socket on the dial plate into which an electric pick-up for phonograph records may be inserted, thus using the audio power tubes of the Philco for reproduction. Greater enjoyment from a phonograph than you've ever had before.

then—NEUTRODYNE-PLUS!

That perfect tone quality-genuine RE-production of the original sound waves combined with distance-getting and selectivity. We have already made private tests before impartial and critical listeners. They have been amazed, delighted and mystified.

a

Philco has managed to produce this super-quality set in exquisite furniture models at surprisingly moderate prices. more important still, we have put the same identical chassis into special radio metal cabinets to sell at popular prices. Even without popular priced models, "Neutrodyne-Plus" would make Philco a tremendously big seller this season, but with equal quality in lower-priced cabinets, Philo (so everybody tells us) is bound to be the season's biggest seller.

Read the following pages, and don't forget to send the coupon on the last page. That is important!



Models

Superb designs by Hollingsworth-Pearce and Albert Carl Mowitz. Louis XVI period in the latest, most modern vogue-selected matched walnut panels, beautifully grained, sturdy and durable-absolutely guaranteed against warpage and shrinkage.

Philco cabinets possess a satin sheen richness of finish made possible only by expert cabinet makers. We wish you could see this furniture under construction—the careful hand sanding, exhaustive painstaking finishing work, the many inspections and the careful packing.

Many of the best-known furniture experts and buyers were consulted before our designers started work on these cabinet creations. A beauty entirely new in radio receiving sets.

The "Highboy"

model illustrated above includes the built-in Philco Console Grand Speaker, the Receiver, Power Supply and Built-in Aerial.

PHICO Page 3

omly Chassis ccccccccc

IN A COMPLETE LINE OF MODELS

In the complete range of Philco models, from the highest price to the lowest, there is only one Philco chassis. The purchaser of a Philco Set, no matter what price is paid, always gets the maximum Philco performance. Every feature that makes Philco the outstanding set of the year is contained in the lower priced model as well as in the highest priced cabinet, because both have identically the same chassis—the same set.

From the standpoint of performance there will be only one Philco-the best. Different models, yes-but only one chassis. So no matter what model a radio buyer may prefer, no matter what price he chooses to pay, he knows that he never gets less than the maximum of Philco performance.

Philco Will Maintain Firm Furniture Policy

Philco Directors have determined upon a rigid furniture policy, namely—the Philco radio will be sold only in Philco cabinets—and in no other way. We are not interested in having the Philco offered in inferior cabinets at bargain prices. We say, "The quality of the Philco justifies the price, and a Dealer is entitled to his legitimate profit."

Furthermore, every Philco Set and every Philco Cabinet will carry a serial number and the Philco protective seal, which will be plainly visible when the lid is open.

The Philco will carry the factory guarantee only while contained in its original Philco Cabinet.

Protected Territory for Dealers

This is important. We shall particularly guard the interests of Philco Dealers by giving them territorial protection. This means that we will have only a limited number of Philco Dealers within a great radius. The Philco offer is not for everybody. We are going to select our Dealers. To those Dealers we will give the utmost protection and co-operation.

We fully appreciate the fact that it is absolutely vital to everybody concerned that the Radio Dealer makes money—actual net bankable profit. We know that your success means our success, and our first

and foremost purpose this year in putting Philco on the market is to see to it that our Dealers prosper and that thereby we prosper also.

Financing Plan

All arrangements completed by Philco to afford Philco Dealers a very liberal and truly workable financing plan. Your installment paper is financed for you, so that you, Mr. Dealer, get the cash and yet do not have to pay unreasonable charges for financing. (This will be explained in our personal letter to those who seek a Philco agency.)



This Console Model is a masterpiece of dignified and artistic design. A modern conception of Louis XVI period by Hollingsworth-Pearce and Albert Carl Mowitz. Selected walnut panels, handsome satin finish, painstaking construction. Contains the Ladio Receiver, Power Supply, Built-in Aerial and Coatscla

PHILEO Page 4



Superbly Decorated by Hand

Exquisite colors to meet the trend of the day. Four stunning table models that will captivate the women and will harmonize perfectly with the color schemes in the homes of today.

Labrador Gray, a beautiful neutral shade reminiscent of the misty hills of Northern coasts.

Nile Green, a soft gray-green with just a touch of blue. Created by one of the country's leading interior decorators.

Mandarin Red, beautifully toned and shaded, and will add warmth and brightness to any room.

Rich Furniture Brown, warm, rich and shaded in two tones. Classic design with bezel plate in entique bronze.

Color in the Home is the popular demand of the day. Women particularly insist upon color to harmonize with individual plans of home decoration. Philco, in presenting these special radio metal Table Models in color, exquisitely designed and hand-decorated, is giving radio Dealers the opportunity to reap the profits which lie in this strong, popular trend.

Furthermore, by eliminating the wood and designing a cabinet of this radio metal, we are able to give the public the same Philco Set at about one-third the price of our furniture models.

The one great outstanding radio value of the season! Mail the coupon on the last page of this announcement and get all the details and the full descriptive literature.

Phiso Page 5

The PI-I-CO. PI-I-CO. Speaker Cacaaaaaa



at a price

of $^{\$}25.00$ to the Public

When we first produced this really superior Speaker we questioned if we should put out such an ultra-quality product at so low a price. The public, it was argued, might more or less judge performance by the price. But after many tests on many people, we recognized that the superiority of this Philco Speaker was so obvious, even to the untrained ear,

that the proof of excellence will be evident to everybody on first hearing.

Hence, the low \$25.00 price simply cannot be used to prejudice the listener, but, instead, it will prove a tremendous factor in making the Philco Speaker the one great seller of the year. Because the Philco Speaker positively out-performs other well-known Speakers for which the public is accustomed to pay \$10 to \$15 more. With such an offer, think of the market that is waiting for you!

Colors

Yes! This splendid Speaker is also obtainable in a variety of colors. A rich furniture brown, red, green or gray, and—decorated by hand. Philco Speakers to match the color schemes of the homes of today. Also to match the beautifully decorated Philco Sets.



A wonderful Cone Speaker, compact in size, beautiful in design and appearance, and with a superb softness and richness of tone. The Philco Speaker gives perfect reproduction over the *entire* musical scale: a beautiful, pure treble; a rich, full bass. No smothering of tone; no distortion; no snarl or rattle at any point—even at fullest volume.

A direct comparison of the Philco Speaker with its best-known competitors is the most convincing of all tests. We have repeatedly made these tests and listeners have left convinced that Philco has achieved new and remarkable standards of tone reproduction. Such tonal depth, such uniform resonance, such true articulation, is new to radio. While the Philco Speaker was originally developed for use with the Philco Radio Set, it positively improves the quality of reception on other sets.



The very ultimate in speaker RE-production is attained in the Philco Console Grand Speaker table, illustrated above. The specially designed tone chamber, which contains the speaker unit, gives amazing emphasis to the life-like quality of tone. A volume, a depth, a resonance which can be compared to nothing less than the actual performance before the microphone. Made of selected walnut panels with precise care and handsome finish. A beautiful piece of furniture to support any table model radio—and at a remarkably low price.

PHICO Page 6

AnAdvertising Campaign that Blankets the Nation

Philco will quickly put the news of its new "Neutrodyne-Plus" radio set before the entire American public with a gigantic advertising campaign.

Double-page spreads in four colors and in two colors in the big National Magazines—The Saturday Evening Post, Liberty, Collier's, American Weekly, National Geographic, World's Work, Scribner's, Review of Reviews, Harper's, The Golden Book and the Atlantic Monthly—reaching twelve million (12,000,000) families and over fifty million (50,000,000) readers each and every issue.

Every Radio Dealer knows that Philco advertising brings the actual sales. When a Philco advertisement appears in a magazine or a newspaper the retail Dealer gets concrete results in sales and cash the next day and the days thereafter. That is why this gigantic National Magazine advertising campaign is of such vital interest to you.

Tremendous Newspaper Advertising

Hundreds of thousands of dollars—yes, as much as that will be spent in a single month in the big newspapers of all the important trading centers to bring the news of Philco's astounding new Radio Set before the entire radio public. And these big, National advertisements—week after week—will be advertisements that get the business—immediate sales for you and all other Philco Dealers.

Every one of the many thousands of Philco advertisements—whether in the National Magazines or in the newspapers—will carry a coupon. This means that people in large numbers will not only call on the Philco Dealers throughout the United States, but inquiries—coupons and letters—in large numbers will also pour in by mail to our factory. These many thousands of inquiries will be turned over to the Dealers in the neighborhoods where they originate.

Nation-Wide Broadcasting of Famous Philco Hour

Millions of people are listening in on the "Philco Hour" every Wednesday night at 9 o'clock, Eastern Standard time. "Philco Mem'ries" Hour, producing the complete story and musical selections from the musical comedies and light operas of bygone days, is a feature that millions await with keen interest. The "old stager" who tells the story and directs the program has become a national favorite with radio listeners the country over.

The National Broadcasting Company reports having received more letters on the Philco Hour than any other national feature.

Philco will continue its national broadcasting every week without interruption throughout the year. The program will be heard from the following 36 stations:

Important! At the beginning and at the end of every program a suitable and proper selling announcement about the marvelous new Philco "Neutrodyne-Plus" Radio Set will be made.

Original Window Display

Yes, entirely new and original and very attractive window and counter display material.

This service also includes a complete assortment of advertisements in all sizes for the Dealer's own use in his local paper; also a complete series of letters and folders for direct mail and distribution to the store customer.

A Trade-In Plan for Old Radio Sets

The coming of the AC Electric light socket set has made over seven million (7,000,000) radio sets obsolete—out of date. This means millions of new prospects for Radio Dealers.

A Trade-In offer is now a mighty important part of every Radio Dealer's selling plan. A tremendous opportunity for profit! But unless Dealers follow an intelligent Trade-In policy there's as much opportunity for loss as there is for profit.

there's as much opportunity for loss as there is for profit.

Under the plan of Trade-Ins which we have formulated for Philco Dealers, we propose to see to it that our Dealers do not throw away their profits on Trade-Ins! To cash in on this year's wonderful opportunity you positively need the right plan—a plan that makes money for you and leaves you your real net profit.

Trade Discounts

Special! The details of our Trade Discounts to Radio Dealers will be given only in personal letter from us to you or by personal call. Every Dealer answering this special announcement will receive the full information on the matter of prices.

SEE NEXT PAGE for COUPON Mail it today for Full Details

Pin CO Page 7

Send Coupon cccccc

This may easily become the most important move you ever made. Merely sign your name and address and mail coupon to us

There are many important details that we have not yet told you about our splendid proposition for this season. In this announcement we have been able to cover only the high spots. We want to give you the complete story in every particular.

We know that the Philco Radio Offer to Dealers presents the biggest chance for profit ever known in the Radio industry.

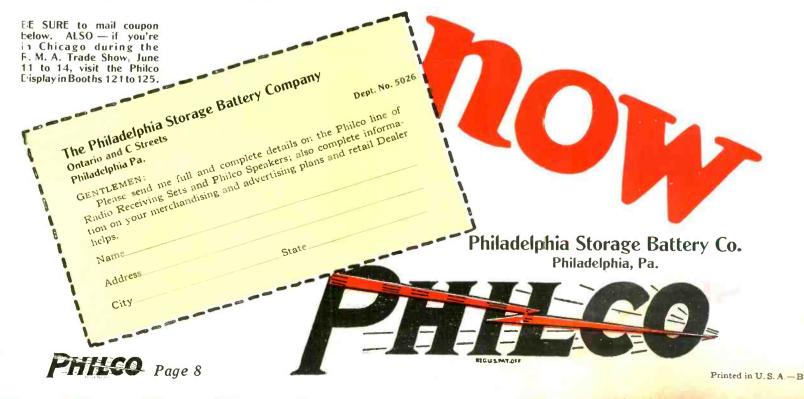
We Want You to Choose

Radio Dealers will choose their proposition carefully this year. The merchants who investigate carefully will be the ones who survive in the radio business and make the big profit. And we want only those who are business men enough to do this. Much will be claimed—and the man of judgment will take time to investigate every claim thoroughly.

And Philco Will Choose Carefully

The Philco offer is *not* for everybody. We are eager, of course, to get the best Dealers in every locality. The "best" does not necessarily mean the largest, although many of the largest Radio Dealers are already included in our list. We are giving the Philco franchise to the Dealers (large and small) who take a genuine interest in Philco, and who will take the fullest advantage of this wonderful "Neutrodyne-Plus" radio receiver and our powerful advertising and selling plans.

Of course, Mr. Dealer, we want you to investigate. But please do so with the utmost promptness. Send the coupon today. You may be the very Dealer (large or small) whom we most desire to get in your locality. It would be your loss and our loss if you delay, and in the meantime we involve ourselves elsewhere, so that it becomes too late to grant a Philco franchise to you. So do not delay sending this inquiry coupon. No obligation.



The "just ordinary" fellow may not realize that the successful tradesman is constantly on the alert for things that are different. He sells the difference between his merchandise and that of his competitors.

CHAMPION radio tubes are distinctive, not only in quality but in sales appeal. They are apart from the commonplace and you will be proud to sell them.

28 successful years of incandescent lamp manufacturing and a million-dollar company positively guarantee CHAMPION satisfaction.

Dealers-Write us for more information about Champions.

CHAMPION

RADIO WORKS, INC.

139 Pine Street

Dan Vers. Massachusetts

AC and DC Types





"KNOWN

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.



The Guarantee of the Manufacturer Protects you and your Customer

CROSLEY

New 6 Tube AC Electric GEMBOX New 8 Tube AC Electric SHOWBOX Improved 8 Tube AC Electric JEWELBOX \$95

AC Electric JEWELBOX

AC Electric GEMBOX

pletely self-contained AC set; in fact, the first AC set of any type to be offered set of any type to be offered at such an astonishing price. It utilizes three 226 tubes, two stages of radio and the first stage of audio with the non-radiating, regenerative 227 detector tube. The output tube is Gem-box is highly sensitive because of its non-radiating regen-eration. Distant stations can be built up to tremendous volume. It is highly with approximately 135 volts on the plate. It utilizes a 280 rectifier tube, selective. It operates from 100 to 125 volts AC line current and is made in two types for either 60 cycles or making a total of six va-cuum tubes housed inside its beautiful, gold high-lighted case. This set has a modern illuminated dial; 25 to 40 cycles. 25 to 40 cycles.

The output circuit of this set supplies the necessary DC current to take care of the field of the type E Dynacone in addition to the AC output which actuates the armature in the Dynacone. Or it can be used in connection with the type D Musicone, giving very satisfactory results. its coils are shielded. It utilizes the famous, genuine Neutrodyne circuit in combination with the nonradiating, regenerative de-tector tube, which in itself is equivalent to one ad-

The Improved BANDBOX ditional stage of radio amplifi-Whatever happens in 1928

Radio has never seen such value!
Crosley radio maintains its leadership
by always giving the public MORE
for its money than it expects. THE CROSLEY RADIO

ses ... an engineering triumph in ... a production miracle in PRICE.

\$95

8 tubes

6 tubes



\$65

6 tubes



The Bandbox has already proven itself a bright star in radio history. Genuine Neutrodynt completely shielded; Acuminaon distant stations; modern il-luminated dial... such are the amazing features that have made this storage battery type receiver the finest of its kind. Improvements and refinements place it in an incontestable position in its field regardless of price.



YOUR

You're there wit

1928-20RADI

New DYNACONE Dynamic Speaker Improved Battery Operated BANDBOX Improved BANDBOX JR.

\$80

Today, determined by laboratory and actual hor stallation comparisons, Crosley Radio on a dollar for dollar basis is superior in performance to any radio on the market. Now, Crosley makes it possible for any purchaser to know how a Crosley Radio will perform in his home before he buys.

CORPORATION, Cincinnati

AC Electric SHOWBOX



HOME

BOX JR. 6 tube Dry Cell receiver



TheMUSICONE Crusley Musicones became the world's fastest selling loud speaker several years ago when first introduced and have maintained that leadership ever since. Today this new model holds NO equal for value. Constantly improved, the Musicones have consistently given the world the full joy and pleasure of radio at low prices. The Musicone its inception in the field of magnetic speakers — clear, resonant, powerful and pure of tone!

Montana, Wyoning, Colorado, New Mexico and West, prices slightly higher.

The new DYNACONE

namic speaker having field coil magnets. These fields energize by direct current, giving the improved performance that is expected from dy-namicspeakers. The Dyna-cone actually reproduces the fundamental tones down to 50 cycles with a superior curve of response over the entire range up to 7,000 cycles. The Dyna-cone is made in two types; Type E for sets having NO superior curve of response

As both of these sets, being push-pull, utilize an out-put transformer, two of the put transformer, two of the leads from the speaker go inside of the set to pin jacks, which supply the DC field current from the power unit, and the other two leads plug in on the regu-New Dynamic Speaker lar manner and conduct the AC voltage, which actuates the armature and

out-put transform-er and Type F for sets utilizing an output transformer. Dealers will see that you get the RIGHT type for your set. The

type for your set. The Type F is particularly rec-

ommended for the Jewel-

box and Showbox described

in this ad.

gives forth the sound.
Price of the two identical.

5 days free trial coupon

THE CROSLEY RADIO CORPORATION,

I want to know more about Crosley Radio. I want to take I want to know more about Crosley Radio. I want to take dayantage of your offer to allow me a 5 day FREE trial in my own home. I cannot locate the nearest Crosley dealer so own home. I cannot locate the nearest Crosley dealer so please arrange the home demonstration for me.

Send Set In which interested here

a Crosley

ATWATER KENT RADIO

Take on Atwater Kent Radio and throw the red ink bottle out the window

What radio enables the dealer to make the greatest amount of profit on every dollar of the original investment?

ATWATER KENT RADIO

The public demand for Atwater Kent Radio—always the leader in sales—has been six times greater, from January to May, 1928, than

for the same period in any previous year.

The satisfaction of realizing quick and generous profits from the fastest turnover of capital has come to the dealers who have concentrated their sales effort on Atwater Kent Radio.

The Atwater Kent franchise, valuable in the past, will be even more valuable for this coming year.

ATWATER KENT MANUFACTURING COMPANY
4733 Wissahickon Avenue A. Atwater Kent, President Philadelphia, Pa.
On the Air—every Sunday night—Atwater Kent Hour—listen in!



Crosley, Jr., is determined that the consoled and cablinets designed to house Crosley Radio and containing the new Crosley Dynacone match the super-value of the receivers and the remarkable new dynamic speaker as well. Logically Crosley looked to the world's largest furniture manufacturer to produce such values. For in Showers Brothers' Co.'s plant he finds production comparable to his own—modern "straight line" manufacturing, organized along gigantie lines to produce in dividual units on the most economical basis. Showers designers turned to this task with free hands. From Showers perfected kiln dried lumber, solid, permanent construction by the famous Showers laminated process is introduced. Lovely veneers were selected to form the delightful modern patterns which make fine furniture so attractive today. Inspired wood carvers added decorative motifs, and rare woods are combined to make these consoles exquisite gems. Then mighty organization—skilled in mass production, applied its long experience to producing such beauty at prices the world will pronounce its greatest furniture values.

STUDY THE VALUE PICTURED IN THE CENTER OF THE PAGE

IN THE CENTER OF THE PAGE

Standing 38 inches high, this console pre
sents a lovely wainut surface so cut as
to offer the exquisite grain of the wood
to its fullest advantage. Decorated
with genuine wood carvings and containing the new wonder toned Crosley
Dynacone speaker. Price \$50. Behind it hangs a matching console
mirror which Dealers show at
\$11.00 and before it you catch
a glimpse of a specially designed tuning bench which
adds much to any room and
ean be bought for \$16.75.

Two leaders collaborate to create radios greatest value

Model C-1

Exquisite walnut veneers cut to show the full beauty of the grain matched and combined with rare zebra wood and moire walnut is decorated with genulne wood carvings. Fluted legs impart a delicacy to unusually sturdy construction. The hardware is solid brass. Full swinging doors open upon the radio control panel and the new amazing Crosley dynamic speaker — the Dynacone, with which cabinet is equipped.



\$84

Description of Model C-2

Fine walnut veneer has been matched to create a most beautiful combination of wood graining. Delicate carving has been added to complete a true work of art.

Description of Model C-4 Matched walnut veneer creates charming doors with over-laid decorations of curly maple veneer. Genuine wood carvings are high lighted and beautifully finished.

Model C-4 \$70



Crosley dealers now show this carved walnut console

eguipped with the new Crosley dynamic DYNACONE

AC Electric GEMBOX receiver

SHOWERS BROTHERS COMPANY BLOOMINGTON, INDIANA

Bloomington, Ind. Dept. 130.

I should like to see this featured console in it 5
C-3 in my home will you please arrange it.

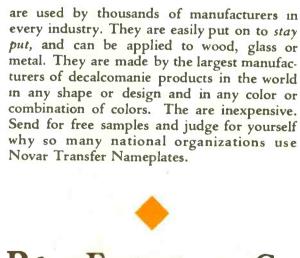
DAYS FREE.
Send me literature I have checked. Showers Brothers Co., Bloomington, Ind. Dept. 130.

Showers Brothers Fine Furniture for Living, Dining, Redroom, Kitchen Showers Radio Cabinets Celebrated Nurre Mirrors

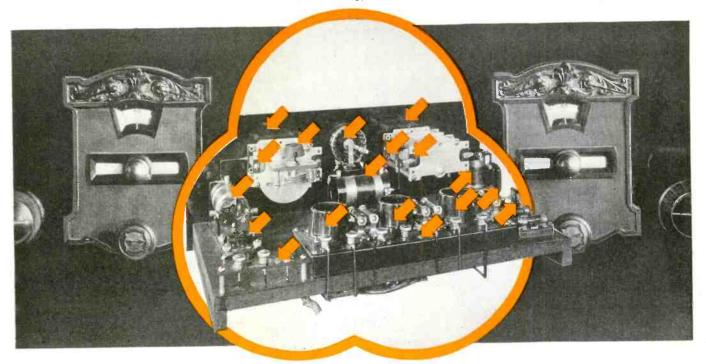
Name

PROTECT your name and your product. A Novar Transfer Nameplate on every article you manufacture is the last link in your advertising. It identifies your product, protects your customer and brings re-sales.

NOVAR TRANSFER NAMEPLATES



Palm, Fechteler & Co. 67 Fifth Ave., New York



Front Panel and interior of Daven Receiver, showing parts made of Bakelite Materials.

Made by Daven Radio Corporation, Newark, N. J.

"Practically the entire Daven Receiver is built of Bakelite Materials"

PRACTICALLY every part of the Daven Bass Note Set, from the Bakelite Laminated Panel and Bakelite Molded window dials and knobs, to the small Bakelite Molded condenser, is improved in performance and appearance through the use of these materials. In Bakelite Materials, Daven has found the solution of radio insulation problems, and has standardized on them for many vital parts, including:—

Front Panel— Window Dials— Knobs— Sub-panel— Variable Condensers—Fixed Condensers—Tube Sockets—Rheostats—Coils—Wave Amplifier—Resisto Couplers—Tube Bases.

When well known radio manufacturers lay such stress upon the importance of using Bakelite Materials in building their receivers, it indicates how desirable it is for radio dealers to forestall trouble by making sure that the sets and parts which they handle are Bakelite Insulated.

PAKELITE CORPORATION

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



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

Carryola





CARRYOLA No. 40-\$35

Very handsome. All metal parts gold plated; Tone Modulator, Patented, exclusive Bakelite tone arm and reproducer; Patented diaphragm; velvet turntable and Automatic stop. This new design is also provided with a patented, built-in Wood Record Container—50 inch air column, new type horn chamber and a motor that plays three full selections without rewinding. Beautifully finished in heavy Black or Brown Fabrikoid. Weighs only 23 pounds.



CARRYOLA No. 20—\$15 New type horn chamber and other substantial improvements make this new model by far the greatest value ever offered below \$25.00.

MASTER MODELS FOR EVERY



Introduces

Three Entirely New and Improved Master Models



FINER music—bigger, handsomer instruments—with the most amazing improvements ever built into a portable phonograph, mark the introduction of the new Carryolas.

As the dominating factor in the portable phonograph business, it is only natural that Carryola should be first with outstanding improvements to still further increase the popularity, sales and profits of its vast army of successful dealers.

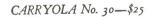
We are proud to introduce these splendid new Master Models to the music lovers of America. In all the world of acoustical science there is nothing that can be compared in VALUE, quality and richness of tone, in refined beauty of design, or the mechanical perfection of the Carryola line for 1928 and 1929.

You will be delighted with their new, larger sizes, refined elegance of color and finishes, their new reproducers, volume control, Bakelite tone arm and other features—together with the most extensive national advertising and sales program ever given to merchandise of like character.

These new Master Models make their formal bow to the musical world during the Music Trades Convention in New York City, week of June 4; Chicago, week of June 11, and West Coast Music Pageant, week of June 18. We invite you to see and hear them there and then, or write now for our beautifully illustrated and completely descriptive booklet.



The World's Largest Manufacturers of Portable Phonographs 645 Clinton St., Milwaukee, Wisconsin



With long air column horn chamber of unique design; Patented, exclusive Bakelite tone arm and reproducer and Patented diaphragm. Motor will play three selections without rewinding; Velvet turntable—finished in new special design Fabrikoid, in Black, Blue, Green, Red and Brown.



HOME AND FOR EVERY PURSE



Freshman Leads

LWAYS in the van—a few steps ahead of the crowd—again Freshman will surprise the industry with something new at the Chicago Show. Not just "new"—there's little merit in that—when Freshman says "new," it means "better!"

And before the show—the "so-called" slow season? Not for Freshman dealers. A nation-wide merchandising and advertising campaign offering tremendous reductions in prices on standard, up-to-theminute Equaphase Electric Radios, enabled every Freshman dealer to do volume business.

Freshman Radios are sold direct to Franchised Dealers. This assures the most profitable type of merchandising and advertising co-operation. We Hope to see You at the Show

CHAS. FRESHMAN CO., Inc.

Freshman Bldg., New York 2626 W. Washington Blvd., Chicago 800 N. Spring St., Los Angeles

McGraw-Hill Publishing Co., Inc. JAMES H. McGraw, President EDGAR KOBAK, Vice-President

EARL WHITEHORNE Editorial Director WILLIAM ALLEY

Managing Editor

Vol. 7

IUNE, 1928

No. 6

It is Time for the RADIO INDUSTRY to Make Its

OICE Heard in the



ARKETPLACE

FTER all, it isn't how much money people earn that interests an industry. How do they spend the money that they have?that's the point.

The important thing to the automobile man is the amount the average family sets aside in the budget or takes out of the bank account for motor cars. Just so, it makes no difference to this industry of ours how much the household spends if they are not buying radio. But we are very vitally interested in the possibilities for influencing the American home to a greater desire for radio entertainment and a more exacting appreciation of quality in radio reception. For that, we know, will give to radio a greater relative importance to the domestic purse and people will put more money into radio and less into something else.

This is the new conscious phase into which American industry is drifting. This is the "new competition" that we hear so much about. This is the basis of the new idea of competitive selling between industries that, for example, has increased the amount of money spent in national magazines in co-operative advertising by associations, from about \$450,000 in 1919, to \$5,000,000 in 1927. It is for this reason that the Copper and Brass Research Association is spending approximately \$450,000 a year and has increased copper consumption about 125 per cent since 1921 because people are using more brass pipe and copper gutters and so on. And for the same reason the Society of American Florists is now spending \$2,000,000 on a four-year program, and in four years has doubled the consumption of cut flowers.

IN A WORD, the sales problem of the radio I manufacturer, the radio wholesaler and the radio retailer today is not primarily one of contesting for supremacy among trade names. The prosperity of the radio industry rests upon the extent to which John and Mary in their typical American homes buy radio sets instead of signing checks or term contracts for motor cars or phonographs or putting the money into furniture or clothes or a vacation.

And right here it might be well to ask a question—Just what is the radio industry doing about this?

The radio industry is doing nothing about it in any organized way. The radio industry is not

even making plans. Some 108 co-operative market building programs were in active operation last year by other industries, many of them directly competitive with radio, because the dollars they. take out of the home will not be spent for radio. But the radio industry is busy with its intra-family fight. Each manufacturer is absorbed in struggling to get the business for himself. We even have two rival manufacturers' associations, eyeing each other askance. And the radio industry in its rush and busy-ness has not stopped to realize that the real battle in the marketplace is, after all, an interindustry campaign of radio entertainment versus the other good things of life. They have forgotten that the way to win this kind of battle is by organization and a plan and co-operation and leadership.

TS RADIO to be outclassed in the "new competition"? Are home movietones or film phonographs or wired wireless programs or some other similar diversion to come along with new fad appeal and displace radio from the popular fancy? Or is the radio industry going to get together and make itself heard in the land?

There is only one sure way for radio to build itself permanently into the fabric of American home life. It must so sell the entire people on the pre-eminence of space radio for entertainment, news and educational programs and for its enterprise and leadership in the advancement of the art in terms of tone quality and scope of service, that public confidence cannot be shaken and unsettled by counter appeals.

The radio industry must raise its voice in the It must speak with unity, with marketplace. the strength of knowledge and of purpose. It must begin to talk to America with the message of a unified industry, clear cut and confident. The time has come for associations, corporations and individuals to get together—for radio. Radio needs a broad program of co-operative advertising backed by the organized strength of the entire industry, and directed to the single purpose of sustaining and increasing its popularity in the American home. This campaign of market-building should be undertaken by one or both of the radio manufacturers' associations and should start at once—before radio finds its market undermined and stolen away by "new competition."

The UESTION-



Last February, "Radio Retailing" asked, "Can the Music Trade Make Money Out of Radio?" The answer was sought direct from the music trade itself. Here it is-

ROOF is at hand that the music trade can make money out of radio. The average music store's inventory is right; its management is right, generally speaking; its costs are right and its net profits on the actual business done are right-but-

The music store is not doing enough business with these factors; gross sales are too low in proportion to inventory carried and turnover is too slow to give the music store

enough total profit at the end of the year.

All these facts have been brought to light by means of an analysis made by Radio Retailing through questionnaires submitted to more than 1,000 of the leading musicradio stores throughout the country. This survey, the editors tell me, brought a larger percentage of returns than any survey previously made on any subject, indicating a great amount of interest on the part of the music trade, in the radio situation generally.

Here are the facts, obtained from the music trade itself: The average price of the radio outfits installed by radio-\$4,684.09 in radio (retail value), and is selling \$22,-276.88 worth of radio in a year. The turnover is 4.7 times a year, which is not as high as it should be. The net profit is 5.23 per cent, which is also too low. The average radio-music store sells 102 sets a year, or an average of two a week, which might be increased to three a week on the same inventory and overhead.

The average price of the radio outfits installed is \$218.40, including accessories and installment charges.

The radio department of the average radio-music dealer does 38.06 per cent of his entire business. Some of the individual returns show as little as 5 per cent in radio, and some are as high as 90 per cent.

HE average music dealer's records show that he is I making a faster turnover in radio than he was formerly making, and better than he is making in other lines; that he is fast getting the hang of installing and servicing radio sets; that his selling methods, his demonstration facilities, his instalment experience, and his various other qualifications, all go to make his store a natural outlet for radio-

-BUT his net profit is too low! He is getting tuned in to radio, but he wants the interference and static removed. The serious interest of the music dealer in radio, as demonstrated by the returns from our questionnaire, is shaping itself into very pertinent questions as to trade discounts, methods of distribution, guarantee of merchandise, service requirements, integrity of jobbers, protection of dealers and kindred subjects.

Outstanding are the demands of the music dealer that he be given greater discounts from list prices, and that the lines of wholesale and retail distribution be tightened up so that he will not suffer from cut-throat price competition. A growing dissatisfaction with loose jobbing methods is very marked in the suggestions made by the

music trade for the radio manufacturer.

The ANSWER-

An analysis of how the music trade is selling radio, made by means of a survey in person and by mail, of 225 representative musicradio outlets scattered throughout the country

By C. L. DENNIS

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

Whether the solution of the problem as to greater net profits lies in bigger discounts or in better management may be determined by an analysis of the figures which *Radio Retailing* has obtained.

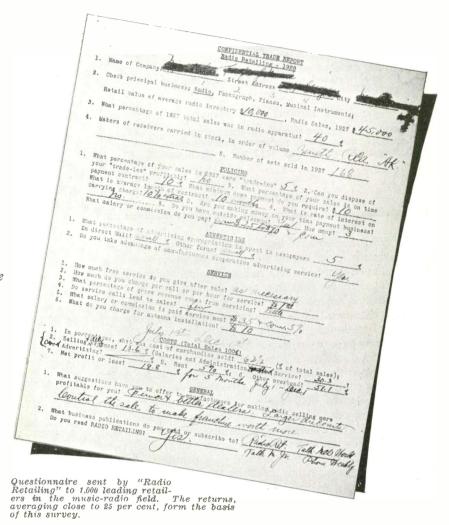
What do our figures on sales and turnover seem to indicate? Unless he is carrying too much dead stock—obsolete sets or poorly chosen merchandise—the average music dealer has a good assortment of sets for his customers to choose from. The size of his inventory proves that. Without increasing the size of this stock, or perhaps by weed-

ing out some dead merchandise, he might well increase his turnover twice a year more, without any great increase in overhead. In other words, he might well dispose of three radio sets a week instead of two, as he is now doing, at very little more expense. When we come to the facts revealed by our returns on advertising and sales expense, it is likely that we will find a road to more rapid turnover.

However, it is worth noting that the present turnover of 4.7 times a year is increased from 3.7 which the survey made by *Radio Retailing* and the Music Industries Chamber of Commerce in 1925 revealed. This increased the net profit from 2.6 per cent in 1925 to 5.23 per cent in 1927.

With a net profit of 1.12 per cent per inventory turn, as our new figures indicate, increasing the turnover two times, or the sale of one more set a week on the same inventory, would give a yearly net of 7.47 per cent on the same amount of stock carried.

In the matter of terms and other sales policies, the music trade makes a good showing, due to its familiarity with instalment contract accounts. The reports



show that 28.3 per cent of the average music dealer's sales are for cash. The time payment sales are made with fairly good down payments, ranging from 10 to 33½ per cent, with an average of better than 25 per cent. The contracts are limited as to time, with an average of 9.7 months for contracts to run, a great majority limiting their time payments to ten months or less. The deferred payments carry an average revenue of 7.3 per cent interest or carrying charge. It may be noted that the carrying charge is comparatively new in the music trade, even since radio came into the field, and a goodly number of dealers have tried out the two new things together, taking a leaf from the book of the electric merchandiser who had his time price and cash price years before.

The average price of sets sold by the music dealers reporting is satisfactorily high, amounting to \$218.40 for a complete installation, including accessories. Considering this high average, it is interesting to find that the music dealer has avoided any considerable volume of trade-in business so far. Although the average percentage of trade-in business reported is 14.8 per cent, the

The Average Music Store's **Policies** Percentage of total business done in trade-ins 14.8 Can you dispose of trade-ins profitably? (Percentage answering "Yes")...... Percentage of total business done on time 34.5 payments. 71.7 Average size of first payment.... 25.3 9.7 Average length of contract, months..... Average per cent of interest charged. 7.3 Are you making money on time payments? (Percentage answering "Yes") 83.1 72.3 such salesmen), men.... 2.15 Payment of Salesmen Straight salary, per month (average amount). \$134

and 97% read Radio Retailing

Straight commission, per cent (average size). 10.1 Salary and commission, \$112 per month and 3.1%

majority of dealers have kept this under 10 per cent, and the average is increased by a few dealers who report that half and even more of their radio sales include trade-ins. The indications are that they are a growing factor in the music dealer's business, and a dangerous one, in view of the fact that two-thirds of the dealers say they cannot dispose of trade-ins profitably.

The average cost of radio merchandise to the music merchant is down to 62.7 per cent, as compared to 75.2 per cent when the last figures were compiled three years ago, and as compared to the most recent figures available from last year of 66.4 per cent for radio dealers generally. This would indicate that the music dealer's demand for higher discounts from list prices has been recognized to some extent, but he is not satisfied. There is a very general demand on the part of the trade for greater discounts, as the sales resistance increases and selling expense goes up.

ADVERTISING, SALES AND SERVICE

THE radio advertising expense of the music dealer is low, an average of 3.88 per cent for the members of the music trade reporting. This might well be increased 25 per cent more, because the average advertising expense of retail sales generally is 5 per cent, according to figures which have been published in *Radio Retailing*, and according to the records of the music trade's advertising of other lines. In this neglect of advertising we may find a solution to the problem of increased turnover, which appears to be the most promising source of bigger profits under the present gross margin.

Of this limited appropriation for advertising, the average music dealer spends 62.2 per cent in newspapers, 21.2 per cent in direct mail, and 16.6 per cent in other forms of advertising. It is possible that an increase of the direct-by-mail advertising expenditure, plus a more aggressive sales follow-up of prospects resulting therefrom, would result in the increased turnover to be desired. By "other forms" of advertising, we take it that the music merchant charges a certain amount of his general expense for outside help and material in trimming windows, programs, etc., to his radio department. Is it possible that

he has neglected to put his best foot forward in presenting his radio wares, through window displays and promotion which require the exercise of constant ingenuity?

Another factor wherein the music dealer may well study his sales possibilities is in the service department, inasmuch as nine out of ten dealers say that their service calls lead to sales. Here, again, we may find the answer to increased turnover.

SPEND MONEY TO MAKE MONEY?

I T IS not a popular argument in these days of mounting costs, to advocate the spending of more money to make money. Yet these average figures of the music trade warrant us in venturing the opinion that a more aggressive advertising policy and a stronger selling personnel would produce far greater net profits, through more rapid turnover, with the same stock investment and without increasing the general overhead.

Although the average sales expense of the music dealer is not too low, the retail salesmen seem to be underpaid. A majority of the dealers reporting use two or more outside salesmen, but the latter make an average salary of \$134 a month, which is too low to attract high-caliber hustlers, and very little more than is paid to service men. On a straight commission basis, the average of 10.1 per cent is about right. It seems likely that the combination salary and commission basis, with a little higher commission added to the salary, would attract higher-class salesmen and produce bigger sales and a better turnover without unduly increasing sales expense.

In the matter of service expense, the music dealer is out of line. He has an opportunity here to increase his service revenue, employ better men, make his service more acceptable to the customer, take advantage of the sales appeal through service, and release more money for advertising and net profits—all without added expense to himself.

The figures show that the service expense of 5.18 per cent of his gross revenue is too high. His revenue of 6.55 per cent from service is too low in proportion to service costs. He gives too long a period of free service after the sale—3.9 months on the average. This is too much. His average charge of \$1.64 an hour for service is too low, unless he establishes a standard minimum charge for each call after the period of "free service" is passed. The latter could well be reduced to one month, or two at the most, or possibly limited to three calls within two months after the installation.

Service men's salaries are not high, so the service costs are not increased unduly on that account. There is a trend toward paying service men a straight commission

The Average Music Store's Sales

Size of radio inventory Annual radio sales Total sales (radio and music)	\$4,684 \$22,276 \$58,294
Percentage of total sales accounted for by radio Average radio turnover, times Net profit on radio sales, per cent	38.06 4.7 5.23
Net profit per inventory turn, per cent Number sets sold annually Average price of installation (including ac-	1.12
cessories)	\$218.40

(All tabulations on these pages made by averaging total returns)

of 10 or 15 per cent, instead of salary, or to reduce the salary and pay a small commission averaging 4 per cent. The latter course seems to be wiser than straight commission. The reduction of service costs appears to lie in more knowledge of the subject, less free service, and a revision of service charges upward.

Progress in Servicing Sets

T HAT the music trade is progressing in its service policies is shown by the average charge for installation of \$10.80 as against \$8 shown by the figures gathered three years ago, which included antenna materials. There is plenty of evidence that the music dealer is rapidly learning his service lessons. He has this problem much better in hand than was indicated by previous reports of service experience. He has learned that the owners of sets are willing to pay for service that is actual, real service. They are not willing to pay for slipshod, indifferent service, nor do they want such service "free."

The manufacturer is not without blame in the matter of customer dissatisfaction, it would seem, from the suggestions offered by the music trade that he supply better sets, provide for more careful tests at the factory, and thus lessen the service requirements for the dealer. One source of customer disgruntlement is to have a set out of use for weeks at a stretch while it is returned to the factory or jobber hundreds of miles away for attention.

It is worthy of note that the music dealer now sticks to standard lines of radio, presumably from his experience with the phonograph business and the name value of piano lines and other instruments handled. The earlier experience of the trade was contrary to this, and it would appear that the average good dealer has come to the conclusion that two or three lines of standard, advertised radio sets are the most likely to produce profits for him. They usually cover his price range, with a high-priced quality line or perhaps two, and a popular-priced line.

MERCHANDISE MORE TO HIS LIKING

IT IS also well worth noting that the dealers who report the best turnover are the ones who handle the standard lines.

The music dealer sees the radio business getting down to the first principle in selling appeal—what will the merchandise do for the customer in the way of home entertainment and home adornment? He is beginning to sell it on that basis.

The music dealer wants a complete unit, and the electric set has brought it to him. This coming of electric sets has been a big factor in the music trade's acceptance of radio. The high-priced units, too, are more in keeping

The Average Music Store's Costs

9	
	62.7 37.3
Total operating costs, per cent Average annual net profit on radio sales, per cent	32.07 5.23
$(Retail\ sales=100\%)$	

The Average Music Store's Advertising and Service

Percentage of radio sales spent in advertising	3.88
Portion of advertising appropriation spent in newspapers	62.2
in direct mail	21.2
in other forms	16.6
Do you use manufacturers' co-operative advertising plans? (Percentage answering	1
"Yes")	92.6
Average length of free service, months	3.9
Average service charge per hour	\$1.64
Average charge for antenna installation	\$10.80
Percentage of total revenue derived from	
service, per cent	6.55
Do service calls lead to sales? (Percentage	
answering "Yes")	91.1
Payment of Service Men	
Straight salary, per month (average amount)	\$131
Straight commission, per cent (average size).	11.5
Salary and commission, \$100 per month and	

with the larger sales which the music dealer has been accustomed to making. He knows more also of the furniture aspect, fine cabinet work, period designs, etc., through his experience with the piano and the phonograph. The electric pick-up for the phonograph attachment is another factor to influence the music merchandiser. He has become familiar with electric equipment through motor-driven reproducing pianos and phonographs.

ARE BIGGER DISCOUNTS THE ANSWER?

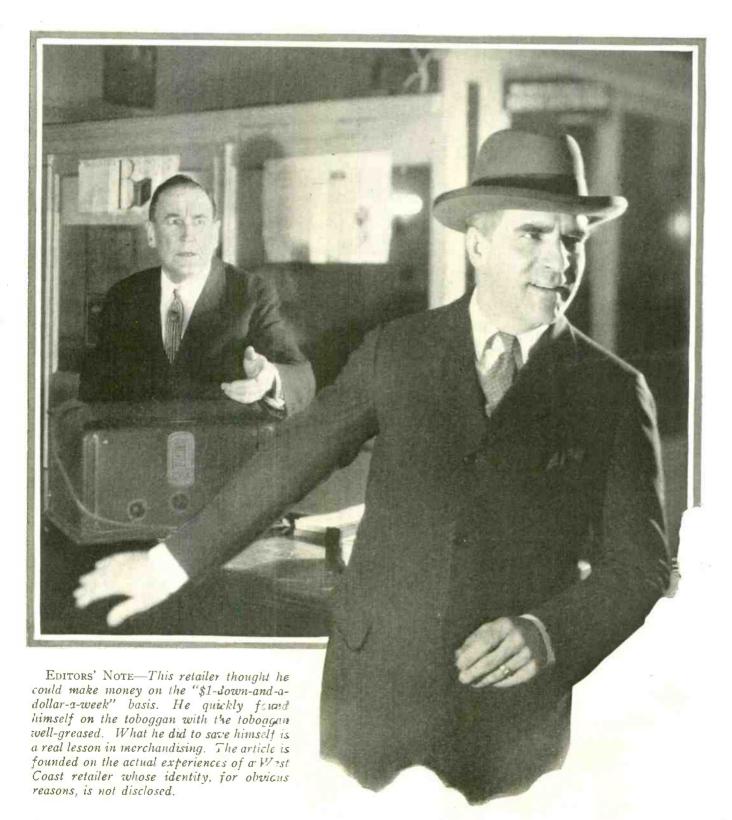
W ITH these things more clearly defined, the music merchant wants to know why his net profits are not what they should be. He believes that the solution lies in bigger trade discounts, but he is not overlooking the fact that these must be accompanied by a more careful scrutiny of sales outlets.

The suggestions to manufacturers even go so far as to advocate the abolishment of jobber distribution; certainly there is no doubt in the music dealers' minds that there are too many jobbers and too much indiscriminate placing of agencies. There are frequent complaints of bringing out new lines before giving the dealer a chance to dispose of old stock, and requests to bring out new lines early in the year instead of late in the season. The dealer wants fewer models and more efficient, standardized sets, to avoid the complications of servicing them. One suggestion from several quarters calls upon the manufacturer to supply and price his sets with complete equipment.

Almost invariably the suggestions come back to the question of increased discounts. The present discounts have been figured on a rapid turnover; there is no allowance made for the trade-in factor or increasing sales resistance as the market becomes supplied. Good merchandise in appearance and performance, at a fair price which will meet competition, and a limitation of jobber and dealer distribution to coincide with the limitatons of the market—these are what the music merchant needs to make radio pay. With them he may figure to increase his sales and his net profits by speeding up his turnover through increased advertising, higher-caliber salesmanship, and better service.

Either that—or bigger discounts—are the music trade's suggested methods of securing the necessary larger net profits.

" S OWN



Doesn't PAY!

Small down payments almost ruined this store what this dealer learned from the experience

By C. Grunsky

BELIEVE," began Mr. Brown, "in adequate down payments in selling radio."

The statement is a simple one, but it requires some explanation. First, the interviewer had approached Mr. Brown knowing that during the past year his firm had, for a short period, sold radio on a small down-payment basis, and we wished to get a record of his experience. Secondly, the retailer's name is not Brown, but he prefers, and the manufacturer who encouraged the idea prefers, that his identity and place of business remain undisclosed.

Suffice it to say that he is a well-known merchant in a Western community of several hundred thousand population; that his firm caters to a large, if not the most socially élite, clientele in the community; and that he is accustomed to show a very substantial profit on his books at the end of each season. In other words, his business methods, as a whole, are successful, and although not always looked upon by his neighbors as conservative, in the main, are sound.

His customary policy has been to ask for a 25 per cent down payment, with ten months to pay in installment sales. Last year, however, a change was made in certain models of a line he carries and he found himself with a considerable stock on his hands which was in danger of rapidly becoming obsolete. Moreover, his jobber and the manufacturer were in somewhat the same predicament and they encouraged him to try an experiment in installment selling.

"One dollar down and the rest in small monthly payments," had read the advertisements of a local piano company that had remained in business in the community

for a good many years and that seemed to have been able to outlive all prophesies of disaster made on account of the adoption of this policy. He himself had had a very successful experience in the sale of vacuum cleaners with small down payments. Why would it not work in the case of radio since it had worked with pianos and vacuum cleaners?

Two types of sets were chosen for the experiment. One was a set selling in the neighborhood of \$100. On this set a down payment of \$10 was asked—approxi-

mately ten per cent. The other set, selling between \$30 and \$40, was particularly featured and on this the offer was modeled after that of the piano dealer, "\$1 down and a small payment each month."

There was no spectacular newspaper announcement of this event, but the sets were featured in the windows and evidently the offer proved attractive. The day the sale started was a busy one and every day thereafter proved to be more so until the entire stock of several hundred sets was gone.

"THE people who came in to buy them were obviously not well-to-do," says Mr. Brown, "but they were respectable appearing people and in each case they were glad to give references." Contrary to the usual practice of the store, the references were followed up only casually. That is to say, in every case it was ascertained that the man was actually working where he said he was and that he lived at the address he gave. Further than this the investigation was not pressed—credit was granted and the set delivered.

What was the result? The first month's payment brought an alarming number of defaults, the second month even more. In a surprisingly large number of cases the family had moved from its address almost immediately following the purchase and was not to be located. Several were traced to nearby cities, but in such cases when pressed for payment they almost invariably returned the set, refusing to make further payments. Actual theft of the goods—the customer disappearing so that it became too expensive a matter to attempt to trace him—was more common with the lower priced set.

Before the matter was finished with, the store had written off a full fifty per cent of the sales.

"Radio apparently is an article which appeals to all classes," Mr. Brown offered in explanation, "and our small initial down payment further appealed to the least desirable class of transient worker. These people would not purchase a vacuum cleaner on the same terms, because a vacuum cleaner would not interest them. Neither, I presume, would they want a piano. The radio appealed

(Please turn to page 108)

"WHEN a rumored price cut or a change in models threatens to leave you with an unwelcome slow-moving stock on your hands don't try to move it with the small, down-payment 'bait,' says this merchant, who tried it to his sorrow.



Maintaining a budget and balancing it regularly result in accurate knowledge of income, expenses and profits

By Ray V. Sutliffe

(Merchants Who Have Made Radio Pay-No. 17)

O YOU make up an advance budget of your estimated expenses for your fiscal year? If so, do you balance your estimates against actual expenses and then balance that against actual income?

It is important that every business should work on the budget plan. But it is more important still that the budget be balanced regularly.

The Chattanooga Radio Company, Chattanooga, Tenn., has worked out a budget plan that keeps its owners fully informed as to the financial progress and status of their business. In the opinion of Norman Thomas and Earl Winger, partners, their system of budget maintenance and balancing has been of tremendous value in keeping their business in black ink.

In 1922 these fellows put \$250 apiece, all the money they had, into the pot and opened a radio store. They had, however, other assets—of greater value: a thorough technical training, a passion for business integrity and an overwhelming desire to know where the money was

coming from and where it was going. Here is their gross sales record to date: 1922, \$13,000; 1923, \$26,000; 1924, \$34,000; 1925, \$40,000; 1926, \$46,000; 1927, \$52,000.

The business for last year showed a net surplus slightly over \$6,000 (11 per cent) and earned 21 per cent on an invested capital of approximately \$27,000. Assets are listed as in excess of \$31,000. The firm discounts all its bills and handles all its own term paper, at a banker's profit in excess of 15 per cent.

What's the answer? Three things: These boys know their radio, they work hard, and they watch the figures. And they watch the figures by means of their "balanced budget" illustrated on these pages.

"The dealer who says he hasn't time to keep costs or itemize sales by months hasn't time to think about losses or net profits either," declared Mr. Thomas. He then clarified his immediate objectives as follows:

(Please turn to page 68)

UDGET

Budget Control Sheet of Chattanooga Radio Company Based on Gross Sales, for Fiscal Year, of \$50,000

Month 1927	Publicity	Autos,	3	4	5	6 Cost	7	. 8	9 Net	10 A) 11 12 Accumulative	
1927	(5% of Sales)	Servic- ing	Occu- pancy	Operat- ing	Selling	of Material	Total Expenses	Gross Sales	Profit or Loss	Exper	ises	Sales	P or L
April	\$100	\$165	\$240	\$280	\$300	\$2,205	\$3,290	\$3,500	\$210	\$3.2	90	\$3,500	\$210
Арин	135	187	182	270	300	1,081	2,155	1,764	391	2,1	55	1,764	391
Mav	100	165	240	224	300	1,890	2,919	3,000	81	6,2	09	6,500	291
May	67	93	344	240	300	756	1,800	1,260	540	3,9	55	3,024	931
	100	140	240	224	300	1,638	2,642	2,600	42	8.8	51	9,100	249
June	24	174	180	233	300	702	1,613	1,168	445	5,5	68	4,192	1,376
July	50	130	260	224	300	1,071	2,035	1,700	335	10,8	86	10,800	66
July	40	105	213	220	300	1,042	1,920	1,703	217	7, 4	88	5,895	1,593
A	100	130	240	224	300	945	1,939	1,500	439	12,8	25	12,300	525
Aug.	48	213	305	210	300	1,360	2,436	2,200-	236	9,9	24	8,095	1,829
C	150	140	240	224	300	2,520	3,574	4,000	426	16,3	99	16,300	99
Sept.	102	239	226	230	310	2,420	3,527	3,900	373	13,4	51	11,995	1,456
0	250	160	240	320	350	2,835	4,155	4,500	345	20,5	54	20,800	246
Oct.	24 i	152	408	345	365	3,048	4,559	4,918	359	18,0	10	16,913	1,097
7kT	300	190	240	440	400	3,591	5,161	5,700	539	25,7	15	26,500	. 785
Nov.	362	214	205	460	397	4,747	6,385	7,646	1,261	24,3	95	24,559	164*
D	450	240	240	440	450	4,662	6,482	7,400	918	32,1	97	33,900	1,703
Dec.	531	276	228	462	492	8,994	10,983	14,517	3,534	35,3	78	39,076	3,698
1928	400	220	270	460	400	4,158	5,908	6,600	692	38,1	05	40,500	2,395
Jan.	371	223	285	430	381	4,281	5,971	6,903	932	41,3	49	45,979	4,630†
Feb.	350	190	240	440	400	3,465	5,085	5,500	415	43,1	90	46,000	2,810
Manah	150	150	240	350	400	2,520	3,810	4,000	190	47,0	00	50,000	3,000
March			+2.00	+2.050	A4 200	421 500	447.000	450.000	-2.005			*50.000	42.00
Totals	\$2,500	\$2,020	\$2,930	\$3,850	\$4,200	\$31,500	\$47,000	\$50,000	\$3,000	\$47,0	- 1	\$50,000	\$3,000

Key-Above broken line-estimated

Below broken line--actual

Col. 3. Includes insurance and taxes. Col. 4. Includes depreciation and miscellaneous. Col. 6. Estimated by applying past material cost percentage to gross sales.

Figures in italics indicate loss.

†Actual net profit to date.

In COLUMNS one to five, operating expenses are broken down into their fewest number of logical sub-divisions.

The next item, cost of material, averages 62 per cent of gross sales. This favorable figure comes from the following economies: buys from local jobber, tubes kept under lock and key, service more than self-supporting, many accessories bought at better than 45 per cent discount, few "mark-downs," as the Chattanooga Company buys current goods in small lots and takes cash discount.

Subtracting total expense from gross sales gives us the final column (9) in the first block. An anticipatory estimate of cost of material and desired net profit is necessary in order to supply all the elements which go to make up the item, "Anticipated Gross Sales." (Col. 8 above broken line.)

If actual sales and expenses come within five per cent of estimated values the budget may be said to "balance." And, what is of greater importance, a satisfactory net profit will result. If, however, there is an unbalanced condition, due to overweight on the expense side, policy corrections must be made if a healthy condition is to be restored.

Note that business for the first three months was less than ex-

pected and that the operation showed a loss until September. Accumulative losses were not wiped out until November. From that time on, due to special advertising and holding costs to a minimum, a substantial profit was registered.

The importance of columns 10, 11, 12 cannot be too strongly emphasized. Accumulative totals are of greater significance than disconnected monthly comparisons because it is the status of the entire past history of a business for its fiscal year that determines its prosperity at any given time. For example: according to this table (col. 9) the business showed a net profit for September; yet, actually, it still was \$1,456 in the red (col. 12) as of Oct. 1, and did not show an actual bank balance profit until some time in November. Notice that the real profit balance months for this radio specialty concern are from November to April (col. 12). Observe also that estimated expenses, as well as actual, show losses for July. August and September (col. 11) and that the budget did not really balance until November.

Column 12, accumulative profit or loss, is a "keynote" record because it reflects the answer to the question—"Am I in business for my health or to make money?"

- 1. Set a mark and establish a means of knowing the rate of progress toward that mark.
- 2. Cut costs—by following the budget closely
- 3. Build sales—through establishing a reputation for business integrity.

THE keeping of written records of business progress divides itself naturally into two parts, the story of what actually is happening and of what *should* happen if net profit is to be maintained. For the accomplishment of the first necessary piece of bookkeeping, this concern uses standard forms of cash control. There are available a number of standard forms for keeping daily, weekly and monthly records of all financial transactions, stock movements and profit or loss summarizations.

Because these Chattanoogans had these necessary statistical records of daily income and expenses, they were able to set up a budget sheet or "target" for 1927 and again for 1928. This budget plan of operation is the most important factor in their success, according to these business men. "If the budget plan is good enough for Coolidge and Mellon, it's good enough for me," declares Thomas.

Indicative of the value of such a sheet is the following circumstance: The fiscal year, with this concern, runs from April to April. Last September there was a discrepancy of \$11,000 between the total volume of business which should have been transacted, as of the first of that month compared to the previous year, and actual performance. Sales were running behind, to say nothing of the extra "bogey" which had been added to the budget to allow for a normal, healthy expansion. This situation was met by conducting an unusually aggressive advertising campaign during October, November and December.

Anyone could see a situation of that kind, and apply the same remedy, without a budget, it will be claimed. True, but, as Thomas points out, can one be certain, by rule-of-thumb reckoning, that this additional publicity effort could be made without a corresponding sacrifice of net profits? In his case, because the budget is kept by major expense divisions, he was in a position to know where to prune from other items in order to carry through this special publicity expense without jeopardizing final profits.

THE "anticipation" sheet, as devised by the company in question, is just about as simple, consistent with effectiveness, as can be drawn up. It provides, as all good budgets should, for estimated sales by months, actual sales by months, estimated expenses by major classifications by months, and actual expenses. Thomas has not allowed columns for carrying forward the growing or "accumulative" totals. It is important that this be done in some manner or other, because the chief interest lies not in a monthly comparison of sales for that month only but in a monthly comparison of total, or accumulative, results to date. Thomas does the latter every month on his adding machine. This operation he calls "balancing the budget."

If sales to date are lower than anticipated, or expenses higher, he knows, and *knows in time*, that something must be done about it. If sales cannot be increased, without the expenditure of more money than his budget margin will allow, then expenses *must* be pared if net profit percentage is to be maintained. This is the theory of the budget system and this is the policy to which

Thomas and Winger give the lion's share of credit for whatever prosperity they may have extracted from the retailing of radio.

The third objective—building sales—may be treated briefly. An examination of the yearly sales figures shows that gross volume for any one year was not unusual. Hundreds of dealers are selling as much.

Winger and Thomas used all the approved selling methods. Shouted radio from the housetops from the first. Spent five per cent for advertising, followed all leads to their lair, "used the user," kept each set in an operative condition, connected each set up in the store and gave it a program test before delivering. (This is not done by many dealers. Winger recommends it highly).

But this is a story of cutting costs, of getting a more than living profit out of average gross volume. Here are the economy policies that have been followed consistently since 1922:

They get the recommended selling price—getting full

prices is an economy.

Up until 1926 it was a two-man outfit. The partners sold and serviced. Last year, when \$52,000 gross was run up on the cash register, they added, during the busy season, one full time and one part time servicer and a part time bookkeeper. Prior to last October one of the firm kept the books, and kept them well.

The store is a modest one, but in an excellent location.

Rent \$150 a month.

A separate inventory is kept for tubes. These evasive net profit killers are kept under lock and key. Every one must be requisitioned and accounted for.

Less than ten per cent of sales are made on a trade-in

No service calls after six p.m.

Charges \$2 per service call after the 90-day free service agreement expires.

Takes two per cent for cash in ten days.

Makes a banking profit on all time payment contracts.

THE question arises, "How can this company enforce these rulings?" The answer is that it does. It takes a firm stand, has always done so, and established this reputation in the early days. Everybody in Chattanooga knows that Norman Thomas and Earl Winger are doing business on a businesslike basis—and everybody admires them for it. "Those fellows must be good if they can afford to cut out night servicing and charge for what they do give. After all I guess I want reliability and I know I can get it there."

One of the most profitable activities of the Chattanooga Radio Company is its practice of carrying its own paper. Sixty-five per cent of its sales are made on terms. Half of these agreements are in the form of 30, 60 and 90-day notes. This paper is renewable and carries a "retention of ownership" clause. The regular banking charge of eight per cent on notes is enforced. On its mortgage contracts a charge of one per cent per month, on the original unpaid balance, is made. On a ten-month contract this is equal to well over twenty per cent on the money actually tied up by the dealer.

cent on the money actually tied up by the dealer.

"It is a difficult matter," said Mr. Thomas, "to show on paper the exact amount of this banking profit at any one time or to show how it is arrived at, as every account is in a constant state of flux. Old ones are being closed out and new ones added constantly. However, our bank balance indicates that we are making just about sixteen per cent on the money which is thus tied up."

Making SERVICE

Self-

Supporting

From a losing proposition to 30 per cent net profit is the record of this Atlanta, Ga., concern's service department

YON & KING, in Atlanta, Ga., have worked out a plan whereby they have succeeded in converting their servicing end of the business from a losing department into a self-supporting proposition.

They formerly operated their service department under much the same plan that many other radio merchants operate

it—by hiring service men on a flat salary and supplying them with trucks—but they never seemed to be able to show much profit from the department under that system. Under the new plan, however, they make a profit on every call and the best part of it is the service men make more money and are better satisfied.

Under the old system the firm paid the service men a straight salary of \$35 per week and maintained a fleet of trucks for the different men to make service calls with. Under the new plan the firm pays the men 60 per cent commission on all service calls and the trucks that were formerly owned by the firm have been sold to the men who pay all operating expenses connected with the trucks, including the repairs. The men are also paid a 5 per cent commission on all parts and new sets sold.

A SCALE of charges is in force with city day calls being charged for at \$1.50 a call, night calls \$2 per call while calls outside the city at any time are \$2.

One of the most noticeable results of this new system has been that service calls are more promptly attended to and the work is done right and done that way at first because the service men do not get any money until the customer has been satisfied. Thus poor work has been climinated. Furthermore, the company knows that the

TREASONS

why I like this new service plan:—

1- I make more money -I get 60% commission on all service calls

2-I get 5% commission on all parts and sets I sell

3-I own the service truck

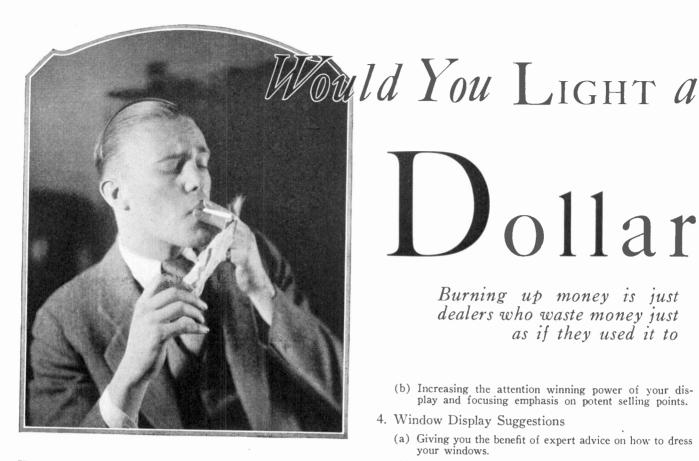
Lyon & King's service men state they are well pleased with this new service arrangement.

part of the service call fee that they get is practically all profit which enables them to know exactly where they stand at all times.

The men like the new system because they are earning more money. The average is now from \$40 to \$60 a week as compared with \$35 under the old system. Out of this they have to maintain their truck but this is not a great expense. The weekly commissions have run as high as \$95.81 when some big broadcasting event was coming and there was a lot of service work to be done before the event.

For the first time in the business history of this firm, they are making a profit out of their service department. Their profit runs better than 30 per cent which is an exceptionally good return for a service department.

Some idea of how efficient this department has become can be gained from the fact that over 300 customers were serviced just before the last big championship fight. And, one half hour before the fighters entered the ring, every call had been made and every set put into shape to receive the returns.



OULD you light a cigarette with a dollar bill? Would you throw money into the waste basket? You wouldn't do either of these things, yet investigation shows that radio dealers deliberately toss thousands of dollars into the waste basket, daily.

Millions of dollars are spent every year by radio manufacturers in preparing, producing, and distributing a huge diversity of dealers' sales help material, most of which is wasted. Only one dealer out of ten finds window displays, counter displays, direct mail service, selling and service education and the thousand and one other selling aids, sufficiently useful to him to escape the rub-

Criticism may be made of some of this advertising material but, as a rule, the principal reason for the dealer's unconcern toward it is his lack of appreciation of the selling influence of these helps. Window display material is practically essential to every dealer who has a store front and is, therefore, the most widely distributed and used. But, does the average dealer realize how many different kinds of display material are offered him and the number of uses to which it may be put? The following is only a partial list:

- 1. Window Display Posters
 - (a) Bringing out the selling arguments in favor of a particular brand of receiver.
 - (b) Serving as a background for a set display.
 - (c) Tying in national magazine, newspaper and bill poster advertising with the lines you handle.
- 2. Decalcomania Window Signs
 - (a) Identifying the brand of sets you feature.
 - (b) Establishing you as an authorized dealer for a nationally advertised line.
- 3. Decorative Lamps and Moving Electric Signs and
- (a) Enabling you to beautify your window and increase its advertising power.

ollar

Burning up money is just dealers who waste money just as if they used it to

- (b) Increasing the attention winning power of your display and focusing emphasis on potent selling points.
- 4. Window Display Suggestions
 - (a) Giving you the benefit of expert advice on how to dress
 - (b) Offering examples of windows which helped other dealers to sell goods.

Even in bare outline form, this list is suggestive of a wide diversity. Remember that most of this material is prepared by highly paid experts and that it is ready to serve you at a cost of only a few cents and a few minutes of effort. Much is offered you without cost; for a few of the more expensive items you are asked to pay the bare cost of manufacture, more as a protection against outright waste than an attempt at compensation. That cost does not include the services of designers, artists and sales experts; the dealer pays only for the raw material.

Nor does this represent the complete story of window display assistance. The larger manufacturers employ window trimmers who visit your store from time to time and show you how to make the most advantageous use of these numerous aids to selling. If the dealer is unresponsive or merely tolerant, these trained men devote little time or effort to his problems, but they will offer painstaking and constructive assistance to the appreciative

ANOTHER class of material consists of counter displays, posters for the interior of the store, and data and suggestions as to effective store arrangement. Very often, as a result of these interior display materials, the prospect visiting your store is influenced to recall all the advertising which he has read in behalf of the lines you carry—a subtle and valuable selling influence which adds its bit to personal selling solicitation.

A class of selling support which comes from the manufacturer directly to the dealer is advertising booklets, advertising copy and cuts, bill posters and direct mail literature. Through this service, the dealer has at his disposal advertising experts and competent direct mail writers, all without cost for their services. Some manufacturers with large resources support co-operative



New Table-Type Receivers

Illustrations of some of the receivers manufacturers are mar not complete presentations of manufacturers' lines and are



Stewart-Warner Speedometer Corp., Chicago, Ill. \$94.50



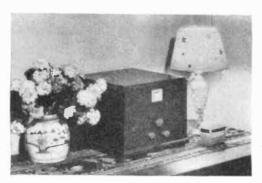
Zenith Radio Corp., Chicago, Ill. \$150



Atwater Kent Mfg. Co., Philadelphia, Pa. \$125



Shamrock Mfg. Newark, N. J. \$95



National Carbon Company, New York City.



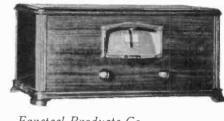
A. H. Grebe & Co. Inc., New York City, \$227.50



Minerva Radio Chicago, Ill. \$125



Radio Corp. of America, New York City, \$115



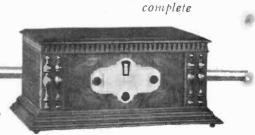
Fansteel Products Co., North Chicago, Ill. \$235

Chicago, Ill. (portable) \$86.90



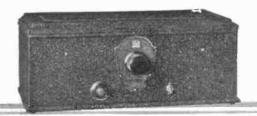
Case Electric Corp., Marion, Ind., \$98

Day-Fan Electric Co., Dayton, Ohio, \$150



for Next Season's Market

keting this fall. Photos on these and the following pages are intended only to give some idea of the new types of products.



Bush & Lane Piano Co., Holland, Mich. \$110



Crosley Radio Corp., Cincinnati, Ohio, \$80



F. A. D. Andrea, Inc. Long Island City, N. Y. \$110

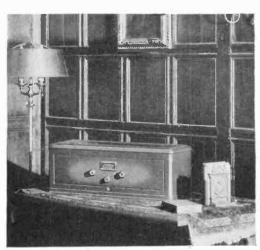


American Bosch Magneto Corp., Springfield, Mass., \$132.50

Stromberg-Carlson

Rochester, N. Y.

Tel. Mfg. Co.,



Kellogg Switchboard & Supply Co., Chicago, Ill. \$169.50 complete



Kolster-Radio Corp., Newark, N. J. \$135



Philadelphia
Storage Battery
Co.,
Philadelphia,
Pa. \$125



Freed-Eisemann Radio Corp., Brooklyn, N. Y. \$125



Bremer-Tully Mfg. Co., Chicago, Ill. \$130



A-C Dayton Co., Steinite Radio Corp., Dayton, Ohio, \$98 Chicago, Ill. \$75



Radio Retailing, June, 1928

Some of the Latest Type



F. A. D. Andrea, Inc., Long Island City, N. Y.



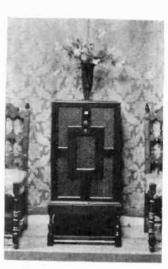
Kolster Radio Corp., Newark, N. J. \$350



Kellogg Switchboard & Supply Co., Chicago, Ill. \$775 complete



Electrical Research Labs., Chicago, Ill. (radio-phonograph combination)



Splitdorf Radio Corp., Newark, N. J. \$290



Case Electric Corp.,
Marion, Ind. \$175



(Left)

Argus Radio
Corp.,

New York,

N. Y. \$495



Minerva Radio Co., Chicago, Ill. \$225



Philadelphia Storage Battery Co., Philadelphia, Pa. \$275

Console Receivers for 1929



Day-Fan Electric Co., Dayton, Ohio, \$200



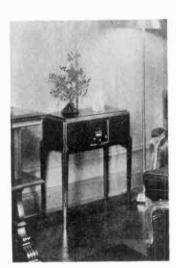
Bush and Lane Piano Co., Holland, Mich. \$215 complete



Marti Electric
Radio Co.,
West Orange,
N. J.



Bremer-Tully Mfg. Co., Chicago, Ill. \$190



National Carbon Co., New York City.



Amrad Corporation, Medford Hillside, Mass. \$475



Steinite Radio Corp., Chicago, Ill. \$150



Fansteel Products Co., North Chicago, Ill. \$487.50



Grigsby-Grunow Co., Chicago, Ill. \$167.50



Zenith Radio Corp., Chicago, Ill. \$230

New Consoles and Tables



Aston Cabinet Mfrs., Chicago, Ill.



Knoxville Table & Chair Co., Knoxville, Tenn.



Superior Cabinet Co., Muskegon, Mich.



Udell Works, Indianapolis, Ind.



Picrson Co., Rockford, Ill.



Grand Rapids Furniture Co., Grand Rapids, Mich.



Caswell-Runyan Co., Huntington, Ind.



American Furniture & Cabinet Co., Philadelphia, Pa.



Radio Master Corp., Bay City, Mich.

for the Next Season



Adler Mfg. Co., Louisville, Ky.



Excello Products Corp., Cicero, Ill.



Wasmuth-Goodrich Co., Peru, Ind.



Excello Products Corp., Cicero, Ill.



St. Johns Table Co., Cadillac, Mich.



Superior Cabinet Co., Muskegon, Mich.



Adler Mfg. Co., Louisville, Ky.



Wasmuth-Goodrich Co., Peru, Ind.



Udell Works. Indianapolis, Ind.

Magnetic Type Reproducers



Croslev Radio Cincinnati, Ohio \$25



Radio Corp. of America, New York City, \$35



Philadelphia Storage Battery Co., Philadelphia, Pa. \$25



Temple, Inc., Chicago, Ill. \$29



Stevens Mfg. Corp., New York City, \$35



F. A. D. Andrea, Inc., Long Island City, N. Y. \$30



Kolster Radio Corp. Newark, N. J. \$35



Farrand Mfg. Co., Long Island City, N. Y. \$35



Atwater Kent Mfg. Co., Philadelphia, Pa. \$24



Tower Mfg. Corp., Boston, Mass. \$11.95



Sandar Corp., Long Island City, N. Y. \$19.50



National Carbon Company, New York City



A. H. Grebe & Co. Inc., New York City, \$17.50



Timmons Radio Corp. Philadelphia, Pa. \$25



O'Neil Mfg. Corp., West New York, N. J.



Stewart Wurner Speedometer Corp., Utah Radio Products Corp., Chicago, Ill. \$16.50



Chicago, Ill. \$30



Operadio Mfg. Co., St. Charles, Ill. \$35

Dynamic Type Reproducers



United Radio Corp., Rochester, N. Y. \$75



Magnavox Company, Oakland, Calif. \$70



Newcombe-Hawley, Inc., St. Charles, Ill. \$52



Farrand Mfg. Co., Inc. Long Island City, N. Y. \$50



Rola Company, Oakland, Calif. \$75



Sandar Corp.,



Long Island City, N. Y. \$50





O'Neil Mfg. Corp., West New York, N. J. \$60



Sandar Corporation, Long Island City, N.Y. \$75



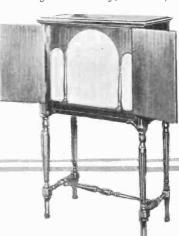
Farrand Mfg. Co. Inc., Long Island City, N. Y. \$75



Newcombc-Hawley, Inc., St. Charles, Ill. \$70



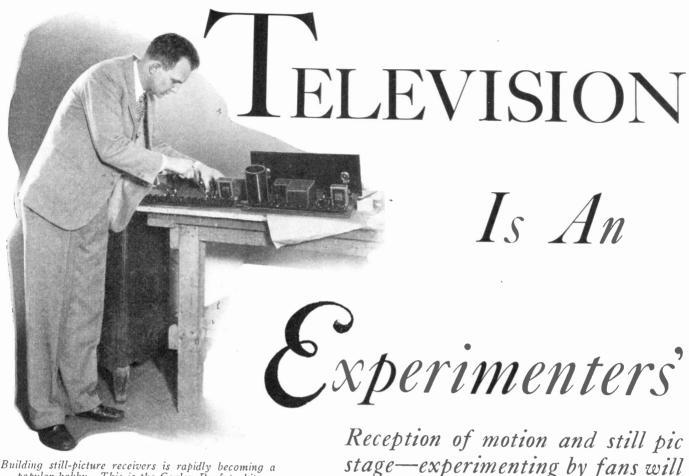
Magnavox Company, Oakland, Calif. \$175 (power amplifier)



Kolster Radio Corp. Newark, N. J. \$175 (power amplifier)



Radio Corp. of America, New York City, \$350 (power amplifier)



Building still-picture receivers is rapidly becoming a popular hobby. This is the Cooley Rayfoto kit.

ONSIDERABLE public attention has been focused on the recent developments in television and telephotography. To the public, television means motion pictures in the home received by radio, and to the radio trade it brings up practical merchandising questions such as: when will television and telephotographic apparatus be available; what will it cost and what service problems will it bring?

Of these questions, the first is the most important because cost and service problems of the new art will certainly not exceed those to which the radio trade is already accustomed. What the trade awaits is the availability of saleable radio picture apparatus of a type which will appeal to hundreds of thousands.

Telephotographic apparatus is highly developed and not much time will be required to make it a merchandisable proposition; television, on the other hand, is in a crude state and its attainment, in marketable form, is comparatively far off.

The main difficulty in the development of television is that with the existing systems the transmitting apparatus responds only to a small area. The broadcast subject must stand within a few inches of the scanning apparatus, and it is a delicate matter to hold this position so that the subject will be within range of this apparatus at all times. All systems, so far demonstrated, have been subject to the same limitations.

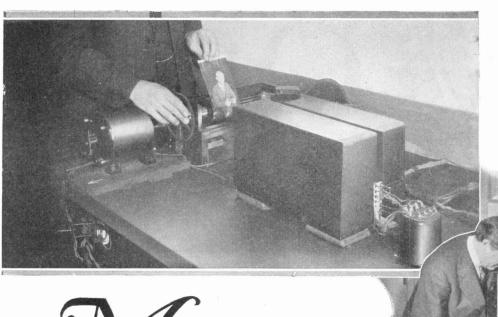
Likewise, the observer at a television receiver must sit before a box, with his eyes close to an aperture, in which he sees a small and animated reproduction of a face, two or three inches square. There is a lack of detail in the received image. It is comparable to a rough-screen, half-tone newspaper cut, sufficiently clear

to make faces recognizable and to enable the observer to watch the facial expression of a speaker as he delivers a radio address.

The popular imagination, however, does not have so limited a conception of television. The enthusiast imagines that the television receiver will bring him to the scene of a football game so that he can observe the action on the field as the announcer describes it. He imagines himself at a prizefight or at the footlights of a theater, watching a great number of principals doing their part to entertain him. He might not be so enthusiastic about a device which brings him only close-ups of faces and reproduction of small objects.

From the entertainment standpoint, therefore, the development of television has not yet reached a stage where it promises to offer hope of wide public appeal. Television today is an interesting laboratory experiment. It is also sufficiently reliable and simple in operation to promise, for the future, commercially available apparatus, suited to operation by the average user. But, the small "pick-up" area is a limitation which must be overcome before television receivers, saleable in large quantities, are available.

Furthermore, present systems of television require a broad frequency space corresponding to many broadcasting channels because of the vast number of images which must be transmitted in a short time, and to date television has been conducted only on short waves. It is not yet a practical possibility on the regular broadcasting channels. In consequence, the present receiving apparatus. in the hands of the public, is useless for the reception of television impulses and all the difficulties of fading and congestion on the short-wave channels must be overcome



Market

tures by radio is a laboratory

be first commercial development

before television becomes a commercial reality. For the present, therefore, although the apparatus so far developed has made possible the definite promise that tele-

vision will come within the next few years, a tremendous amount of research is still necessary.

TELEPHOTOGRAPHY NEARER THAN TELEVISION

TELEPHOTOGRAPHY, or transmission of still pictures, is already sufficiently developed to be commercially practical for home reception within one radio season. The question now is, will it have sufficient appeal to be a sales field for the radio industry or must we await the perfection of television before we have an expanding

market for the industry?

The telephotographic equipment of today is capable of the very finest quality of reproduction, easily comparable with that obtainable in the rotogravure sections of the newspapers. The image transmittable is limited only by the power of the camera and, therefore, still pictures, covering any subject, can be transmitted and received. Subject matter of great news and entertainment interest may be transmitted without further fundamental research.

Moreover, still picture transmission requires the use of only a single communication channel and the entire organization of broadcasting, as at present canstituted, is available for the purpose of disseminating radio pictures. This consideration also makes the present receiving set, in the average user's home, a suitable medium for picking up the pictures transmitted.

Within a year, it is quite likely that there will be several still picture recorders available, selling at prices less than two or three hundred dollars. Present activities. however, indicate that telephotographic apparatus will

Lcft—A still picture transmitter. A number of stations are now making regular broadcasts of still pictures on their usual wavelengths.

Below—Dr. Alexanderson (left) of the Radio Corporation has made a laboratory model of a home television receiver. Its commercial production, however, is still far distant.

first appear in the trade in the form of parts for setbuilding fans until it becomes of sufficient general interest and prompts enough picture broadcasting to warrant the manufacture of complete recorders.

Similarly, television apparatus will undoubtedly follow the same course of development but certainly its ultimate arrival in the form of a complete set will not be here for several years. There is, therefore, no sensible reason why customers should hold off buying radio receiving sets in their present form in the hope or expectation of obtaining a combined tone and vision receiver in the near

If, in the meantime, telephotography is to be a field for the radio industry, the quality and character of the pictures sent, that is, their program value, will be the ultimate criterion which determines its sales field. Picture transmission and aural transmission can be carried together on the same wavelength, since the picture signal, with all systems so far demonstrated, consists of but one or two high-frequency tones. These may readily be filtered out in the output of the receiver without interfering with the understandable transmission of speech.

Thus, picture reception and aural reception can be carried on simultaneously and without interfering with each other, if necessary. This possibility removes one of the principal objections to picture reception because it does not limit the broadcasting station to serving the

(Please turn to page 108)

Selling Quality

RADIO furniture has become the foremost salesincreasing accessory in the hands of radio merchants today. Through the sale of period and highgrade cabinets many store owners who are making radio furniture part of their business have jumped unit sales and gross sales from 15 to 30 per cent.

Among the concerns that have accepted furniture as a part of radio, few have gone into the subject more thoroughly than three Chicago concerns which have made it their business to know radio furniture and to provide for it is their selection.

for it in their sales and service programs.

Lyon and Healy, one of the largest and best regarded music houses in the country, has so much respect for this item that early last winter its radio salesmen were required to take a course of six lessons in period art, cabinet construction and fine woods from the head of the piano department. The result of this training was t once apparent in the increased number of higher priced cabinets which were sold. A careful estimate made indicated that the average unit sale jumped not less than 15 per cent.

"One of the points brought out by our instructor, and used effectively by our men with their prospects," says manager E. M. Schultz, "was this: authentic period designs in radio furniture correspond to the classical compositions in music. And who is there that cannot appreciate the elevating influence of classical things in furniture, which is always in evidence, even more than

in music, which is heard but occasionally?

"Another convincing argument which we use repeatedly is to the effect that the day of the radio set resembling a laboratory experiment has passed forever. The day of the scientifically built set, housed in appro-

priate furniture, has arrived."

Mr. Schultz finds that the following period influences, either in the pure type or in harmonious combination, are outselling, right now, all the other styles three to one: William and Mary, Gothic and Modern Spanish. He finds also that the public does not favor the more cumbersome pieces, that they prefer those that do not project from the wall over 20 inches and that their fancy is captivated by sets whose front panel harmonizes with the rest of the cabinet.

"Why is it," he asked, "that the average dealer, a great percentage of whose gross unquestionably represented by the furniture item of his stock in trade, spends not over five per cent of his time studying this angle of his business or presenting this subject to his customers?"

A NOTHER music house in Chicago, Wurlitzer, has paid special attention to the sales technique of its radio men with respect to their making a proper presentation of the furniture element in the selling process.

"Wurlitzer," states Earl P. Maricle, district manager, "brings prospects to its stores, it is true, by using the popular price appeal, but when it gets them there they are

shown the better cabinets in short order. It is not a sale unless the invoice reads over \$200, is one of my axioms. Obviously quality furniture is the answer."

Mr. Maricle has also made an intensive study of interior decoration within the past year and strongly recommends the subject to every radio dealer in the country.

"A piece of radio furniture is something more than just an assembly of wood, glue and shellac," Mr. Maricle tells his customers. "It is inert material brought to life, animated, made to talk through the miracle of electrical sound reproduction. That is why you really should select the very best cabinet your purse will allow."

This line of reasoning, he declares, appeals even more

to the middle classes than to the well-to-do.

He has found also that the statement that his cabinets are guaranteed against constructional defects by the manufacturer, and, in turn, by Wurlitzer, to the con-

sumer, carries a whole lot of weight.

The problem of increased inventory was answered by the statement that this should not bother the merchant who knows how to sell quality cabinets inasmuch as such a man will experience a steady flow of furniture and should enjoy at least a four-time turnover per year. The added margin on furniture should more than compensate for this slightly lower ratio of sales to inventory than is the case with table models. Furthermore authentic period cabinets never become obsolete.

ANOTHER Chicago store has found sufficient business in radio furniture this past winter, to maintain two "panel fitters" in its radio workshop. These men were occupied almost continually either assembling chasses on wooden panel boards and placing these matched panels in high-class cabinets or cutting apertures in panels to accommodate table models in their original housings.

The cost of this activity is regarded, by this store, whose policy will not permit the mention of its name, as overwhelmingly justified because of the added merchandising service this set-up enabled it to offer its customers—a service which has increased its average sale and net profit approximately 30 per cent and which has helped its salesmen close orders that otherwise would have been lost. Needless to state this store carries a wide selection of period radio cabinets adaptable to any of the four lines of sets handled. These cabinets range in price from \$60 to \$270.

"Seventy per cent of our sales this season were 'assembled jobs,'" declares the manager of the radio department. "By this I mean transactions in which the propect picked her set and then selected, from our comprehensive stock, the console that suited her purse and her taste in furniture. This method of selling radio is most satisfactory; equally so for both seller and buyer. The customer gets exactly what she wants; the dealer has the dual pleasure of knowing that his customer is satisfied and that, in the majority of instances, he has



increased his total transaction over the figure which otherwise would have been the case."

THE operating expense of the cabinet workers, it was stated, is many times offset by these factors of greater gross and spread.

To provide for emergencies this concern keeps an adequate supply of unfinished, veneered-walnut, panel stock in its workroom. Frequently it is possible to make a moderate charge for special alterations. Professional

cabinet workers are not necessary for adaptations of this nature. The main requisite is a good jig saw.

Here are some pertinent observations concerning this matter of the relation of external appearance to internal mechanism, made by this man whose experience selling quality cabinets has been broad and successful:

The average prospect displays more interest in "eye value," fine furniture, this year than heretofore.

While tone, reception and reliability are first dis-(Please turn to page 108)

How Much Does a

Bronson and Townsend

found they were losing

money on a number of

small accounts. The

methods used to correct

this condition will in-

terest every radio dis-

tributor

Evaluation of territory and reduction in number of

OME years ago when volume as applied to territory, number of customers, sales and lines of merchandise carried was being hailed as the savior of business we began an analysis to determine what was the real effect of volume, under varying conditions, upon net profits. The dangers of volume have come to be so generally recognized that the disease has been given the name of "volumitis," but interest is not so much in the disease itself as in ways and means of determining, in specific cases, at what point volume as applied to territory and customers becomes a liability.

With this much as a background I think I can very briefly trace the various stages we went through in developing our figures in regard to the value of customers

and territories.

Our start was made when we undertook to determine the cost of handling a minimum order. Our conclusion was that the simplest possible one-item order, if taken by an outside salesman, cost us \$1.96, and if that same order came in by mail the cost was 96c.

Our next step was an analysis of our sales in order to determine the percentage of our orders in various size groupings. A typical month gave us the following results:

	No. of Orders	
	Per Cent	Per Cent
Under \$1	7.3	.13
\$1 to \$5	18.7	1.7
5 to 10	14.1	3.4
10 to 15	9.9	4.1
15 to 25	14.3	9.2
Total	64.3	18.6

HESE figures require very little comment. Obvi-Lously when there is a gross margin of only, say, about 20 per cent and a minimum cost of \$1.96 per order. there is some point in the size of an order where there ceases to be a profit. This point we determined in our particular business to be \$15; and, of course, the loss increased as the size of the order decreased below \$15. We further determined that an order between \$15 and \$25 might or might not be profitable depending on the number and character of the items making it up.

The results of this investigation almost automatically caused us to ask ourselves the question which was the

basis of our next investigation.

This question was: — How small can an account be and still be profitable?

*In a talk before the sixteenth annual convention of the United States Chamber of Commerce, Washington, D. C., May 8.

Based on our previous investigation in regard to the size of a profitable order, it was obvious that our answer to this guestion would be affected

largely by the size of the orders which made up an account.

Our conclusion was:

An account to be profitable must be made up of at

One \$25 order per month or Two \$20 orders per month or Three \$15 orders per month.

In other words an account of \$300 per year might be

profitable if the orders averaged \$25 each. On the other hand an account would have to be \$540 for the year if the orders averaged only \$15 each.

By Lewis H.

Bronson & Townsend

Again, the next step was most natural. We made our analysis of all the accounts on our customers'

The total number on our sales ledger was 1,464.

Of these, 734 were shown to be profitable if measured by the above yardstick.

730, by this same vardstick, were

shown to be unprofitable.

But the most interesting part of this customers' analysis was developed by a further study of the list of the unprofitable accounts. With hardly an exception we found that those listed as non-profitable were either nonhardware accounts or hardware accounts in territories where other wholesalers could give better service than could we from New Haven. By non-hardware accounts I mean merchants who do not carry in stock for resale a reasonable assortment of hardware.

We do not now nor have we ever had the slightest desire to penalize the small merchant. But we came to the conclusion that the sale of hardware was becoming too spread out and that there were too many merchants who were eager to increase their sales by adding just a few items of hardware to their stocks. It was these merchants who were affected by the policy we at that time adopted. For, obviously, any legitimate hardware merchant could buy of us if he wished at least \$600 worth of hardware in a year. But if his interest in us was only as a source of supply for an occasional item it did not seem to us that we were unreasonable in frankly telling him that his account was unprofitable.

In the case of those accounts who were located in territories more convenient to other wholesale centers the

Small Account Cost?

accounts enabled this distributor to increase net profits

BRONSON*
Co., New Haven, Conn.

problem was a little different. These accounts were mainly hardware merchants personally friendly to us. But it was easier for them to

buy from nearby sources and the transportation service was better. We made a careful analysis of several of these territories in order to determine how much it really did cost us to get the business out of each one of them. The figures were startling. Selling costs alone ran from eight per cent to as high as just under sixteen per cent. Obviously, any such selling costs made a territory unprofitable.

Although we realize that volume of sales, when obtained through the increased purchases of the same group of customers, has a favorable effect upon overhead, at the same time we were unwilling to fool ourselves by not recognizing the fact that increased sales, when obtained by going beyond our natural selling area, usually resulted in a serious increase in selling cost with a corresponding decrease in net. Then, too, although we do not pretend to be entirely altruistic in our business, we do not see much point in going out after business which cannot help us to any considerable extent, if that same business, when turned over to the natural source of supply of that territory, might be very greatly to that other wholesaler's advantage. When these facts were frankly stated to our customers in outlying territories, practically without exception they agreed that our decision to give up their territory was logical and at the same time to their own interest.

THE result of this analysis was the elimination of nearly $\frac{1}{3}$ of our territory which, with the elimination of $\frac{1}{2}$ of our customers, was a pretty serious change to make all at one time. But we decided to do it and ever since have continued on doing this same type of work through the elimination of unprofitable territories and customers.

Decreased Volume Does Not Necessarily Mean Decreased Net

It might be possible to maintain that such a plan, if economically sound, should be carried out even though the results did not show up immediately in the balance sheet. I, however, realize fully that no business has any excuse to continue on, unless, in addition to performing a useful service, it makes for itself a net profit. This is the ultimate test which I insist our business must subject itself to. The fact that our business has shown an increase each year in its operating profits is my answer to those who, obsessed with the term of volumitis, hesitate to give up anything in the way of volume, even though the lack of profit is acknowledged. So often there seems to be a fear that the resultant decrease in total sales will somehow or in some way affect unfavorably the costs of running the business.

I would not, however, imply that we feel we have discovered a "cure-all." Much more needs to be done. What we are primarily interested in is that business shall accept its responsibility to work out for itself methods which can be proven sound, and which will, through the reduction in the now too high costs of distribution, work out to the immediate benefit of the consumer and to the ultimate benefit of business itself.

A Review of the Trade Show

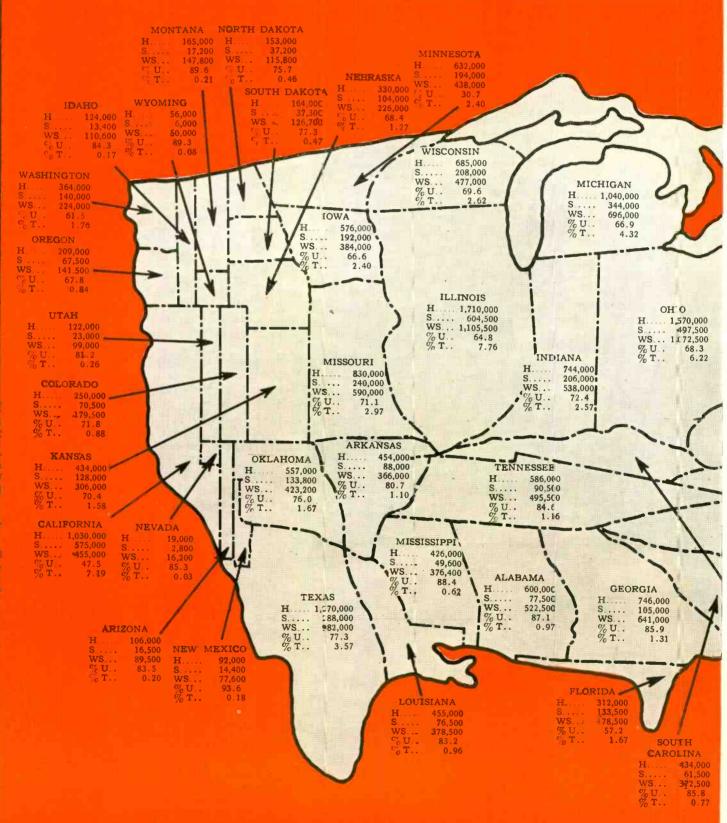
THE R. M. A. Trade Show at Chicago this month holds unusual significance for the entire trade. The latest developments in all radio products, and the new season lines of the leading manufacturers will be on display. Every one who possibly can, should attend.

But there will be many thousands of dealers and distributors who will be unable to get to Chicago the week of June 11. For their benefit, therefore, the July issue of *Radio Retailing* will contain a review of the Trade Show.

The types of products exhibited at the show will be analyzed, new developments explained, and trends recorded. A complete, first-hand report of the show will thus be made available for the readers of *Radio Retailing*.

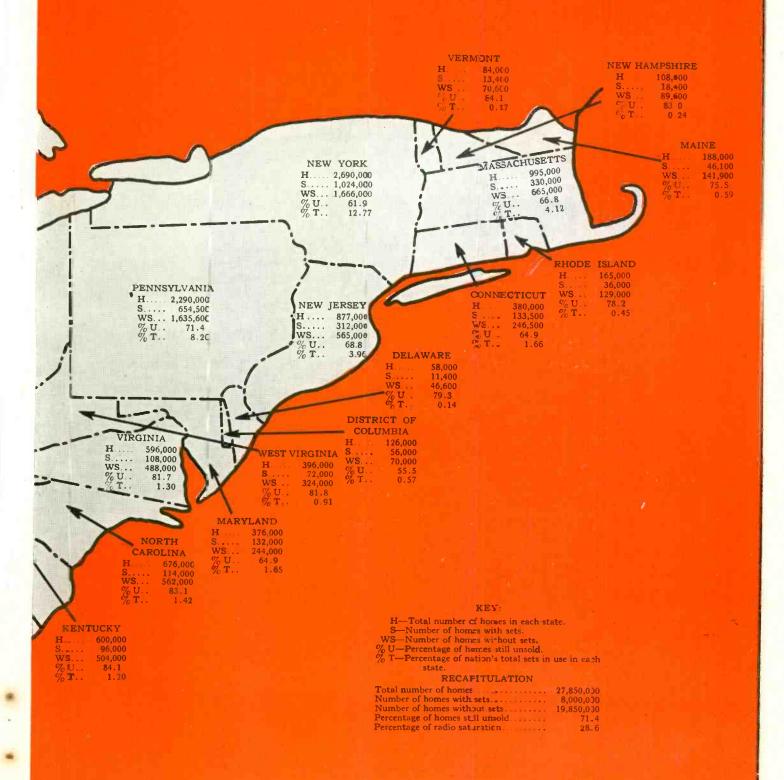
Map of the States According

Figures showing number of homes with Size of states is proportionate to the num-



to Their Market for Radio

sets and number of home without sets. ber of homes still without radio receivers





JUNE, 1928 Vol. 7, No. 6

Quality Furniture—a Factor of Major Importance

IT IS a fair statement—even today when most dealers consider radio furniture as supplementary to the main issue of selling the set itself—that not less than 30 per cent of total sales is due to this "incidental" item.

One of the leading music houses in the country, one whose appreciation of the volume and profit possibilities of quality cabinets is well developed, tells us that 60 per cent of its radio department business for 1927-28 (total sales \$550,000) was represented by radio furniture. This house features period lines exclusively. What is more to the point, over 70 per cent of its net profit came from this same source.

Recognizing this important development, Radio Retailing plans to give a great deal of editorial consideration to this factor. Radio furniture is the last large accessory which the dealer has left on which to increase his sales and profits.

Quality furniture enhances tremendously the appearance of the retail store. It gives it individuality. It identifies the merchant handling it as a "live wire" radio man. It gives him the "edge" in his sales presentation over the dealer down the street who carries, in many instances, the same make of set and whose bid for business otherwise is as alluring as his own. Quality furniture packs a wealth of selling arguments. It carries an adequate spread, or can be marked up so that it will. It offers, in brief, an opportunity to make larger profits for the man who will display and feature it.

Line Voltage Controls Are Necessary

SOME A.C. tubes have been short lived because too high a voltage was put on the filaments. Most A.C. sets have been designed to operate on 110 volts. However, it is sad but true that the majority of public service systems deliver fluctuating voltages often in excess of 110. Some set manufacturers furnish a means of compensating for high voltage by tapping the primary of the power transformer and installing in the set a toggle switch which can be adjusted to compensate for various line voltages. However, many manufacturers still do not provide any means of adjustment, yet this accessory is very important and greatly needed.

For sets with no line adjustments, an accessory known as a "line voltage control" should be installed by the dealer. These have just been introduced to the market and although they take various forms, all are essentially variable resistances of around 60 ohms and capable of passing about 50 or 60 watts safely. Use of a device of

"Eye Value"_

this type will insure that the tubes are being operated at

the proper voltage.

This item should be merchandised with A.C. sets for it will not only give an added source of revenue but will eliminate many service calls due to burnt-out tubes—but—do not attempt to use one of these controls with a power amplifier or dynamic reproducer combination which uses about 200 watts. These line voltage controls are intended only for use with the ordinary 60-watt A.C. set.

Trade Associations Are the Guardians of Business

THE place of trade associations in American business was one of the major topics discussed at the recent convention of the United States Chamber of Commerce held at Washington, D. C. That trade associations play an important part in business and should equip themselves to make their work of the greatest possible value was the big message to trade generally that came out of the Washington conference.

The trade association, it was declared, is the dominating force in the establishment of sound business principles and the maintenance of ethical business conduct. Such associations are not fulfilling their greatest usefulness unless they refuse to receive as a member, or expel from membership, organizations that wilfully violate fundamental principles of sound business. That was the keynote of one of the meetings and in it there may be a thought for the radio trade.

Co-operation in the Small Town

ANYONE traveling about from town to town and interviewing radio merchants is struck by the variations in business practice encountered in different towns. In one community the radio business will be on a fairly sound basis, with all merchants asking for an adequate amount down in time payments, allowing not more than ten months to pay, making no undue promises of unlimited service, or demonstrating on a conservative policy. In another town close by, everybody will be delivering sets on request to be left for a week or ten days, credit terms will be lax, complaints as to poor collections universal, and service a burden on the merchant. "I have to do it because my competitors do," is the excuse offered for these lax policies.

It is true enough that, in a small town, it is difficult for a merchant to refuse to do for his personal acquaintances as much as another merchant down the street is willing to do. That, in itself, is the important reason why small town merchants should co-operate in

A Definite Requirement for Next Season

Guardians of Business
Small Town Co-operation
"Flash-in-the-Pan" Stuff
A Lost Art
other things discussed by t

and other things discussed by the editors

the establishment of uniform standards of practice. Try getting together with your neighbor and see if you cannot solve some of the evils of your local radio business. It has been done successfully in many communities.

Building for Permanence

**F LASH-IN-THE-PAN" stuff doesn't pay. Right now more than ever before in the radio industry it is being proven that those radio manufacturers as well as retailers and distributors, who do not build a strong structure based on good products, sound merchandising, proper advertising and well controlled finances, are headed for oblivion.

The radio industry was founded by opportunists, that's true. But it takes more than opportunism to build a healthy business. Retailers who expect to continue making their living from the sale of radio, and manufacturers who expect to show a permanent adequate net profit for their stockholders, may well bear in mind the four cardinal principles of "building for permanence" that are outlined in the paragraph above.

They will interest serious merchandisers. They will not interest flash-in-the-pan opportunists.

How Large Is the Replacement Market?

NEWSPAPER article recently stated on the author-Antity of the National Automobile Chamber of Commerce, that two million motor vehicles are required for replacements every year in the United States alone. Thus half of the market for American automobiles is virtually assured every year by the demand for replacement of worn-out cars. Again the analogy of the automobile industry to the radio industry is significant. It is safe to say that every owner of a radio set who has had his set more than two years is an excellent prospect for new equipment. The numbers of this type of prospect are of no mean proportion. Surveys have indicated that almost 50 per cent of dealers' sales of new sets are to old set owners. Therefore, a check-up of set owners by retailers, to ascertain the vintage of the sets in use, would seem a logical step to take.

It is not necessary to wait until the saturation point is almost at hand before going after the replacement market. Inasmuch as the replacement market for cars constitutes half the yearly market, so a proportionately large amount of radio equipment now in home use is ready for the junk heap. Every such set owner ought to have a nice, new, shiny receiver installed in the front parlor for comparison with his old set.

Is Balanced Distribution a Lost Art?

A STUDY of the retail radio trade in any average American city discloses the uneconomic condition that the half dozen or so best outlets in a town concentrate on the same lines of receivers. The other lines, many of them excellent, standard lines, are left to spread themselves out among a conglomeration of outlets, good, bad and indifferent.

This has been brought about in the natural course of events, but there is a remedy for it. Consider for a moment the fact that this condition brings all the best outlets in a town into direct competition with each other on the same lines. If each of these outlets handled different lines they would be taken out of direct competition with each other and more business would result for everybody concerned.

It would then not be necessary for prominent lines to seek a conglomeration of outlets of all sorts and descriptions. It is this latter course which has brought about the spread-eagle method of radio distribution with its consequent expense and waste.

Balanced distribution seems to be a lost art, but it can be revived if distributors would stop to analyze their local situations, and, working co-operatively instead of antagonistically with the other fellow, devise ways and means of achieving it.

Her Youngest and Brightest



Electra, brightest star in the Pleiades, intimate friend of the great Zeus, presents her youngest and brightest boy to the public, with the aid of Winsor McCay.

The youthful Radio will soon be bigger than his three older brothers, for he will carry power, light, sound and pictures around the world.

Copyright, New York American



The public has put the stamp of its approval on RADIOLA 18 and its predecessor—the "17" by the purchase of more than \$30,000,000 worth of these simplified, perfected, dependable alternating-current receivers.

This sign marks the leading Dealer



dealer in every community

RADIO CORPORATION OF AMERICA

CHICAGO

SAN FRANCISCO

MAKERS



National Political Convention pages in Collier's, Literary Digest, Liberty and Saturday Evening Post.

NEWSPAPER ADVERTISING

Big display copy for Radiola 18 and the Loudspeaker 100A in leading dailies over the country.

BROADCASTING

The new RCA Demonstration Hour (Blue Net-

work and Associated Stations) every Saturday afternoon at 2:30 Eastern Standard Time.

HOME DEMONSTRATION

A Radiola 18 demonstrated in the home by the dealer usually stays in that home.

SALES HELPS

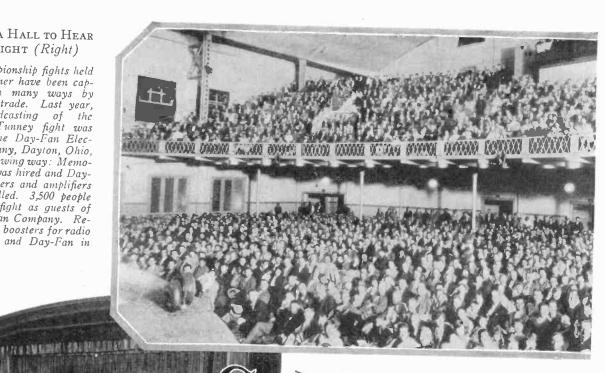
Dealer mats, descriptive literature, etc.

RCA Radiola

MADE BY THE MAKERS OF THE RADIOTRON

HIRING A HALL TO HEAR THE FIGHT (Right)

The championship fights held each summer have been capeach summer have been capitalized in many ways by the radio trade. Last year, the broadcasting of the Dempsey-Tunney fight was used by the Day-Fan Electric Company, Dayton, Ohio, in the following way: Memorial Hall was hired and Day-Fan receivers and amplifiers Fan receivers and amplifiers were installed. 3,500 people heard the fight as guests of the Day-Fan Company. Result? 3,500 boosters for radio in general and Day-Fan in particular.



MERTIME

TIE-UP WITH LOCAL THEATERS (Left) William Barrow, Great Neck, N. Y., arranged with his local theater to broadcast the fight to its audience. Stromberg-Carlson receivers were installed and the fight heard by the audience.

THE BIG FIGHT IN Texas (Right)

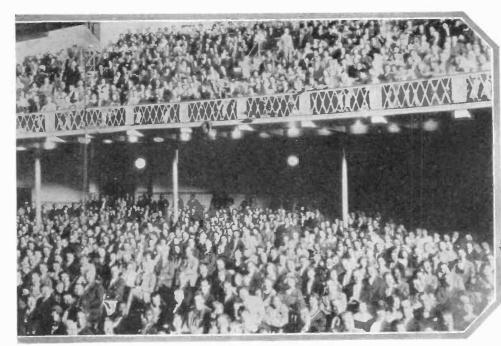
Here is the scene in front of the Prickett Battery Station, Mexia, Tex., when it broadcast the Dempsey-Tunney fight for the benefit of passersby. Priceless good will is thus secured by letting the crowds in on events of this nature.



EXIDE STATION

Los Angeles Got It, Too (Left)

Ray Thomas, Inc., Los Angeles, Cal., tied up with the Los Angeles Daily News and broadcast the fight for the crowds outside the Daily News office, again impressing the public at large with the service of radio. radio.



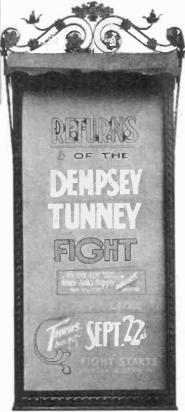
is Sports Time



Advertising in New Jersey (Below)

The Hines Auto Supply Company, Asbury Park, N. I., supplied radio sets for three of its local theaters so that audiences could listen to the Dempsey-Tunney fight.

Lobby posters, such as the one shown below, were only a small part of the advertising accruing to the Hines Company through this tieup.



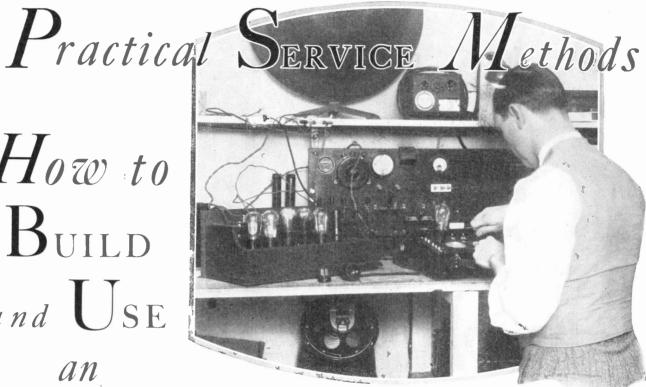
(Left) Billboard sponsored by the Radio Trade Association of San Antonio, Tex., to advertise the radio broadcast of last year's championship bout.

(Below) The radio description of last year's World Series was broadcast outside the Seattle Times office by the Harter-Meggee Company, Kolster distributor, Seattle, Wash.



How to Build

an



(L. Set Tester

Construction and operating details for an instrument designed to make every test necessary for both A.C. and D.C. receivers

Conducted by

H. W. BAUKAT

Technical Editor

HERE has been a demand for some time for a radio testing instrument that would enable the service man to test practically any set or type of tube and yet be neither too heavy nor too expensive to

In offering the following test set, three individual meters have been used rather than one expensive combination meter. These will make all the tests necessary at a minimum cost. It has been estimated that the test set herein described can be built by any dealer or service man at a cost not to exceed \$50.

This test set is also comparatively simple to operate and free from scale readings which require calculations in order to obtain final results. All of the parts used are readily obtainable if the dealer does not already have them at hand, with the exception of the bi-polar

switch, and the resistance of .133 ohms which shunts the D.C. milliammeter. The first, the bi-polar, switch is made by the Weston Electrical Instrument Corporation, Newark, N. J., and was used because of the simplicity of operation it afforded the completed test set. The correct markings for each position of this switch are shown in an accompanying illustration. The switch is rotated in a counter-clockwise direction. As for the shunt resistance, this consists of 1.7 inches of 15 mill. manganum wire

which can be obtained from any large wire manufacturer. This is arranged is a small coil to suit the convenience of the builder. It is, however, highly important to get the exact diameter of the wire given here, and also the exact length in order that the resistance be .133 ohms.

If the constructor uses panel mounting meters of $3\frac{1}{2}$ inch diameter, and arranges the layout as suggested, a Bakelite panel of the standard 7 in. x 12 in. size can be used. If the completed outfit is to be mounted into a small carrying case, this box should be not less than two

inches deep, inside dimensions. It is not at all necessary to follow the layout as given as long as the wiring diagram is strictly adhered to.

HE layout shows on the left, a triple range A.C. voltmeter, 150-8-4 volts. This meter allows ample range for A.C.

filament and heater voltage reading as well as line voltage tests. In the center is shown a D.C. voltmeter with a scale of 200-8 volts. This meter, when used with the bi-polar switch, shown directly beneath, allows the following readings to be readily taken: "A" and "A-reversed" readings up to 8 volts, "C" and "C A-reversed" up to 20 and 100 volts, plate voltage readings up to 200 and 800 volts, and readings at the D.C. binding post of 8, 200 and 800 volts. The reverse

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readings are to take care of sets wherein the plus and minus are interchanged.

The meter at the extreme right is a D.C. milliammeter, ranging from 0 to 30 milliamperes with an external shunt for 300 milliamperes. The construction of this shunt has been previously described. This allows plate current readings up to 30 and 300 milliamperes, and also the same ranges may be had at the milliammeter binding posts.

AT THE top are shown three sockets, one UY and two UX, for making tube tests. At the upper left-hand corner we have a single-pole, double-throw switch or contact key which affords a means of making grid tests on tubes placed in either the UX or UY socket. The socket to the right is for testing either half or full wave rectifying tubes of the filament type. The little single-pole, double-throw switch just above the socke allows a separate test of either plate of a full wave rectifier, and it should be remembered that these readings are always taken on the 300 miliammeter range.

Directly below the bi-polar switch we have four binding posts marked "G," "minus," "plus" and "P," which means that they are to make the connections which go to the grid, the negative and positive side of the filament, and the plate. Batteries may be connected to these if a number of tubes are to be tested and no radio set with the proper socket voltages is available. For test work, a four conductor cord and plug, the plug being made from an old tube base, is connected to the binding posts. When any of the other binding posts are used for meter read-

ings, the test plug and any tube in the tester should first be removed.

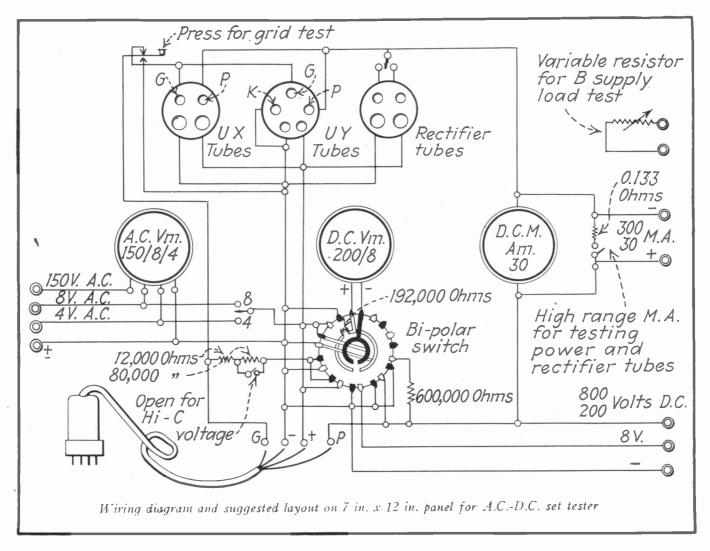
In laying out this tester, provision has also been made for the '50 type of power tube so that the high plate and bias voltage, this tube requires, may be read on the meters.

In the upper right hand corner is shown a variable resistor which is to be used for the B-supply load test. This resistor can be of any good variable type. It should be able to dissipate at least 40 or 50 watts. The load test is made in the following manner: connect the lower binding post of the resistor to the negative millianmeter binding post. The upper resistor binding post is connected to the negative voltmeter binding post, then the two voltmeter binding posts are connected to the B-power unit and the bi-polar switch set to the 800-volt range.

When the resistor is varied, the milliammeter will give varying current readings. By taking simultaneous readings of current and voltage, some idea of the output of the B-supply device can be obtained.

AS A RULE, when a set is to be tested out, the service man will start at the radio frequency end and work through the set, socket by socket, until he gets to the power stage of the audio frequency amplifier, each time removing the tube and placing the test plug in the socket, and the tube in the tester socket.

Let us take a typical case and follow it through. Suppose we remove the first radio frequency tube and place the tester plug in the socket, and place the radio frequency tube itself in a socket on the set tester. The first





Artists conception of completed A.C.-D.C. set tester. Space may be left in the rear of the carrying case for wires, cables and the various adaptors as shown.

thing we want to find out is the filament voltage. Therefore, we will set the dial of the bi-polar switch to "A." If the filament connections in the radio set have the negative terminal on the left side, we will get a scale deflection of "A" indicative of the voltage at the socket. If the filament is negative on the right, the needle of the meter will go the wrong way and the up-scale reading will be on "A-reverse." If the filament is lighted from A.C., we will obtain no readings at all on the D. C. meter.

However, by turning the toggle switch to 8 or 4 volts, depending upon the type of tube being tested, we will now get the proper A.C. voltage reading on the A.C. meter. Also, as it is highly important that the proper positions of these switches be indicated, it is suggested that, unless an engraving machine is handy, a very sharp steel point be used to scratch the desired indication in the panel, and then fill it up with white chalk so that it shows very plainly.

CONTINUING with our test on the radio frequency tubes, the next desired reading will be the C-bias voltage. This is always D.C., and is read on the 200 scale, either as 20 or 100. The dial switch is marked "C" and "C A-reverse." These two positions are given so that no matter which way the filament is connected, the



Showing the correct arrangement of readings to appear on bi-polar switch. Two positions are not used and may be left blank or utilized as the builder desires.

C-bias can be read directly. When the filament voltage is read on "A-reverse," the C-bias is read on "C A-reverse" correspondingly. Plate voltage readings may be now obtained by turning the switch dial to the "B" position either 200 or 800. It may be noted that the latter is seldom used outside of the power stage. Plate current readings are read on the milliammeter 30 scale. This plate current reading is the normal operating plate current.

To obtain a grid test, the grid key is pressed, which thereby connects the grid to the filament. (In most cases to the negative side.) This gives a high reading of plate current and in the case of power tubes, it is necessary to use the 300 milliampere range. The greater the difference between the normal plate current and the grid test plate current, the better the tube.

Various types of adapters can easily be made by the service men or purchased so that any type of socket or prong arrangement may be taken care of. A complete set of these should consist of the following material: six feet of double cord with a plug on one end and two terminals on the other for use with the A.C. voltmeter in testing A.C. line voltages; six feet of four-conductor cable with terminals at one end and a dummy four-prong tube base plug at the other; two short lengths of single cord with picks on one end and terminals on the other for use with the various meters when making external tests; and one four-prong and one five-prong adapter for use with heater type tubes. This in general will take care of practically all needs. Should cases come up when these do not take care of desired tests, adaptors can easily be made or purchased to fit unusual test requirements.

In the May issue of *Radio Retailing* on page 70 in this department, it was shown how to make an adapter in order to test shield grid tubes. This same arrangement can be applied to the tube tester described in this article. Any questions that may arise will be gladly answered by the editor of this department.

List of Parts for A.C.-D.C. Tester

Meters

A.C. voltmeter, 150-8-4 volts $$\rm D.C.~voltmeter,~200\textsc{-}8~volts$$ D.C. milliammeter, 30 m.a.

Resistances (One each)

600,000 ohms 12,000 ohms 80,000 ohms 0.133 ohms (1.7 in. of .015 in. manganum wire) Variable resistor for load test

Sockets

2-U.X. type

1—U.Y. type

Switches

- 15—Binding posts
 1—U.X. base converted into test plug.
 1—Adapter with U.Y. socket and U.X. base

Good Soldering Flux

The ordinary acid soldering flux is very bad when used in radio sets because of its corroding effect if some of the flux is left on the wires or metal parts. However, if this type of flux is used, all joints and parts soldered should be cleaned after soldering with a rag or brush moistened in wood alcohol. This will clean the acid away.

A much better flux to be used is glycerine and alcohol combined with a double reaction chloride. The glycerine stays on the wires and enables the solder to flow freely. Any druggist can make this up.

Directory of

Trade Show Exhibits

Listing all exhibitors, booth numbers and products on display at the second annual trade show of the Radio Manufacturers' Association, Hotel Stevens, Chicago, June 11-15

Abox Co.,

215 N. Michigan Ave., Chicago, Ill.

A-power units, filters.

A. C. Dayton Co.,

Booth B-63

308 E. First St., Dayton, Ohio.

Receivers.

Acme Elec. & Mfg. Co.,

Trickle chargers, B-power units, automatic control switch, A, B & C power units, A-power unit, A-B-C converter units for A.C. tubes.

Acme Wire Co.,

Booths B-8-9

1255 Dixwell Ave., New Haven, Conn.

Fixed condensers, wire & cables of all kinds.

Adler Mfg. Co.,

Booths B-74-5-6

29th & Chestnut Sts., Louisville, Ky.

Radio tables and cabinets.

Aero Products, Inc.,

1772 Wilson Ave., Chicago, Ill.

R. F. coils, short wave receivers, short wave transmitter kits, wave traps, antenna couplers.

Aerovx Wireless Corp.,

Booth B-83 wave transmitter kits, wave traps, antenna couplers.

Aerovox Wireless Corp., Booth B-83
70 Washington St., Brooklyn, N. Y.
Paper and mica condensers of all kinds, wirewound resistances and mountings.

All-American Mohawk Corp., Booths B-66-7
4201 Belmont Ave., Chicago, Ill.
Receivers.

Allen Bradley Co., Booth B-68
286 Greenfield Ave., Milwaukee, Wis.
Variable carbon resistances.

Aluminum Co. of America, Booths 61-2
Edgewater, N. J.
Aluminum for all purposes, magnesium products. Aluminum for all purposes, magnesium products.

American Bosch Magneto Corp.,
Springfield, Mass.
Receivers, reproducers, power units.
American Mechanical Lab.,
Booth 28
285 N. Sixth St., Brooklyn, N. Y.
Volume controls, variable grid leaks, variable resistors, power rheostats and variable power resistors, multiple variable resistors, socket antenna plugs, line voltage controls, electric heat controls, table type variable resistors.

Amrad Corp.,
Medford Hillside, Mass.
Receivers, electrolytic condensers.
Amsco Products Co.,
Booth 81
416 Broome St., New York City.
Condensers, sockets, rheostats, fixed resistors, resistance coupler, binding posts. resistors, resistance coupler, binding posts.

Andrea, F. A. D., Inc., Booths 18-9
Jackson Ave., Orchard & Queens Sts., Long Island City, N. Y.
Receivers, reproducers.

Apex Elec. Mfg. Co., Booth B-87
1410 W. 59th St., Chicago, Ill.
Receivers.

Arborphone Division Consolidated Radio Corp., Ann Arbor, Mich.
Receivers, reproducers.

Arco Elec. Corp., Booth 22 Arco Elec. Corp., Booth 22
207 E. Columbia St., Fort Wayne, Ind.
Chargers, A-power units, B-power
units, AB-power units, automatic
switches, filament transformers, choke
coils, power transformers, B-condenser
banks.

producer coils, transformer windings, extension cord, terminals.

Benjamin Elec. Mfg. Co., Booth 56
120 S. Sangamon St., Chicago, Ill.
Sockets, variable condensers, T. R. F. coils, brackets, switches.

Best Mfg. Co., Booth 14
1200 Grove St., Irvington, N. J.
Reproducer motors, reproducers, phonograph attachments.

Birnbach Radio Co., Booth 145
254 W. 31st St., New York City.
Extension and reproducer cords, cables, R. F. coils, connectors, flexible wire.

L. S. Brach Mfg. Corp., Booth B-57
127 Sussex Ave., Newark, N. J.
Lightning arresters, antenna outfits, plugs, connectors, window lead-ins, hydrometers, insulators, crystal detectors, relays, solder, A and B power units, power amplifiers, antenna plugs, Brachstats.

Bremer-Tully Mfg. Co., Booths B-3-4
656 Washington Blvd., Chicago, Ill.
Receivers, reproducers.

Bright Star Battery Co., Inc., Booth 71
Hoboken, N. J.
Flashlight cases and batteries, dry A, B and C batteries.

Brooklyn Metal Stamping Corp., Booth 146
718 Atlantic Ave., Brooklyn, N. Y.
Microphones, phonograph pick-up, vernier dials, switches, rheostats, crystal detectors, plugs, connectors, extension cords, jacks, crystal receivers.

Brown and Caine, Inc., Booth 6
2317 Calumet Ave., Chicago, Ill.
Fixed condensers.

Buckeye Mfg. Co., Booth B-71
440 W. Superior St., Chicago, Ill.
Receivers.

Buckeye Mfg. Co., Booth 52
Permanent magnets.

Buckeye Mfg. Co., Booth 52
Permanent magnets.

Bugess Battery Co., Booth 102
Madison, Wis.
Dry A, B and C batteries.

Buses Battery Co., Booth 131-2
Holland, Mich.
Cabinets, receivers, reproducers, reproducer cabinets.

Carter Radio Co.,
300 S. Racine Ave., Chicago, Ill.
Adaptors, condensers, jacks, plugs, reproducer cabinets.

Carter Radio Co.,
300 S. Racine Ave., Chicago, Ill.
Adaptors, condensers, jacks, plugs, resistors, rheostats, switches, current supply units.

Case Electric Corp.,
Marion, Ind.
Receivers.
Caswell-Runyan Co.,
Huntington, Ind.
Radio furniture.

C. E. Mfg. Co.,
Booth B-82
Huntington, Ind.
Caswell-Runyan Co.,
Huntington, Ind.
Radio furniture.

C. E. Mfg. Co.,
Booth 107
702 Eddy St., Providence, R. I.
Tubes.
Celoron Co.,
Bridgeport, Pa.
Molding powders, impregnated paper and fabric for molding, molded insulation, laminated sheets, rods, tubes, special parts, radio panels, silent gears, pinions.

Central Radio Corp..

Booth 44 Ration, laminated sheets, acus, special parts, radio panels, silent gears, pinions.

Central Radio Corp., Booth 44

Roosevelt and 5th Sts., Beloit, Wis.

Kits, sockets, receptacles, metal and Bakelite sub-panels.

Central Radio Labs., Booth 151

16 Keefe Ave., Milwaukee, Wis.

Variable resistances, volume control plugs, A. C. line voltage controls, heavy duty variable resistances, wirewound fixed resistances.

Chicago-Jefferson Fuse & Elec. Co., Booth 96

501 S. Green St., Chicago, Ill.

Audio transformers, choke coils, chargers, tube testers and checkers, tube rejuvenators, transformers.

Chillicothe Furn. Co., 1 Cherry St., Chillicothe, Mo. Radio furniture.

Columbia Phonograph Co., Booths 148-9
1819 Broadway, New York City. Radio-phonograph combinations.

Continental Fibre Co., Booth 76
1375 Wrigley Bldg., Chicago, Ill. Insulation material.

Cornish Wire Co., Booth B-28
30 Church St., New York City. Harnesses, antenna wire, antenna kits, hook-up wire.

Crosley Radio Corp., Booths 97-8
3401 Colerain Ave., Cincinnati, Ohio. Receivers, reproducers.

Crowe Name Plate & Mfg. Co., Booths 39-40
1749 Grace St., Chicago, Ill.
Metal escutcheons and face plates, etched and lithographed metal panels, metal dials and scales, name and serial number plates for radio accessories.

Cunningham, Inc., E. T. Booth 134
370 Seventh Ave., New York City.
Tubes. Day-Fan Electric Co., Booths B-77-8 1320 Wisconsin Blvd., Dayton, Ohio. Receivers.

DeJur Products Co.,

199 Lafayette St., New York City.

Ballast units, A. C. line voltage controls, wirewound resistances, metalized grid-leaks and resistors, variable condensers, sockets, heavy duty resistances, R. F. coils, binding post strip, illuminated dials, fixed mica condensers, plugs, resistance coupled units, resistor mountings.

Diamond Electric Spec. Corp., Booth 55

780 Frelinghuysen Ave., Newark, N. J.

Dry A, B & C batteries, tubes, flashlights.

Diamond Vacuum Prod. Co., Booth 7

4049 Diversey Ave., Chicago, Ill.

Tubes.

Dongan Electric Mfg. Co., Booth 152 Receivers. Dongan Efectric Mfg. Co., Booth 152 2987 Franklin St., Detroit, Mich. Audio transformers, power transformers, filament transformers, choke coils, condensers. condensers.

Dooley Elec. Mfg. Co., Booth 79
Wheeling, W. Va.
Power units, chargers, receivers.

Dubllier Condenser Corp., Booth B-10
4377 Bronx Blvd., New York City.
Fixed condensers, antenna plugs, interference filters. Eby Mfg. Co., Inc., H. H., Booth 133
4710 Stenton Ave., Philadelphia, Pa.
Binding posts, tip jacks, tube sockets.
Booth 88 Binding posts, tip jacks, tube sockets.

Binding posts, tip jacks, tube sockets.

Ekko Co., Booth 88

111 W. Monroe St., Chicago, Ill.

Ground clamps, connectors.

Electrad, Inc.,

173 Varick St., New York City.

Fixed and variable wire wound resistances, volume control, neutralizing devices, window lead-ins, jacks, mica and paper condensers, glass grid leaks, metallic grid leaks and resistors, socket antenna, switches.

Electrical Research Labs., Booth 84
2500 Cottage Grove Ave., Chicago, Ill.

Receivers, electric phonographs, amplifiers, magnetic phonograph pick-ups, dynamic reproducers.

Elgin Cabinet Co., Booth 75

Elgin, Ill.

Consoles, consolettes with built-in reproducers.

Ellen Warks Inc., Booth 130 Consoles, consolettes with built-in reproducers.

Elkon Works, Inc., Booth 130
515 Gregory Ave., Weehawken, N. J.
Tapering chargers, 3-amp. charger dry, replacement rectifier units, dry high capacity condensers (750 to 4000 mfd.), B-rectifiers, voltage regulator for A. C. sets, power plant for dynamic reproducers (transformer and dry rectifier).

Arcturus Radio Co., Booths B-30-1 255 Sherman Ave., Newark, N. J. Tubes.

Argus Radio Corp., Booth 23
257 W. 17th St., New York City, N. Y.
Receivers.
Aston Cabinet Mfrs., Booth 105
1223 W. Lake St., Chicago, Ill.
Cabinets.

Atwater Kent Mfg. Co., Booths B-37-8-9
4700 Wissahickon Ave., Philadelphia. Pa.
Receivers, reproducers.

Belden Mfg: Co., Booth 144 2300 S. Western Ave., Chicago, Ill. Cables, harnesses, hook-up wire, re-

Directory of TRADE SHOW Exhibits (Continued)

Essenbee Radio Devices Co., 2016 W. Lake St., Chicago, Ill. Ball antennas. Excello Products Corp., Boo 4820 W. 16th St., Cicero, Ill. Consoles, cabinets, tables. Booths B-64-5 Fansteel Products, Booths 85-6-7
State St., N. Chicago, 111.
Receivers.
Farrand Mfg. Co., Inc., Booths B-58-9
11 Court St., Long Island City, N. Y. 11 Court St., Long Island City, N. Y
Reproducers.
Fast, John E., & Co.,
3982 Barry Ave., Chicago, Ill.
Condensers.
Federal Furniture Factories.
206 Lexington Ave., New York City.
Cabinets and tables.
Federal Radio Corp.,
1738 Elmwood Ave., Buffalo, N. Y.
Receivers, reproducers.
Ferranti, Inc.,
Booths Booth 11 Booth 3 Booths 81-2 Receivers, reproducers.

Ferranti, Inc., Booth 9
130 W. 42nd St., New York City.
Audio transformers, choke coils.

Findlay, Robert, Mfg. Co., Booth 60
Metropolitan & Morgan Aves., Brooklyn,
N. Y. Metal console tables.

Formica Insulation Co., Booth 150
4614 Spring Grove Ave., Cincinnati, Ohio
Insulation material.

Freed-Eisemann Radio Corp., Booths 94-5
Junius St. & Liberty Ave., Brooklyn, N. Y.
Receivers, magnetic and dynamic type Receivers, magnetic and dyna reproducers.
Franch Battery Co., Booth Madison, Wis.
A, B & C dry batteries.
Charles Freshman Co., Inc., Booth Charles Freshman Co., Inc., Co., Co. Booths B-55-6 Booths 116-7 Receivers, reproducts

H. H. Frost, Inc.,

160 N. LaSalle St., Chicago, Ill.

Rheostats, variable high resistances, head-phones, jacks, sockets, fixed resistances, tip jacks.

Booths 12 General Dry Batteries, Inc., Booths 12
13100 Athens Ave., Cleveland, Obio.
Batteries.
General Instrument Corp.. Booth 13
477 Broadway, New York City.
Variable condensers, transformers, rhoostats, potentiometers, A-power units. units.

General Radio Co.,

30 State St., Cambridge, Mass.

Amplifiers, condensers, dials, power supply units, testing instruments, transformers.

supply units, testing instruments, transformers.

General Transformer Corp., Booth 35
900 N. Jackson Blvd., Chicago, Ill.
Audio transformers, pilter chokes, power transformers, power packs.

Gold Seal Elec. Co., Booths 46-7
250 Park Ave., New York City.
Tubes.

Grand Rapids Furn. Co., Booth 72
Grand Rapids, Mich.
Radio furniture.

Gray & Danielson Mfg. Co., Booth 92
260 First St., San Francisco, Calif.
R. F. amplifier, receivers, amplifier, foundation kits, dials, condensers, sockets, coils, transformers.

Grebe & Co., Inc., A. H., Booth 65-A
109 W. 57th St., New York City.
Receivers, reproducers, B- & C-socket power unit, short wave receivers.

Greene-Brown Mfg. Co., Booth 17
5100 Ravenswood Ave., Chicago, Ill.
A-power units, chargers

Grigsby-Grunow Co., Booths 64-5
4540 Armitage Ave., Chicago, Ill.
Receivers. Hamilton Mfg. Co.,
Two Rivers, Wis.
Radio furniture.
Hammarlund Mfg. Co.,
Booths 24
424 W. 33rd St., New York City.
Receiver kits. variable condensers, R.
F. chokes, dials, R. F. coils, shields, equalizers, couplings.
High Frequency Labs.,
Receivers, intermediate frequency and audio frequency amplifying units.
Howard Radio Co.,
469 E. Ohio St., Chicago, Ill.
Receivers.
Hoyt Electrical Inst. Co.,
Booth 8 Receivers.

Receivers.

Receivers.

Rooth 8

Penacook, N. H.

Testing instruments and meters.

Booth 15

Bridgeport,

Conn.

Booth 15

Bridgeport,

Conn.

Booth 153

Rooth 15

Bridgeport,

Conn.

Booth 153

Rooth 153

Rooth 153

Rooth 153

Rooth 153

Booth 21 International Resistance Co., Booth 522 Perry Bldg., Philadelphia, Pa.
Metalized resistors and powerohms. Booth 38

Jensen Radio Mfg. Co.. Booth 48
212 Ninth St., Oakland, Calif.
Dynamic reproducers.

Jewell Elec, Instrument Co.. Booth B-50
1640 Walnut St., Chicago, Ill.

Meters of all kinds, tube checkers, set
analyzers, capacity meters, radio test
bench.

Jones, Howard B.,
2300 Wabsania Ave., Chicago, Ill.

Multi-plugs, plugs, cable, socket equipment for radio sets and power packs.

ment for radio sets and power packs.

Karas Electrical Co., Booth B-54
4040 N. Rockwell St., Chicago, Ill.
Variable condensers, dials, output filters, short wave receivers, R. F. coils, audio frequency transformers, choke coils, power transformers, filament transformers, shielded grid tube kits, sub-panel brackets.

Karpen & Brothers, S., Booth 136
Jackson Ave., Long Island City, N. Y.
Cabinets.

Keilogg Switchboard & Supply Co., Booths B-25-6
1066 W. Adams St., Chicago, Ill.
Receivers, tubes.

Kenrad Corp., Booth 90
Owensboro, Ky.
Tubes.

King Mfg. Corp., Booth 93
Buffalo, N. Y.
Receivers.
Kingston Products Corp., Booth 128
Kokomo, Ind.
A. C.-units, A-power supply, B-power supply units.

Knapp Electric, Inc., Booth 130
Port Chester. N. Y.

A. C.-units, A-power suppl supply units.

Knapp Electric, Inc.,
Port Chester, N. Y.
A-power units, A-power
ABC-power unit kits.

Knoxville Table & Chair Co.,
Knoxville, Tenn.
Radio furniture.

Kodel Radio Corp. Booth 130

unit kits,

Radio Turniture.

Kodel Radio Corp., Booth 118
507 E. Pearl St., Cincinnati, Ohio.

A-power units, B-power units, rectifying elements.

Kolster Radio Corp., Booths B-60-1-2
200 Mt. Pleasant Ave., Newark, N. J.
Receivers, reproducers.

Lund, I. A., Corp., Booth 141 1018 S. Wabash Ave., Chicago, Ill. Radio cabinets.

Magnavox Co., Booth 111
4250 Horton St., Oakland, Calif.
Receivers, reproducers, tubes.
Maring Wire Co., Booth B-6a
Muskegon, Mich.
Magnet wire.
Marti Electric Corp., Booth 110
22 Central Ave., West Orange, N. J.
Receivers.

McMillan Radio Corp., Booth B-79 1425 S. Michigan Ave., Chicago, 1ll. Receivers.

1425 S. Michigan Ave., Chicago, Ill.
Receivers.

Micarta Fabricators Co., Booth B-80
500 S. Peoria St., Chicago, Ill.
Insulation material.

Minerva Radio Co., Booth 43
154 E. Erie St., Chicago, Ill.
Receivers.

Molded Wood Products Co., Booth B-29
219 W. Chicago Ave., Chicago, Ill.
Mounted and unmounted tone chambers, reroducer units, cone assemblies, reproducers.

Leslie F. Muter Co., Booth B-48
76th St. & Greenwood Ave., Chicago, Ill.
A.C.-power units, B-power units, mica & paper condensers, grid leaks, resistance mountings, fixed and variable wirewound resistances, R. F. chokes, audio chokes, output filters, window lead-ins, wave trap, switches, antenna kits, plugs, audio frequency transformers, lightning arresters, ground clamps, resistance coupled amplifiers.

National Carbon Co., Inc., Booths B-32-3
30 E. 42nd St., New York City.
Receivers, dry A, B & C batteries.
National Co., Inc., Booth B-98
Jackson, Sherman and Abbott Sts.,
Malden, Mass.
Tuning units, vernier dials, illuminated drum dials, variable condensers for receiving and transmitting, audio impedance units, tone filters, full and half wave chargers, B-power unit, B-power unit and power amplifier combined, filament transformers, A, B & C supply units for A. C. tubes, power transformers, condenser block, filter chokes.

National Vulcanized Fibre Co., Booth 69 Maryland Ave. & Beach St., Wilmington, Del.

Maryland Ave. & Beach St., Wilmington,
Del.
Vulcanized fibre and phenolite-laminated Bakelite furnished in basic forms of sheets, rods and tubes, as well as special orders.

Newcombe-Hawley, Inc., Booths B-34-5-6
St. Charles, Ill.
Reproducers—air column, magnetic cone and dynamic cone.

Northern Mfg. Co., Booth 137
371 Ogden St., Newark, N. J.
ABC kit (Marathon 608 type tubes, harness, volume control, pendant switch & B-power unit), A. C. kit (Marathon 608 type tubes, having volume control & step-down transformer).

complete line of tubes.

Northwestern Cooperage & Lumber Co.,
Booth 129

Gladstone, Mich. Radio furniture.

O'Neil Mfg. Co., T15 Palisade Ave., West New York, N. J. Reproducers.

Operadio Mfg. Co., St. Charles, Ill.

Air column reproducers, amplifiers, portable receivers.

Pacent Radio Co., Booth B-51
156 W. 16th St., New York City.
Magnetic pick-ups, reproducers, audio and power transformers, audio amplifiers, phonograph A. C. induction motors, reproducers.
Perryman Electric Corp., Booth 53
33 W. 60th St., New York City.
Tubes.
Philadelphia Storage Battery Co.

Tubes.
Philadelphia Storage Battery Co.,
Booths 123-4-5 C and Ontario Sts., Philadelphia, Pa.
Receivers, reproducers, batteries.
Pierson Co., Booth 115
Rockford, Ill.
Radio furniture.

Rockford, III.
Radio furniture.
Pioneer Radio Corp., Diano, III.
Receivers, sockets.
Platter Cabinet Co., Booth 91
North Vernon, Ind.
Air column reproducers, reproducer cabinets, desk consoles, radio-phonograph combinations.
Polymet Mfg. Co., Booth 113
599 Broadway, New York City.
Metalized and wirewound resistances, fixed and variable resistances,

ballasts, plugs, connectore, Booth B-40
1600 Indiana Ave., Philadelphia, Pa.
Cabinets and cabinet reproducers for
Atwater Kent radios.

Potter Mfg. Co., Booth 45
2004 S. Sheridan Rd., North Chicago, Ill.
Fixed paper condensers of all kinds.

Q.R.S. Co., Booth 109 25 E. Jackson Blvd , Chicago, Ill. Tubes.

Racon Elec. Co., Inc., Booth 119
18 Washington Place, New York City.
Horns, reproducers.
Radio Corp. of America, Booths 57-8-9
233 Broadway, New York City.
Receivers, reproducers, tubes. B-power units.
Radio Foundation, Inc., Booth B-27
1 Park Place, New York City.
Reproducers.
Radio Master Corp., Booths 138-9-40
Bay City, Mich.
Cabinets.
Radio Receptor Co., Booth B-69
106 Seventh Ave., New York City.
Power amplifiers, power units for A.C. tubes supplying A, B and C current as well as power amplification.
Raytheon Mfg. Co., Booth 134b.
Logansport, Ind.
Relay control switches, voltage regulators.
Red Lion Cabinet Co., Booth B-70
Red Lion, Pa.
Radio furniture.
Reichmann Co., Booth 154
1725 W, 74th St., Chicago, Ill.

Radio furniture.

Reichmann Co., Booth 154
1725 W. 74th St., Chicago, Ill.
Receivers, reproducers.
Roberts Co., H. T.. Booths B-44-5
1340 S. Michigan Ave., Chicago, Ill.
Cabinets, combination phonograph and radio cabinets, receivers, phonograph pick-ups, power amplifiers.

Rola Company Booth B-86 ola Company,
Oakland, Calif.
Magnetic cone and dynamic cone reproducers.
Immon Electric Co.,
Canton, Mass.
Audio transformers, choke coils, power amplifiers.

Roath 101. Sandar Corp.,

Crescent Plaza Bldg., Long Island City,

N. Y. Reproducers, cone and dynamic.
Sangamo Electric Co., Booth 135a
Springfield, Ill.
Audio transformers, push-pull audio
units, plate impedances, output chokes,
mica condensers. Springfield, III.

Audio transformers, push-pull audio units, plate impedances, output chokes, mica condensers.

Scovill Mfg. Co., Booths B-23-4
99 Mill St., Waterbury, Conn.
Condensers, dials, knobs, wire, machine screws.

Sentinel Mfg. Co., Booth B-52
9705 Cottage Grove Ave., Chicago, III.
Chargers, A-power units, BC-power units, ABC-power units, BC-power units, ABC-power units, ABC-power units, Booth 156
196 Waverly Ave., Newark, N. J.
Receivers.

Showers Brothers Co., Booth B-1-2
914 S. Michigan Ave., Chicago, III.
Acceivers and cabinets.

Sliver-Marshall, Inc., Booths B-6-7
846 W. Jackson Blvd., Chicago, III.
A.C. receiver kits, short wave receiver kits, screen grid kits, plug-in R. F.
coils, long wave receiver kits, A B and C power supply kit, public address systems equipment, R. F. and A. F.
chokes, variable condensers, fixed condenser blocks, drum dial, sockets, shields, brackets, hook-up wire, loops.

Slagle Radio Co., Booths B-88-9
1232 Maumee Ave., Fort Wayne, Ind.
Receivers, reproducers.

Sleeper Radio & Mfg. Corp., Booth B-88-9
1232 Maumee Ave., Fort Wayne, Ind.
Receivers with dynamic reproducers.

Sleeper Radio & Mfg. Corp., Booth B-19
108 W. Lake St., Chicago, III.
Tubes.

Sparks-Withington Co., Booths B-72-3
146 Summit St. Newark, N. J.
Receivers, reproducers.

Splitdorf Radio Corp., Booths B-72-3
146 Summit St. Newark, N. J.
Receivers, reproducers.

Stenite Radio Corp., Booths B-72-3
146 Summit St., Newark, N. J.
Receivers, reproducers.

Stenite Radio Corp., Booths B-20-1-2
506 S. Wabash Ave., Chicago, III.
Receivers.

Stenite Radio Corp., Booths B-20-1-2
506 S. Wabash Ave., Chicago, III.
Receivers.

Stering Mfg. Co., Booths G-0-1-2
506 S. Wabash Ave., Cleveland, Ohio.
A-power units, ABC-power units, chargers, B-power units, tube testers, tube rejuvenators, output transformers, automatic control switches. Stevens Mfg. Corp., 46 E. Houston St., New York City. Reproducers. Stewart-Warner Speedometer Corp., Booths B-46-7

1826 Diversey Blvd., Chicago, Ill. Receivers, reproducers. Johns Table Co., Booth 16
Cadillac, Mich.
Radio furniture with and without cone reproducers Booth B-92

Super-Ball Antenna Co., Inc., Booth 42 Green Bay, Wis. Antennas, super-ground clamps, radio insulators.

Muskegon, Mich.
Radio furniture made to accommodate horns, cones or dynamic cones.

Superior Cabinet Corp., Booth 83
206 Broadway, New York City.
Radio cabinets and tables.

Sylvania Products Co., Booths B-16-7-8

Emporium, Pa. Tubes.

Televocal Corp., Booth B-84
588-12th St., West New York, N. J.
Tubes.

Tubes.

Temple, Inc.,
213 S. Peoria St., Chicago, Ill.
Air column reproducers, air chrome reproducers, double action units.

Thordarson Elec. Mfg. Co., Booth B-41
500 W. Huron St., Chicago, Ill.
Audio transformers, filament and power supply transformers, audio chokes, output units, push-pull transformers, screen grid audio coupler, audio impedance units, transmitting apparatus, plate and filament supply transformers, plate reactors, microphone coupler transformers, line input and output transformers, line input

mand output transformers, the input inmons Radio Corp., Booths 120-1-2 79 E. Wister St., Philadelphia, Pa. Reproducers.

Reproducers.

be Deutschmann Co., Booth 73

Windsor St., Cambridge, Mass.
Fixed condensers, A-filters, light socket antennas, vacuum mica condensers.

be Booth B-53

Beoth B-53

Reproducers.

Reproducers.

Reproducers.

Transformer Corp. of America, Booth B-81 1428 Orleans St., Chicago, Ill.

Audio transformers, filament transformers, power amplifier kits,

Trav-ler Mfg. Corp., Booth B-93 3401 N. Halsted St., Chicago, Ill.

Portable receivers.

Tyrman Elec. Corp., Booth B-14 143 W. Austin Ave., Chicago, Ill.

Portable receivers.

Udell Works, Booth 142
28th St. at Barnes Ave., Indianapolis, Ind.
Radio furniture.
Ultratone Mfg. Co., Inc., Booth 34a
1046 W. Van Buren St., Chicago, Ill.
Reproducers.
United Cabinet Mfg. Co., Booth B-95
1615 S. Michigan Ave., Chicago, Ill.
Radio furniture.
United Radio Corp., Booths 67-8
15 Caledonia Ave., Rochester, N. Y.
Reproducers, dynamic and cone.
Utah Radio Products Corp., Booth B-96
1615 S. Michigan Ave., Chicago, Ill.
Reproducer units, exponential horns, cone reproducers, dynamic reproducers, electric phonograph pick-up.
Victoreen Radio Co., Booth 147
2825 Chester Ave., Cleveland, Ohio.
R. F. transformers, power audio unit, gang condensers and control, variable resistances, power transformer, choke coil, output unit, filament transformer, switch and plug unit.
Walhert Mfg. Co., Booth B-49
1000 Fullerton Ave., Chicago, Ill.

switch and plug unit.

Walbert Mfg. Co..
1000 Fullerton Ave., Chicago, Ill.
Receivers.

Wasmuth Goodrich Co., Booth B-15
Peru, Ind.
Radio furniture with cone reproducers, combination radio and phonograph cabinets.

Watsontown Table & Furniture Co., Booth 74
Watsontown, Pa.
Radio furniture with and without reproducers.

producers.

producers.

Webster Co.,
850 Blackhawk St., Chicago, Ill.
B-power units, A-power units, AB-power units, chargers.

Webster Electric Co.,
Racine, Wis.
Audio transformers, power transformers, power packs, chokes, electric

Audio transformers, power transformers, power packs, chokes, electric pick-ups.

Wells-Gardner Division Booth 103
Consolidated Radio Corp., 1720 N. Robey St., Chicago, Ill.
Réceivers.

Weston Elec. Instrument Co., Booth B-94
614 Frelinghuysen Ave., Newark, N. J.
Tube tester, A.C. and D.C. set tester, all types of volt meters and ammeters.

Wilcox Laboratories. Booth 20 Booth 20

Wilcox Laboratories, Charlotte, Mich.
Receivers, reproducers.
Yale Electric Corp., Booth 134a
. A-power units, trickle chargers, batteries.

Yaxley Mfg. Co., 1103 W. Monroe St., Chicago, II, Radio convenience outlets, resistances, switches, plugs. Booth 135

variable Zenith Radio Corp., 3620 Iron St., Chicago, Ill. Receivers. Booth 89

Would You Light a Cigarette with a \$1 Bill?

(Continued from page 71)

Likewise, on the service end. many manufacturers are prepared to advise your service man, to suggest equipment which will save time and money on service calls and to help with the knotty technical problems which the service man encounters. Testing devices of great value are offered by manufacturers at cost, enabling a more efficient and prompt service to your customers. Nor does this comprise the entire list of available aid in servicing problems.

They offer printed bulletins with valuable information, service schools at factory branches and, finally, regular courses for service men, carried on at the principal factory. The automobile industry has used such service education to advantage and even dealers in small towns hesitate to employ a service manager who has not spent at least two weeks or a month at the factory where the car he is to service is built.

Visiting the factory at which your line is made is a profitable expenditure of time for both sales and service man. A salesman can speak with a real backing of knowledge and a fire of enthusiasm born of experience, if he has watched the care and facilities employed in making a receiving set. Instead of using unconvincing

general terms in talking to prospects about care in manufacture and accuracy in inspection, the salesman who has seen with his own eves how the set is built, remembers striking examples, convincing, specific and sure-fire, impressing the prospect with the quality back of the product. Manufacturers are glad to show salesmen through the factory and give them some real selling pointers that help sell more goods. The dealer should not overlook the opportunity of watching the radio set in the making because it makes him a more competent salesman.

Why turn the cold shoulder to these dollar-making aids because you are "too busy selling," the excuse most freely offered as explanation for such neglect? If you are so busy, why not use some of these silent selling helps, to give you more time to exert your own sales influence on a larger number of prospects?

Your jobber's salesman is ready to tell you more of the various selling aids to which you are entitled. Do not disregard these many forms of assistance because they are offered at low cost. It is not philanthropy that prompts the manufacturer; it is sound business. And, by the same token, it is good business for you to increase your sales volume by taking advantage of this help,



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.



Radio Tables

A radio table designed especially for the Kolster 6J electric receiver is being made by the International Equipment Company, 1324 Chestnut Avenue, Kansas City, Mo. It is made of American walnut with spinet legs and is 26½ in. high, 27½ in. wide and 12½ in. deep. This model may be had either with or without built-in Peerless reproducer. A table to accommodate the A-K 37 and 38, the Crosley Bandbox models, including the 704. the Steinite electric receiver, and other electric models, is also made. This model is 24 in. long, 15 in. wide and 30 in. high, and has an intended retail price of \$15. — Radio Retailing, June, 1928.

Air-Column Reproducer

Retaining all of the characteristics of the models that have made Temple Air Columns famous, made by Temple, Inc., 1925 S. Western Ave., Chicago, Ill., the new Model 15 is now announced. The same exponential air column of previous models has been retained but by improvements in manufacture the tone of this new model is even better than that of its predecessors. It has a center-line air column length of 54 inches, yet because of its design it is small—being but 11½ inches in diameter. It responds perfectly to all the audible frequencies, and with volume to spare. Model 15 is encased in genuine walnut with sides of the same color in beautifully grained leather effect. List price \$29.00.—Radio Retailing, June, 1928.



New Philco Line

A complete line of radio receivers and reproducers is now being made by the Philadelphia Storage Battery Company, Philadelphia, Pa. It includes a table model six-tube A. C. set with single, illuminated control and a phonograph jack. To meet the popular color trend in furniture, this set may also be had, hand decorated, in nile green, mandarin red, and labrador gray, as well as undecorated in spanish brown. The undecorated sets have an intended retail price of \$115; the hand decorated ones, \$125.

A highboy model in the period of Louis XVI is also made with the Philco console grand reproducer, power supply and built-in aerial. The intended retail price of this style is \$275.

A console model of walnut with handrubbed finish is also offered, with the console grand reproducer, power supply and built-in aerial. This set has the single dial illuminated control and a phonograph jack. Intended retail price, \$200.

The chassis for all models is the same. This includes three stages of R. F. using

\$200.
The chassis for all models is the same. This includes three stages of R. F. using '26 tubes, a detector using a '27 tube, one '26 in the first audio and a '71 in the second audio.
Philco reproducers include the illustrated style, which is the console grand

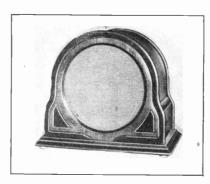


reproducer, made of walnut panels with hand-rubbed finish. This model has fluted legs and pillars and will accommodate any table receiver. The intended retail price, including reproducer, is \$50.

The mantel type reproducer has the balanced armature type unit with an exceptionally large magnet. The unit is non-adjustable, with self-positioning armature supports and a heavy steel drum with the ground coat baked on. The final coats have a lacquer finish. This reproducer may be had in colors to match the hand-decorated sets. The intended retail price in spanish brown is \$25; hand-decorated, \$27.50.—Radio Retailing, June, 1928.

Six Tube A.C. Receiver

A console style A. C. set with power amplifier and built-in dynamic reproducer, known as the "Avon," is being placed on the market by the Splitdorf Radio Corporation, Newark, N. J. This set has six tubes with a '50 power tube. It is enclosed in a compact walnut cabinet, 40 inches high and 20 inches wide with a paneled front grille, backed with real cane, and is said to have tremendous volume and depth of tone due to the power amplifier. It is equipped with a phonograph jack, making full phonograph record amplification possible. The intended retail price, including power amplifier and reproducer, but less tubes, is \$290.—Radio Retailing, June, 1928.



Cone Reproducer

The Trimm Radio Manufacturing Company, 847 West Harrison Street, Chicago, Ill., is placing on the market the illustrated clock-type cone reproducer, known as the "Entertainer." It has a new driving unit and is enclosed in a two-tone walnut cabinet. The intended retail price is \$25.—Radio Retailing. June. 1928.

A.C. Receiver

A.C. Receiver

The Apex Electric Mfg. Company of Chicago, a Division of the United States Electric Corporation, recently announced a new "All-Electric" receiver known as "The Model 36." This one-unit radio is encased in a richly finished metal cabinet, measuring 17½ in. wide, 7 in. high and 12 in. deep. The set is a genuine Neutrodyne and employs A.C. tubes, or four '26 amplifiers, one '27 detector, one 71A power tube and one UX-280 Rectifier, for power-pack. Designed to use 180 volts on the output tube, the tone is unusually natural and undistorted. Good selectivity with good volume. The dial is of the illuminated drum type and operates smoothly.

Due to the design of the Apex Model 36, it is readily adaptable to most console cabinets, thereby giving the dealer a selection of cabinets which he will obtain from several well-known cabinet makers. Retail price of set, less tubes, \$85—slightly higher West of Rockies.—Radio Retailing. June, 1928.



Art Panel Antenna

Art Panel Antenna
The Fishwick Radio Company, Central Parkway and Elm Street, Cincinnati, Ohio, is making the illustrated, horizontal art-panel antenna. The same tapestry effect is in this model that is used in other models of antennas made by this company and the only real change is that it is a little smaller. It is said to be very popular for mantel installation. The wires are interwoven in the tapestry the lead being taken from one end. It is claimed that this is a very efficient antenna and is at the same time very decorative. Intended retail prices are for plain panels, \$2.50 and \$4. For art panels, \$9.50.—Radio Retailing, June, 1928.

Where to Buy It

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

A.C. receiver for hospital use, shield-grid tuning unit, 6-volt panel lamp, divider resistor unit, testing instrument, and dynamic reproducers are among the items announced by manufacturers this month.



Electric Phonograph for Auditorium Use

The Freed-Eisemann Radio Corporation, Junius Street and Liberty Avenue, Brooklyn, N. Y., has just placed on the market the illustrated automatic electric phonograph designed for use in theaters or other places where large volume is desired. The latest type power amplifier incorporated together with an automatic device which allows the playing of a dozen records in consecutive order and then automatically turns off or repeats as long as is desired. Intended retail price is \$950. If it is desired to also use a radio set in combination with the power amplifier a D.C. set can be had complete with the phonograph apparatus for \$1,150 or an A.C. set for \$1,200. The records are played on one side only.—Radio Retailing, June, 1928.



Power Amplifiers and A.C. Converters

A.C. Converters

The Radio Receptor Company, 106
Seventh Avenue, New York City, is making several Powerizers. Powerizer "A"
supplies filament and grid bias for a set using '26 tubes, two '27 tubes, and one or two '71 tubes. It can be wired into the set or harness with a volume control. The intended retail price is \$12.
The Powerizer Junior is designed for sets using a '71 tube in the last stage. It supplies current for seven or eight '26 type tubes, two or three '27's and two '71's and furnishes grid bias for all these tubes. Intended retail price \$35.
The D. C. tube Powerizer is for sets operating only with the '99 type tubes and '22 type screen grid tubes, and has an intended retail price of \$80. A two-stage Powerizer is also offered which may be used in connection with the phonograph pick-up. Intended retail price, \$75. A power amplifier which retails at \$60 is also made, as well as a special Powerizer, with power pack, designed for the Radiola 25 and 28, which retails at \$84.—Radio Retailing, June, 1928.

Complete Reproducer Line

Newcombe-Hawley, Inc., St. Charles, Illinois, manufacturer of radio reproducers announce several important additions to its line for the 1928-1929 radio season.

Through a license agreement with the Magnavox Company of Oakland, California, Newcombe-Hawley will feature a complete line of dynamic cone reproducers in portable, table and console models. These reproducers will incorporate all the advantageous features covered by Magnavox patents which assure a perfected dynamic cone speaker with complete patent protection.

An interesting model is Model 100, Combination Console provided with a phonograph turn-table and electric motor, an A. C. dynamic cone reproducer, and space for any A. C. electric set. A simple switch in the console permits the reproducer to be used with either radio set or phonograph. No pickup is included. Price \$225.

Dynamic cone chassis units will be merchandised separately to set owners who wish to bring their reproducers up to date. Price, \$35 and \$50.

A magnetic cone has been added to the line and is offered in a series of portable and table models. Prices, \$18 to \$40.

The Newcombe-Hawley air-column line is continued in the several models which were popular during the past radio seasons.

The magnetic cone and the air-column are also sold in chassis unit form for set owners who prefer the units without cabinets.—Radio Retailing, June, 1928.



An A.C. shielded Grid Tube

An A.C. shielded-grid tube has just been placed on the market by the Arcturus Radio Company, Newark, N. J. The filament draws a current of 0.35 amperes and its normal operating potential is 15.0 volts. The screen grid is a combination grid interposed between the plate and control grid and a fine mesh arrangement completely enclosing the whole tube structure, thus introducing a completely shielded tube. It is mounted in a standard UX base and the terminals are connected as usual, except that the screen-grid is connected to the regular grid terminal at the base and the control grid is connected to a special terminal, mounted on the top of the tube. It is reported that the characteristics of the A.C. shielded-grid tube are similar to those of the conventional '22 D.C. design, except for a higher mutual conductance. Also slight variations have been made from D.C. design in input and plate impedances, better adapting the tube to use in standard circuits and with standard coils and auxiliary equipment. This tube is recommended for general amplification purposes, in the conventional r.f. and a.f. circuits. The intended retail price is \$7.50.—Radio Retailing, June, 1928.

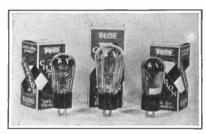
Mantel-Clock Type Reproducer

A reproducer of the mantel clock type with balanced armature is being placed on the market by the Timmons Products Corporation, Germantown, Philadelphia, Pa. The armature and its supports are stamped in one solid piece, insuring, it is claimed, perfect balance at all times. The intended retail price of this model, which is shown in the pictorial section of this issue is \$25.—Radio Retailing, June, 1928.



Receiver for Hospital Use

The Guthrie Company, Inc., Elyria, Chio, is making the illustrated radio receiver for use in hospitals. This is a seven tube a.c. receiver which uses the bed springs for an antenna and the water or steam pipes in the room for a ground. It is made in a very convenient form so that it may be easily moved about and controlled with a minimum amount of effort from the bed. The intended retail price is \$200.—Radio Retailing, June, 1928.



Champion's Complete Line of Radio Tubes

Line of Radio Tubes

The Champion Radio Works, Inc., Danvers, Mass., has extended its line of radio tubes. Taking these in the order that they are given by this company, they are as follows:

The UX-226, which is a 1½-volt A. C. tube, listing for \$2.50; the UY-227, which is a 2½-volt heater A. C. tube, listing for \$5; the UX-2280, which is a full wave rectifier and lists for \$4.50; the UX-112A, which is a 5-volt, ½ amp. tube which may be used either for the power amplifier or a general purpose tube, and lists for \$3, the UX-281, which is a half-wave rectifier, listing for \$7.50; the X-250, which is a power amplifier, listing for \$12; the X-210, which is also a power amplifier which lists for \$9; the X-201-A, which is a detector and amplifier, lists for \$1.50; the X-199, which is a 3-volt tube, listing for \$2.25; the V-199, which is the same as above, except that it has the old type base and lists for \$2.25; the X-200-A, which is a supersensitive detector tube operating on 5 volts, drawing ½ amp., which lists for \$4; the X-171, which is a power amplifier, a 5-volt tube, listing for \$3; the X-120, which is the 3-volt power amplifier tube, which lists for \$2.50; and the X-240, which is a high Mu tube which can be used as a detector and voltage amplifier circuits, which lists for \$2.—Radio Retailing, June, 1928.



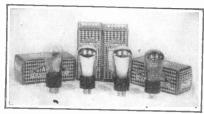
Desk, Receiver and Reproducer

A combination desk, radio receiver and reproducer is being made by the Frank R. Porter Company, 1362 Park Road, N. W., Washington, D. C. This combination may be had with either an electric or a battery-operated set, loop or antenna, and a choice of any of the Porter reproducers except the enchanted cup. The control is in the center of desk with pigeon holes on either side and there are two spacious drawers below The intended retail price, with a battery set, is \$250, or \$350 with an electric set.—Radio Retailing, June, 1928.

Audio Transformers

Audio Transformers

The Sangamo Electric Company. Springfield, Ill., is making several new audio transformers. Type A is designed for ordinary use and has an intended retail price of \$10. Type B, a push-pull input model, has an extremely high primary inductance insuring maximum amplification at low frequencies. The intended retail price is \$12. Type C, is known as the 171 push-pull output transformer, the impedance of which is especially designed to match that of the 71 type power tubes. The list price is \$12. Type D-210 push-pull output transformer is designed to match the impedance of the '10 type power tubes as well as the '12 type tubes. Two '10 tubes in a push-pull amplifier give the maximum output obtainable. Price, \$12. Type E, an output impedance, protects the windings in the speaker from damage likely to be caused by the heavy direct plate current. It is provided with taps to permit matching of impedances to the various types of power tubes. List price, \$5. And, type F, plate impedance, may be used in an impedance coupled amplifier. Taps are provided so that it may be used as an auto-transformer when more amplification per stage is desired than can be obtained from straight impedance coupling. The intended retail price is \$5.—Radio Retailing. June, 1928.

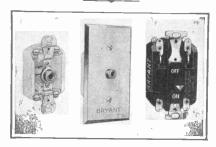


Complete Line of Receiving Tubes

The Diamond Electric Corporation, 780 Frelinghuysen Avenue, Newark, N. J., is now making a complete line of radio receiving tubes, at standard prices, with the following designations: D201A, D112, D171, D200A, DUX199, DUV199, DUV199 Std., D240, D210, D280, D281, D226 and D227.—Radio Retailing, June, 1928

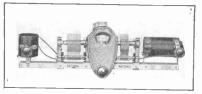
Center Tap and Filament Resistances

An "A. C. Hum Killer," as it is called, is being sold by Arthur H. Lynch, Inc., 1775 Broadway, New York City. It is a center tapped resistance, the resistance on either side being held to an accuracy of one half of one per cent, the manufacturer claims, thereby eliminating a hum in the reproducer which is so often caused by a resistance being off-balance. There are three types. One is for use in connection with 1.5 volt tubes, another is for use with 2.5 and 5 volt tubes and the third is for use with 7.5 volt tubes. Each is sold with a standard Lynch mount. The intended retail price is \$1. This company also sells a resistor unit, called the "Equalizor type 15," to be used in the filament circuit of shield grid tubes.—Radio Retailing, June, 1928.



Switches and Receptacles

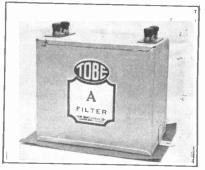
A double pole, double throw, composition cup, flush tumbler switch for power units is one of the new products of the Bryant Electric Company, Bridgeport, Conn. This switch, No. 3888, is a compact, indicating tumbler switch with eight silver plated solder terminals, four at each end. It may be mounted in the receiver panel or any cabinet where a compact concealed flush mounting is desired. The intended retail price is 65c. each. This company also makes a radio jack flush receptacle, No. 2912, with a block composition - bushing plug - hole collar. This may be used as an aerial ground connection, or, with the yoke wire removed, as a reproducer or head set extension, or for battery leads. Intended retail price, 50c, each. A single gang "O" plate of .06 inch brass may be obtained for this receptacle at a list price of 18c. each.—Radio Retailing, June, 1928.



Tuning Unit for Use With Shielded Grid Tube

Tube

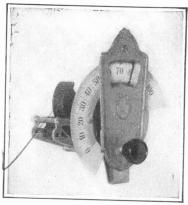
The National Company, Inc., Jackson, Sherman and Abbott Streets, Malden, Mass., is placing on the market the illustrated type 222 tuning unit which is designed for use with a shield grid tube. This type is similar in appearance to the well known type G unit but has the proper windings to permit the use of the '22 or shield grid type of tube. In this unit is embodied a special Browning Drake high impedance slot wound primary transformer. When due care is given to the proper location of the coils and condensers, the necessity of the shielding itself is eliminated. The unit gives single dial control actuated by a knob at the base of the escutchcon, the dial being illuminated. The dial is printed very clearly on celulose, making reading easy. The list price of the unit complete with dial is \$24.50. Complete drilling instructions and panel layout comes with each unit.—Radio Retailing, June, 1923.



A-Filter and A-Block

A-Filter and A-Block

A condenser for use in filtering 6-volt filament supply and containing 3,600 mfd. within a space of 5 in. by 53 in. by 14 in., is being made by the Tobe Deutschmann Company, 11 Windsor Street, Cambridge, Mass. This condenser makes possible the use of low-voltage rectified alternating current for lighting the filament of the ordinary battery-type tubes from a lamp-socket alternating current supply. By combining this A-block with a pair of chokes of suitable size, and a battery charger of proper type, completely wired, 6-volt, filtered, rectified current is available. The A-filter operates on a single-battery charger, capable of delivering two or three amps., with provision for voltage regulation by taps on transformer or a heavy-duty rheostat in secondary, so as to give nine volts at output terminals. A trickle charger cannot be used for '01-A type tubes unless there are not over two of them, and a charger with an auto transformer cannot be used. The intended retail price of the A-filter combined with the A-block and suitable chokes is \$18.—Radio Retailing, June, 1928.



Illuminated Dial

This new illuminated dial made by the Pilot Electric Mfg. Co., Inc., 323 Berry St., Brooklyn, N. Y., is distinguished by an antique bronze-finish front plate of classic Roman design. The soft hammered effect retains the best traditions of guild craftmanship. The construction is rugged and simple, a constant-friction drive being employed, thus eliminating any "play" or backlash and resulting in a steady velvety motion. Illumination is obtained by a flash-light-type bulb placed behind the translucent dial.—Radio Retailing, June.

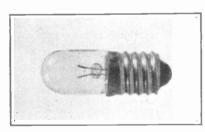
A-B-C Supply for A.C. Tubes

The Greene-Brown Manufacturing Company, 5100 Ravenswood Avenue, Chicago, Ill., is placing on the market several types of power units designed to supply the various voltages necessary for the operation of A.C. tubes. The first type AJ is designed for use with the Arcturus type of tube. The second type RJ is designed for use with standard type of A.C. tubes. The intended retail prices are \$37.50 each less the tube.—Radia Retailing, June. 1928.



Service Test Instrument

The illustrated radio service instrument and traveling case is being manufactured by the Supreme Instruments Corporation, Greenwood, Miss. This case is fully equipped with instruments and all tools and supplies needed by the service man. It contains compartments for everything and has a tube shelf designed to protect the tubes. Under this swinging shelf are felt-lined compartments for small tubes, oscillator coils, etc. The case, size 10½ in. x 18 in. x 7 in., is strong and leatherette covered, with lock and key. The intended retail price is \$98.50. Equipped with large A. C. meter 0-3, 3-18, 0-150 volt triple scale with leads, in leather case, \$11 extra. This company also makes a slightly smaller radio service instrument for store use, fully equipped with special test cords, adaptors, coils and all necessary equipment to test radios. Cover, which has slip hinges for removal, has a compartment to hold all accessories. Price complete. \$89.50. With A. C. meter, same as above, \$11 extra. This instrument makes all A. C. and D. C. tests and synchronizes R. F. stages by both visual and audible means—Radio Retailing. June, 1928.



6-8 Volt Panel Lamps

The Matchless Electric Company, 143 West Austin Avenue, Chicago, Illinois, has placed on the market what is known as No. 40-T-3, radio panel lamp. This is a 6-8 volt lamp designed for illuminating dials and panels. It is manufactured and licensed under General Electric patents and has an intended retail price of 20 cents.—Radio Retailing, June, 1928.

Dynamic Cone Reproducers

Two types of dynamic cone reproducers, one designed primarily for radio receivers and the other for electric reproducing phonographs and radio-phonograph combinations are being made by the Electrical Research Laboratories, 2500 Cottage Grove Avenue, Chicago, Ill. Of especial interest to cabinet manufacturers, is a combined dynamic cone reproducer and power amplifier, designed for quick installation as a single unit in any cabinet having a space measuring 14 in. long, 10 in. high and 12 in. deep, for the reproducer. In addition, this company makes amplifiers and magnetic pick-ups of all types.—Radio Retailing, June, 1928.

Divider Resistance Unit

The newest Electrad product is a complete resistance unit for simplifying the construction of B-power units, called the "Truvolt Divider." It is so arranged with variable taps that the proper grid and plate voltages are easily obtained with any set and power unit combination. By dividing the filter voltage into usable values, it eliminates a great deal of the mathematical calculations and much wiring. It is said that this divider makes it comparatively easy for even the non-technical radio fan to construct a B-power unit which will deliver the proper voltages.

Other products made by the Electrad, Inc., 173 Varick Street, New York City, include "Truvolts," a complete line of volume and sensitivity controls; Royalties, variable high resistances; and the Phasatrol, a balancing device for radio frequency amplifiers.—Radio Retailing, June, 1928.



Grid Leak Clarostat

The new grid leak Clarostat which is being made by the American Mechanical Laboratories, 285 N. Sixth Street, Brooklyn, N. Y., is a compact and noiseless instrument capable of holding any resistance setting. It has a resistance range of from that to 10 megohms in several turns of the knob and can be readily mounted on panel or baseboard. This device is of the same size as the volume control Clarostat, is finished in nickel plating, with screw terminals, and is provided with a special inverted-lybracket so that it may be placed alongside the detector socket, and still be readily available for any setting of the grid leak value. It may be employed in the detector grid circuit of the broadcast receiver and the short-wave receiver, and may also be used as an adjustable resistance value in resistance oupling and impedance coupling, or wherever a high resistance of small current-handling capacity is required. The intended retail price is \$1.50.—Radio Retailing, June, 1928.

A.C. Filament Transformer

The latest product of the Dongan Electric Manufacturing Co., 2987 Franklin Street, Detroit, Mich., is an A. C. type transformer, equipped with terminals designed for use with the new wiring harnesses. The transformer, model No. 6570, is designed for operation with four '26, one '27 and one '71 power amplifier type tube and is mounted substantially in a crystallized lacquered case, equipped with lamp cord and plug outlet for B-power unit, also tap for control switch. The intended retail price is \$6.50.—Radio Retailing. June. 1928.

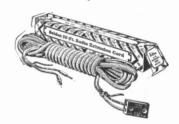




Negative Aerial and Positive Ground Devices

The "Wesholly" positive ground made by the Sunset Manufacturing Company, 7471 Melrose Avenue, Los Angeles, Calif., is a cylinder of copper bronze screen having a core of charcoal surrounded by sawdust, chemically treated, whose action with moisture becomes a cleanser of the screen. After installation, a wave of moisture passes through the screen at all times giving a good electrical connection with the earth. This ground, which may be easily moved at any time, has an intended retail price of \$2.25.

This company also makes a negative aerial with a pick-up capacity equal, it is claimed, to 516 feet of No. 14 wire, compacted into 12½ feet of vertical non-directional aerial. It is easily installed and is made of copper bronze and treated with many coats of Zapon lacquer, minimizing corrosion. The intended retail price is \$7.50.—Radio Retailing, June, 1928.



Reproducer Extension

A recent addition to the radio wire accessory line of the Belden Manufacturing Company, 2300 South Western Avenue, Chicago, is a 50 foot reproducer extension cord. This new cord consists of two rubber-insulated conductors inside a neat brown cotton braid. It is equipped with pin tip terminals on each end. A handy bakelite connector is provided for connecting to reproducer cord terminals. The rubber insulation prevents leaking in the long cord, a very important feature in an extension cord of such great length.—Radio Retailing, June, 1928.

ABC-Power Supply

The Acme Apparatus Corporation, 37 Osborne Street, Cambridge, Mass., is manufacturing a type M-BH power supply unit using a Raytheon BH rectifier tube. The terminals are plainly marked for the various voltages and conveniently located on the top. The terminal panel binding posts are of the improved type with the internal leads soldered and screw posts with guard to prevent the external wires from slipping out of position as they are being fastened. The intended retail price is \$35.—Radio Retailing, June, 1928.

What the Trade is Talking About

F.R.T.A. Convention Meets in Chicago

The Federated Radio Trades Association has completed arrangements for the annual convention to be held June 11 to 15, at the Hotel Stevens, Chicago, in connection with the second R.M.A. trade show.

The convention will be officially opened The convention will be officially opened on Tuesday, June 12, with a joint meeting of the F.R.T.A. and the R.M.A. On Wednesday, June 13, all sections of the Federated will hold individual meetings for the discussion and solution of their own problems. On Thursday, the board of directors will meet to discuss the result of the Wednesday sectional meetings. The program for the coming year will also be discussed and the activities of the organization outlined. tion outlined.

Plans for the dealers' section will be presented to the attending dealers for adoption on Wednesday, and Julian Sampson, chairman, expects to secure several hundred applications in organizing this division.

The Radio Wholesalers' Association, the

jobbers' group of the F.R.T.A., held a closed, pre-show meeting on Saturday, June 9, for the discussion of its individual problems. On Wednesday, June 13, is will hold a meeting open to all attending wholesalers, at which time memberships will be invited. The election of officers will take place.

Trade Commission Issues Complaint Against R.C.A.

A new complaint was issued May 25 by the Federal Trade Commission against the Radio Corporation of America in regard to clause nine of the license agreement in which licensees agree to use R.C.A. tubes exclusively in radio receivers made and sold under the corporation's patents. The Trade Commission contends that this is "unfair" and tends to create a monopoly.

As the patents for the vacuum tubes have expired and are now open to the public, the commission has charged the R.C.A. with violation of the Clayton Act and section five of the Federal Trade Act. Hearings begin in Washington on July 23.

Paragon Electric Starts Manufacturers' Service

A new way to serve radio manufacturers has been announced by the Paragon Electric Corporation which has recently moved varick Street, New York City. The Paragon company has set itself up as more or less of a factory branch where receivers may be tested and repaired instead of being

returned direct to the home factory.

This new plan will be of great economic service to manufacturers located outside of New York City, according to P. A. Petroff, president of Paragon. Factory returns eat up a good portion of manufacturers' profits. The cost of such returns from the Eastern district to a factory in Chicago, for instance, is high. Under the Paragon arrangement, sets of any manufacturer may be sent to Paragon, repaired, and returned to the sender without the necessity of costly

transportation to and from a distant factory. The completely equipped Paragon factory is available for the use of any radio manufacturer who desires economical service facilities in the North Atlantic states.

Over Quarter of Million Sets in Canada

Officially there are now 258,494 radio receivers and 91 broadcasting stations in the Dominion of Canada, according to a recent report to the House of Commons at Ottawa. Last year there were 96 stations but five licenses were not renewed because

of complaints.

The receiving sets are licensed yearly at an annual fee of \$1, the proceeds from this source being used by the Radio Branch of the Department of Marine and Fisheries for research work and for the elimination of interference in all cities and towns throughout the Dominion. In spite of this, thousands of people avoid payment, and at regular intervals there is a round-up of such offenders by the Royal Canadian Mounted Police, many being fined in local police courts.

It has been intimated at Ottawa, the Canadian capital, that there are probably 50,000 unlicensed radio sets in the Dominion. This would bring the total up to the 300,000

The Federal Radio Corporation, Buffalo, N. Y., held a pre-season round table discussion with its distributors on June 6 and 7, at the Hotel Statler, Buffalo. get-together inaugurated a series of business meetings to be held during the remainder of the year. K. E. Reed, sales manager, talked on the company's contemplated marketing plans, and S. M. Doak, advertising manager, presented the proposed advertising schedules.

HENRY L. CROWLEY, for many years president of the Isolantite Company of America, has sold his interest and resigned to organize the firm of Henry L. Crowley and Company, with factory and main offices at East Orange, N. J. An extensive line of ceramic products will be made under the name of Crolite. Mr. Crowley is in direct supervision of sales and will be assisted by H. C. Holmes and Robert Crowley, who will be in charge of production and engineering. to organize the firm of Henry L. Crowley

THE R.M.A. BANQUET to be held during the trade show in Chicago, which was scheduled for the Rainbo Garden is now to be held at the Palmer House, State and Monroe Streets, Thursday, June 14.

THE OPERADIO MANUFACTURING COM-PANY has moved to larger headquarters at St. Charles, Ill. A sales and service office will be maintained, however, in Chicago at 8 South Dearborn Street.

J. Q. Adams, formerly in charge of the radio department of the Hartman Furniture Company, Chicago, is now manager of the radio department of the W. A. Wieboldt & Company department stores in Chicago.

THE RADIO FOUNDATION, INC., New York City, is now located at 1 Park Place, with the factory at Ansonia, Conn.

Important Addresses Made at NEMA Radio Division Meeting

A large attendance featured the annual meeting of the Radio Division of NEMA, which was held at the Drake Hotel, Chicago, June 4-7. Usually the annual meetings of all divisions of NEMA are held at Hot Springs, Va., during the second week of June, but owing to the conflict of dates with the Radio Trade Show that week, the Radio Division decidates were their cases. Radio Division decided to move their meet-

ing to Chicago.

The program of the meeting included fourteen speakers on timely subjects of interest to radio manufacturers. The speakof the Capper-Kelly Bill; Dr. Herbert E. Ives, special research engineer of the Bell Laboratories who talked on "Television"; Thomas F. Logan, chairman of the radio committee of the American Association of Advertising Agencies and also president of Lord & Thomas & Logan; H. Curtiss Abbott, general sales manager of Crosley Radio Corporation; R. L. Duncan, director of the Radio Institute of America, and H. B. Lewis, vice-president of the Commercial Credit Company.

Increase in 1928 Radio Sales Indicated

The following statement has been issued by the Standard Statistics Company, New York City, on the outlook in the radio industry: "The position of the radio industry is, in practically all respects, more satisfactory at present than at this period of 1927. Sales, although recently following a downward trend in reflection of seasonal influences are running quite substantially influences, are running quite substantially heavier than a year ago, and the indications are that the increase will be fully sustained during early future months. With unloading of stocks by producers much less general than is usually the case at this time of year, prices are displaying exceptional stability. While trade conditions have not stability. While trade conditions have not yet improved sufficiently to permit satisfactory profits for the general run of manufacturers, most of the large, well established concerns probably will show more favorable earnings in the first half of this year than last."

THE PILOT ELECTRIC MANUFACTURING COMPANY, INC., Brooklyn, N. Y., plans to make television parts for amateur set builders and has engaged an expert to direct the activities of this department, according to an announcement from the company.

THE CARRYOLA COMPANY, Chicago, has appointed the Reed G. Landis Company of the same city, to handle its advertising. The Landis Company is located at 26 East

H. L. WILLIAMS has been made advertising manager of Silver-Marshall, Inc., Chicago. Mr. Williams was previously connected with the Bendix Brake Company and the Diamond T Motor Car Company.

Business Problems Discussed at Commerce Convention

Many subjects of unusual importance to business men and business organizations were discussed at the sixteenth annual convention of the United States Chamber of Commerce held May 7 to 11 at Washington, D. C.

Tax reduction, reduction of distribution costs, condemnation of the craze for "volume without profit," condemnation of government interference with or regulation of business, and the cleansing of unethical practices in business were some of the measures advocated by the Chamber.

A scathing denunciation of unethical business conduct and a plea for American business to purge itself of these conditions and of the individuals who sponsor them were features of the opening address by Judge Edwin B. Parker at the initial ses-

"lust as nations will decline to recognize a government committed to destroying the foundations of civilization," Judge Parker said, "and just as the legal and medical professions purge themselves of unethical practitioners, so will business decline to recognize as a member of the profession of business, and trade associations will decline to receive into their ranks, or will expel, an individual or an organization that wilfully violates the fundamental principles upon which sound business rests.

Government regulation of business and government ownership of businesses was also scored by Judge Parker.

That chain stores would have to take an active interest in the welfare and upbuilding of those communities in which they establish branches was stated by E. C. Sams, president of the J. C. Penney stores, in an address before the Domestic Distribution division. Chain stores should also work in close co-operation with local business men's organizations, he said. these two things are done, he advanced the belief that chain stores are doomed to feel the reproach of local townspeople who, through local pride, would buy in other stores.

Tax reduction, particularly reduction of the corporation tax to 10 per cent, was urged by Professor Thomas S. Adams, of Yale University, in a talk at the meeting of the Finance Division. He stated that the logical course to pursue, in disposing of Treasury surpluses, was not to apply them to reduction of the public debt, which would write itself off in a few years, or to save the surplus for possible future depressions which could be met when and if en-countered, but to use the surplus govern-ment funds for reduction of the present tax burdens of business and the people as a whole.

Local business men's organizations can help in the problem of tax reduction, according to Felix McWhirter, president of the Peoples' Savings Bank, Indianapolis. who urged such organizations to study their local taxation systems and to make recommendations to local authorities as to how and where local taxes can be reduced. These, he said, offered more opportunity for reduction than do the Federal taxes.

The folly of the policy of business generally to strive for volume without giving due consideration to net profits was stressed by E. J. Mehren, vice-president of the Mc-Graw-Hill Publishing Company, in a talk before the Manufacturers' Division.

"A full factory and red ink," Mr. Mehren said, "seems to be as popular as 60 per cent operation and plenty of black. We are crazy for volume and ruinous prices fill up



Toastmaster Supreme

Ray Thomas, president of Ray Thomas, Inc., Atwater Kent distributor of Los Angeles, Calif., must be thinking of what he'll say when he acts as toastmaster at the banquet and frolic which Atwater Kent is staging for the delegates to the fifth annual convention of the Western Music Trades Association, when they gather in Los Angeles, June 26 to 29. More than fifty entertainers and a forty-piece orchestra will add to the festivities which will be under the direct supervision of T. Wayne McDowell, A-K's convention manager.

our factories. It is time industry's goal became net profit, and not volume for volume's sake alone.

Announce Winners in Kellogg Window Contest

Ten prizes were awarded in the recent radio window display contest conducted by the Kellogg Switchboard and Supply Company of Chicago. Many photographs were received, indicating an active interest in better window displays.

better window displays.

The winners were: 1st, T. M. Cook, Inc., Toledo, Ohio; 2nd, Findley Electric Co., Minneapolis, Minn.; 3rd, Jermyn Bros.. Scranton, Pa.; 4th, Commonwealth Edison Co., Chicago, Ill.; 5th, Lawler Brothers, Bayonne, N. J.; 6th, Bachman Elec. Co., Fond du Lac, Wis.; 7th, Buech Servenberg Shoppe Milwaylee Wis. 8th. Saxaphone Shoppe, Milwaukee, Wis.; 8th, Duncan & Goodell Co., Worcester, Mass.; 9th, Bluebird Music Shop, Philadelphia, Pa.: 10th, Johnson's Electric Shop,

Pa.: 10th, Johnson's Electric Shop, Nashua. N. H.
J. E. Dalinghaus, manager, radio advertising, Chicago Tribune: C. C. Fogarty of the Matteson. Fogarty, Jordan Advertising Agency, Chicago, and E. Butt, of the Rosenow Company. Chicago, acted as judges.

THE COLIN B. KENNEDY COMPANY, formerly of St. Louis, Mo., has moved to Highland, Ill. Production will immediately start on the 1928 models which embrace a line of A.C. receivers.

CYRUS L. ADLER, president of the Adler Manufacturing Company, Louisville, Ky., passed away on May 3, in Louisville. Mr. Adler had been in poor health for some time. In 1903, he organized a company to manufacture reed organs and pianos and the present Adler Manufacturing Com-pany is the outgrowth of his original venture.

NEMA Puts 1927 Set Sales at 1,830,000

Battery-operated radio sets composed approximately 75 per cent of all receivers sold by dealers in this country during 1927. The total sale of radio receivers was 1,830,000 divided between 1,343,000 battery and 487,000 A.C. sets, according to figures obtained under the direction of Marshall T. Jones, chief of the Electrical Equipment Division of the Department of Commerce in co-operation with the Radio Division of the National Electrical Manufacturers Association.

In spite of a widespread public demand for A.C. sets, dealers are rapidly acquiring sufficient stocks of this type of receiver to meet their requirements. The statistics for the first quarter of 1928 also show that radio dealers have kept their stocks replenished this year and that during the first three months there was little reduction of dealers' inventories. While definite statistics are not available prior to October 1, 1927, manufacturers have in previous years experienced a reduction of sales volume as the first quarter advanced, according to R. A. Klock, chairman of the Statistics Committee, Radio Division, N.E.M.A.

An interesting comparison between the stocks of battery operated sets and A.C. stocks of battery operated sets and A.C. sets is shown by the following figures: On October 1, 1927, there were 267,000 battery-operated sets as against 28,000 A.C. sets: on January 1, 1928, 250,000 battery and 101,000 A.C. sets; and, on April 1, 1928, the second 100,000 battery sets and 110,000 there were 190,000 battery sets and 119,000 A.C. sets, or a total of 309,000 sets on hand, April 1. This places the national average at approximately ten sets per dealer for the 31,000 dealers listed, making an average inventory of over \$1,000 in radio receivers alone, at retail prices.

THE RADIO CORPORATION OF AMERICA, New York City, and subsidiary companies, have issued a statement of operations for the quarter ended March 31, 1928, showing a surplus profit of \$3,122,874.05. The dea surplus profit of \$3,122,874.05. tailed statement is as follows:

Gross income from sales, com-Gross income from sales, communications, real estate operations, and other income. \$16,792,547.63

Deduct: General operating and administrative expenses, depreciation, cost of sales, patent amortization, estimated federal income tax and accrued reserve for year end adjustments..... 13,669,673.58 13,669,673.58

Surplus profits for quarter ended March 31, 1928.... \$3,122,874.05

THE BREMER-TULLY MANUFACTURING COMPANY, Chicago, has moved to its new factory at 656 Washington Boulevard, factory at 656 where two acres of floor space is available for the manufacture of radio receivers, reproducers and phonograph combinations. This company is one of the pioneers in the radio industry, and its steady growth since its inception, has warranted the new and larger manufacturing facilities.

THE ST. JOHNS TABLE COMPANY, Cadillac. Mich., has entered the radio field and is now making a complete line of radio tables and cabinets.

THE TOBE DEUTSCHMANN Cambridge, Mass., has changed the location of its New York office to 117 Liberty Street, where A. J. Lyons is in charge.

THE HOWARD RADIO COMPANY, Chicago, has moved to its new factory at 4949 North Crawford Avenue.

Kolster Dealers Form Club

A club of radio dealers all located in the same territory, organized to turn rivalry into co-operation, has been formed by the Kolster radio dealers of St. Louis under the leadership of Eugene Straus of the Straus Company, distributor for the Kolster Radio Corporation. The members meet each month "to talk shop." At these sessions they exchange ideas on salesmanship and prospect promotion which have been tried and found to be successful.

The officers of the club are: president. Lee M. Schlude, Hellrung and Grimm Co.; vice-president, E. E. Bruns, Baldwin Piano Co.; second vice-president, C. E. Krummenacher, Krummenacher Co., Clayton; secretary and treasurer. Thomas G. Crabb,

Straus Co.

The board of directors includes: C. Heinrichs, East St. Louis House Furnishing Co.; A. Gaubatz, Premier Radio Co.; Walter Rhein, Belleville, Ill.; L. J. Portell. Portell Battery and Electric Co., Festus: S. Anich, Anich Motor Co., East St. Louis.

U. S. Radio Position Open

Applications for the position of assistant radio inspector in the Field Service of the Department of Commerce throughout the United States, including Hawaii, Alaska and Porto Rico, must be on file with the Civil Service Commission at Washington, D. C., not later than June 26.
The entrance salary is \$2,400 a year.

probationary period of six months is required; advancement after that depends upon individual efficiency, increased usefulness, and the occurrence of vacancies in

higher positions.

The duties of the assistant radio inspector will be primarily to assist in the enforcement of the Radio Act. The assistant radio inspector will be required to inspect radio equipment on vessels and at land stations, which involves the carrying of 30

or 40 pounds of testing and measuring instruments; to make high frequency and field intensity measurements; to assist in the examination of radio operators, and to perform such office work as is required. The performance of these duties will involve considerable traveling, for which traveling expenses will be necessary allowed

Competitors will be examined and rated on theoretical and practical questions on the construction, use, and adjustment of radio apparatus and auxiliaries; and their education, training, and experience.

Full information may be obtained from the U. S. Civil Service Commission at Washington, D. C., or the secretary of the U. S. civil service board of examiners at the post office or customhouse in any city.

M. Tichenor has joined the Kellogg Switchboard and Supply Company, Chicago, where he will direct the entire production and manufacturing procedure. Colonel Tichenor has a wide background of manufacturing experience gained in the electrical and automotive fields and was formerly connected with the G. W. Goethals Engineering Company of New York and the Pierce-Arrow and Rickenbacker Motor Companies.

THE PHILADELPHIA STORAGE BATTERY COMPANY, Philadelphia, Pa., recently absorbed the Timmons Radio Products Company, Germantown, Pa., maker of the Timmons speaker. The Timmons company will keep its identity as a division of Philco, manufacturing its own speaker, and will also make a new type of speaker which will be marketed under the Philco name.

THE SONORA PHONOGRAPH COMPANY, Inc., New York City, has appointed Adam Stein, Jr., as production manager and Frank J. Black as musical director. Before joining Sonora, Mr. Stein was connected with the General Electric Company, Schenec-tady, N. Y. Mr. Black is well known as a composer and pianist.

Station KSL to Build New Quarters

Permission has been granted to Radio Station KSL, Salt Lake City, Utah, to increase its power to 5,000 watts and to retain its wavelength of 990 kilocycles. This means the construction of a \$100,000 station six miles west of the city, according to Earl Glade, manager of KSL. Already experiments have been made on the flats west of the city to ascertain what point will be the most efficient in the plan saturate the intermountain country. Work will begin on the new plant with its 250-foot aerial towers right away and completion is ordered by the Commission by October 1. The studio will remain in its present location in Salt Lake City.

Of especial interest to radio listeners throughout the intermountain territory is the announcement that arrangements are practically complete for a link-up with a national broadcasting chain which will bring to local fans the New York programs.

THE NATIONAL BROADCASTING COMPANY New York City, has formed the National Broadcasting and Concert Bureau, to arrange the engagements of artists and speakers for WEAF, WJZ and associated stations. In this connection, the services of George Engles have been secured. Mr. Engles has had considerable experience in this line, having acted as manager for many great concert artists, including Paderewski, Madame Schumann-Heink and Marion Talley.

THE UNITED RADIO CORPORATION, Buffalo, N. Y., has completed arrangements for fall broadcasting of an hour of entertainment to be known as the Peerless Period. The programs will begin in September and go on the air each Sunday during the dinner hour, over WEAF and thirty-six associated stations on the Red Network.

Radio Shows and Conventions

June 11-15: R.M.A. Convention and Trade Show, Hotel Stevens, Chicago, Ill.

June 11-16: N.E.M.A. Annual meeting. The Homestead, Hot Springs, Va.

June 12, 13, 14, 15: Federated Radio Trades Association Convention and first annual meeting, Radio Wholesalers Association, Hotel Stevens, Chicago.

June 18-30: International Pageant of Music and Exposition, Ambassador Los Angeles, Calif. Auditorium,

July 24, 25, 26 and 27: Radio Jobbers and Manufacturers' Representatives Club Trade Show, Book - Cadillac Hotel, Detroit, Mich.

June 26-29: Western Music Trades Association Fifth Annual Convention in conjunction with annual meeting of the Music Trades Association of Southern Music California, Los Angeles, Calif.

August 18-25: Fifth Annual Pacific Radio Exposition, Civic

Auditorium, San Francisco. Calif.

September 2-8: Sixth Annual Los Angeles Radio Show, Ambassador Auditorium, Los Angeles,

September 10-15: Second Annual Philadelphia Radio Rodeo, Commercial Museum, Philadelphia, Pa.

September 11-14: Fifth Annual Columbus Radio Show, Memorial Hall, Columbus, Ohio.

September 17-22: Fifth Radio Worlds' Fair, New Madison Square Garden, New York City.

September 17-22: Fourth Annual Rochester Radio Show, Hall, Rochester, Convention N. Y.

September 17-22: Fourth Annual Southwest National Radio Exposition, New Coliseum, St. Louis, Mo.

September 24-29: Seventh Annual Northwest Radio and Electrical Show, Municipal Auditorium, Minneapolis, Minn.

September 24-29: Fifth Annual Montreal Radio Show, Windsor Hotel, Montreal, Canada.

October 1-6: Eighth Annual Boston Radio Exposition, Me-chanics Building, Boston, Mass.

October 1-6: Pittsburgh Radio Show, Duquesne Gardens, Pittsburgh, Pa.

October 1-6: Sixth Wisconsin Radio-Music Exposition, Milwaukee Auditorium, Milwaukee.

October 8-14: Sixth Annual Chicago Radio Show, Coliseum, Chicago, Ill.

October 15-20: Detroit Radio Show, Convention Hall, Detroit. Mich.

October 21-29: Fourth Annual New Orleans Radio Show and Exposition, New Orleans States' Building, New Orleans, Orleans La.

October 22-27: Norfolk Radio Show, City Auditorium, Norfolk, Virginia.

News of Jobbers and Distributors

New Fada Appointments

F. A. D. Andrea, Inc., Long Island City, N. Y., has recently appointed the following distributors in the West Indies: Cuba Electrical Supply Company, Havana, Cuba Electrical Supply Company, Havana, Cuba; Dominican Trading Company, Dominican Republic; Compania d'Eclairage Electrique, Port Au Prince, Haiti, and, Gonzales Padin Company, Inc., San Juan, Porto Rico. These appointments were made by J. W. delfaas, Fada export representative, during

a recent trip to the West Indies.
Southern New York Electrical Supply Corporation, Binghamton, N. Y., has been appointed Fada distributor for the following New York State countries: following New York State counties: Chemung, Tioga, Broome, Delaware and Sullivan together with Bradford and Susquehanna counties in Pennsylvania. This company also maintains a branch at Elmira,

N. Y.

THE ROBERTSON SUPPLY COMPANY, Orlando, Florida, has been appointed Fada distributor for the state of Florida. The Robertson Supply Company also maintains has by Miami. a branch in Miami.

THE BILL PAPE TIRE COMPANY, Birmingham, Ala., has been appointed by F. A. D. Andrea, Inc., as distributor for the State of Alabama.

THE HUGHES-PETERS ELECTRIC CORPO-RATION. Columbus, Ohio, will be Fada representative for the entire central portion of

THE RADIO WHOLESALERS' ASSOCIATION, 32 West Randolph Street, Chicago, Ill., which is affiliated with the Federated Radio Trades Association, Chicago, has prepared a booklet entitled, "The Radio Wholesaler Needs Organization," outlining in detail the origin, requirements and purpose of the association. Copies will gladly be sent to anyone interested in knowing more about this jobber organization.

THE GENERAL RADIO COMPANY, Cambridge, Mass., recently completed arrangements for the exclusive distribution of its laboratory and measuring instruments laboratory and measuring instruments through the Central Scientific Laboratories, Chicago. The General Radio Company will continue, however, to sell directly to its clientele of industrial and college laboratories.



Southwestern A-K Jobbers Discuss Summer Drive

An enthusiastic meeting of southwestern Atwater Kent distributors was recently held at the Hotel President, Kansas City, Mo. Plans for the spring and summer sales drive were discussed, and P. A. Ware, merchandising manager, H. T. Stockholm, territory manager, E. Dyson, credit manager, and L. A. Charbonnier, service manager, all of Atwater Kent, addressed the assembly. Heads of the following distributors were present: Brown & Hall Supply Company, St. Louis; 555 Inc., Little Rock, Ark.: Goodin Radio Corp., Wichita, Kansas: Harrison Smith Company, Dallas; Harrison Smith Company, Oklahoma City; Radio Sales & Supply Co., Denver: Straus Frank Company, San Antonio, and Western Radio Company, Kansas City, Missouri.

West Coast Jobber Installs Labor Saving Device

complete conveyor and truck system, similar to that used in factories, has been installed by Ernest Ingold, Inc., San Francisco, Calif., for unloading and stacking its shipments of radio receivers.

The sets are placed on rollers in the street at the dray and from that point on, until they stand in the stockroom, they are kept in motion on ball bearing trucks or carried forward by gravity on a system of rollers. The packages are handled more carefully than if moved by hand, and coast automatically from the street to a truck the exact size of the elevator which carries one loaded truck up to the stockroom, bringing, at the same time, an unloaded

The approximate saving in time is said to be ninety per cent and 90 receiving sets can be unloaded and stacked in the stock-room in a single hour, according to Mr. Ingold, president of the company.

A. K. Sutton, Inc., Charlotte, N. C., has been appointed Grebe distributor.

THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio, has appointed two distributors to handle Crosley and Amrad products exclusively. They are the Wetmore Savage Equipment Company, Boston, Mass., and the B. H. Spinney Company, Springfield, Mass.

Other distributors who will handle Crosley and Amrad products exclusively are: the Motor Parts Company, Philadelphia, Kierulff & Ravenscraft, California, the Kierulff & Ravenscraft, California, the Lincoln Motor Sales Company, Baltimore, Md., Hudson-Ross, Inc., Chicago, Kriese-Connell Company, Indianapolis, Ind., and the Twentieth Century Radio Corporation,

THE FREED-EISEMANN RADIO CORPORA-THE PREED-EISEMANN RADIO CORPORATION, Brooklyn, N. Y., has recently added several distributors to its list. D. W. May, Inc., Newark, N. J., the Horrock-Ibbotson Company, Utica, N. Y., and the Barrett Electric Supply Company, St. Louis, Mo., are appears those recently appointed. are among those recently appointed.

THE DOUBLEDAY-HILL ELECTRIC COM-PANY, 715 Twelfth Street, N. W., Washington, D. C., has recently been appointed distributor for Newcombe-Hawley, Inc., St. Charles, III.

Steinite Jobbers Arriving for Two-Day Convention at Factory



Over fifty-two Steinite distributors attended the two-day meeting which was recently held at the factory of the Steinite Radio Company at Atchison, Kan. The vistors' time was well occupied with two luncheous, a dinner and a banquet, at which the various angles of Steinite's activities for the com-

and the 1929 line of season were brought out ceivers demonstrated. The Mayor of Atchison welcomed the delegates and Fred W. Stein, president, and Oscar Getz, vice-president, of Steinite, addressed the gathering. The visitors were later taken through the Steinite factories.

Selling Quality Furniture

(Continued from page 83)

cussed the salesman loses no time in "exposing" prospects to the lure of an assortment of not less than 15 attractive cabinets. He explains that any of these pieces will take any set the customer may select and that, with certain makes of sets, it will be assembled on a matched wood panel so that the resulting ensemble will be entirely harmonious, and that this will be done without added charge. Frequently a customer is thus switched from a table to a console model.

Frequently, also, he is attracted by a piece of furniture "really higher than I had intended to pay," by the following interesting test: A prospect is asked his opinion of the tonal qualities of the same program reproduced by speakers mounted in two consoles, one console being a low-priced affair of no particular eye value, the other a quality job of impressive appearance. Invariably, although the speakers themselves are of identical make and specifications, the prospect will declare that the tone of the speaker in the better cabinet is far superior to that of its exact counterpart in the less imposing housing. The majority of sales run between \$70 and \$150—for the cabinet with built-in speaker—not including the set proper. Approximately 10 per cent of the sales are in models listing above this top price.

It costs less than \$3 to fit a set to a cabinet. This is easily absorbed in the added gross margin which is made possible, with 50 per cent of the cabinets, because the retailer can establish his own mark-up.

Television Is an Experimenters' Market

(Continued from page 81)

picture audience at the cost of losing its voice audience. The announcer, while introducing a feature and describing it to the radio audience, may have his words accompanied by a picture signal, giving either a detailed program, photographs of the artists, or any appropriate pictures which will serve to enhance the radio program as illustrations enhance the printed matter in a book.

The apparatus which converts the picture into sound, required by the broadcasting station, can be designed so that it is easily portable. Therefore, news photographs can be taken, developed and put on the air within five minutes after an event takes place. Thus, during a prizefight, pictures of the highlights of every round may be sent and, during a football game, closeups of individual players and the high points of the game may be broadcast.

The business of every radio dealer is closely bound up with the economic status of the broadcasting station itself. It is also conceded that there can be no improvement in radio programs from now on unless broadcasting stations find a means of establishing greater revenue and the contribution of picture broadcasting by sponsors of commercial programs to the revenue of stations is a vital development.

In any case the commercial development of picture transmission and reception is something which should be watched vigilantly by the radio trade. The public imagnation has been stimulated and the radio industry should welcome the appearance of saleable telephotographic equipment and the general broadcasting of still pictures, while awaiting, in the meantime, the perfection of television.

\$1 Down Doesn't Pay

(Continued from page 65)

to them. Some of them undoubtedly took advantage of the offer with the deliberate intention of getting something for nothing, but many of them, I am sure, merely suffered from the chronic difficulty of losing their job and cleared out. To return the radio would have been to go out of their way to be honest, and they did not rise to that moral height."

The purchasers of the more expensive sets who made the \$10 down payment did not, in so many instances, belong to the purely transient part of the population and, in consequence, there were fewer of them who actually disappeared with the sets. On the other hand, even a larger proportion refused to make further payments. From fifty to sixty per cent of the sets were returned to the store during the first three months because the owner's equity was not big enough to keep the sets sold.

There are other reasons why radio is not adapted to an installment business with small down payments, in Mr. Brown's opinion. For one thing, it is a business which is not yet stabilized. No one who has purchased a piano, or a vacuum cleaner, is likely to be disturbed a month after its purchase by the appearance on the market of an entirely new model, and the consequent reduction of the equipment he had purchased, to a figure below what his remaining payments might be. Yet, this has happened in more than one instance in the case of radio.

"When falling prices threaten to leave an unwelcome, slow-moving stock on your hands it is no time to resort to small down payments as an inducement to buy," is the moral Mr. Brown has deduced from his experience. That is the time to be more careful than ever that the sets you sell are permanently sold. Better a few left over sets than the same number of returned ones.

The other factor which makes radio an unfavorable field for experimentation in installment selling is the fact that there is a certain amount of upkeep inevitable in maintaining even a good set in satisfactory operation.

These expenditures are foreseen and explained by the merchant, but the customer does not appreciate what they mean until he finds he has to meet them if he would have the use of his new purchase. If his payment to date has not been a large one, he may simply avoid all further expenditures by returning the set.

"What shall the radio merchant do about it?" asked the interviewer.

"Ask for at least twenty-five per cent down and follow up all references," was Mr. Brown's reply.

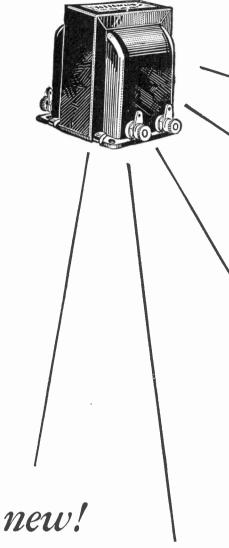
"When it comes to references, we are most particular. We ask three references from each applicant for credit. One of these is the name of a relative. If the purchaser has none locally we will accept names in other states, but we always follow them up.

"Secondly, we ask about accounts in other stores. The word from other mercantile establishments as to how payments have been made in accounts with them is most illuminating. Thirdly, we ask for the bank. In case of actual default, we know where he keeps his money, in case there is anything to attach. A fourth item we ask, not obviously as a question relative to credit, but nevertheless with its bearing on that subject, is the school which the children of the family attend. With laws requiring compulsory school attendance, the child must receive a transfer to another school in case the family moves from the neighborhood. This affords an excellent method of tracing delinquent payments."

Radio's Place in Recent News



Radio Retailing, June, 1928





THORDARSON R-300 AUDIO TRANSFORMER

A superior audio transformer that will satisfy the most critical musical ear. The high impedance windings of the R-300 are wound on a core of D-X Metal, a recent development of the Thordarson laboratory. This new core material has an exceedingly high A.C. permeability, and an inductance that is 50% greater than that of the highest grade silicon steel. In performance, this transformer responds exceptionally well to the lower frequencies and provides the same degree amplification to the diapason of the grand organ as to the note of the flute. Ratio 3:1. Dimensions, 2½" x 2½" x 3" high. Weight, 2 lbs. Price, \$8.00.

In Most of The Better Radio Receivers

Watch dogs of tone quality safeguarding the musical reproduction of broadcast programs, Thordarson Audio Transformers do their part in making real musical instruments of hundreds of thousands of receiving sets annually.

Among leading set manufacturers, Thordarson transformers have long been recognized for their fidelity of reproduction. Today their use is so universal that it is difficult to find a dealer who does not sell at least one make of receiver so equipped.

Make a comparison of the receiving sets in your stock and note how the sets equipped with Thordarson power supply and audio transformers outshine in musical performance.

The wise dealer, in selecting his radio receivers for the coming season, will choose the instruments that are Thordarson equipped. The manufacturer who is farseeing enough to specify Thordarson may invariably be depended upon to have the balance of his receiver in keeping with this high standard of performance.

RDAR TRANSFORMERS musical performance

THORDARSON ELECTRIC MANUFACTURING CO.
WORLD'S OLDEST AND LARGEST EXCLUSIVE TRANSFORMER MAKERS

Huron and Kingsbury Streets - Chicago.III.U.S.A.

MERCHANDISING RADIO PARTS

A Section of Radio Retailing

June, 1928

Modernizing Old Sets-

An OUTLET for PARTS

TATISTICS indicate that there are now 8,000,000 radio sets in American homes and taking into consideration the newest developments in tone quality and A. C. operation it is safe to say that 4,000,000 of them are more or less in a stage of obsolescence.

Not everyone of the owners of these 4,000,000 sets is a first class prospect for a new one but in the opinion of K. R. Schullstrom of K. R. Schullstrom, Inc., 30 E. 59th St., New York City, the majority of them can be sold something to improve their old set—some part, or accessory, or service job that will bring their set up-to-date.

In fact he is so well convinced of this idea that he recently set up a department in his concern for the sole purpose of developing this kind of business. He has found that there is money in parts, as well as in sets, if a dealer is willing to cater to it. "A sale doesn't have to be a complete set," he claims, "in order to show a profit. We make a direct appeal to customers 'who want something better' but who are not in the market for a new set."

So far, the department has well justified its creation both in showing a profit on the business done and in accommodating customers who would otherwise drift to outside repair shops. The job of improving the amplification may vary all the way from nothing more than installing a C battery to new transformers with larger tubes, C battery and additional B battery. Beyond this, however, the customer is advised to purchase a separate power amplifier and power pack to plug in on the detector or first stage output of his set. In this case, if there is not room in the cabinet with the set the equipment is installed in an artistic cabinet to make a first-class looking installation and a power speaker is always recommended and usually sold with the amplifier.

Mr. Schullstrom treats this set repair and rebuilding business as a separate activity in the company and all work of this nature is referred to the man responsible for that work. Advertisements, written exclusively for that type of customer, are carried regularly in the "fan" sections of the local newspapers and this together with a



The K. R. Schullstrom concern, New York City, sells paris by improving its customers' out-of-date receivers

portion of the laboratory rent and other expenses incidental to this business, are charged off against it.

O. Larson, who is in charge of this department, outlines its detailed operation as follows:

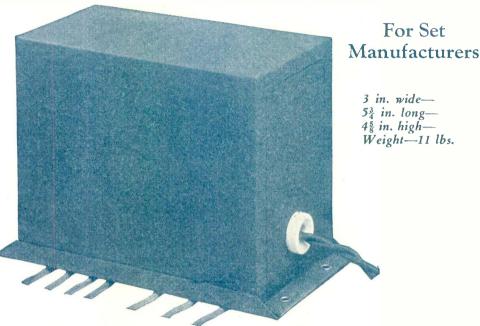
A section of the service department was taken over and separate equipment for handling the work was installed, in order that there would be no conflict with the regular service department. An announcement was made in the papers that the concern was now especially prepared to "efficiently test, repair or modernize any type of factory-built or home-made set." This announcement

(Please turn to second page following)

Cool, Dependable Power

Power Pack—No. 500 will supply power for six—226, one or two 227, one or two 171 and one 280 rectifier tube.

Contains one transformer with all necessary windings, and a dual choke.



FILTER CHOKES

- 7. Provision of carefully designed air gap causes inductance to remain high up to maximum operating current.
- 8. Minimum resistance for given inductance.
- 9. Special arrangement of dual choke enables operation of average receiver with 4.0 mfd. capacity, including by-passes.
- Ample insulation between windings and core to withstand all surges as well as operating voltages.

GENERAL Power Packs are ruggedly constructed of the finest materials. Because of complete and most modern equipment, special labor saving methods in production, capable supervision and the latest testing facilities we can offer this product of EXCEPTIONAL LERIT at the LOWEST POSSIBLE COST.

AT YOUR SERVICE: Our personnel of competent technicians who are fully conversant with problems with which you must deal.

If you are a quantity user of Power Packs, Chokes or Audio Transformers, WRITE FOR SAMPLES AND PRICES.

The incorporation of a GENERAL POWER PACK in your set provides you with an assurance of safety against returns because:

- 1. The transformer is designed for operation of iron at low density which:
 - (a) permits continuous operation without heating
 - (b) eliminates mechanical vibration of laminations
 - (c) reduces field around transformer to a minimum.
- 2. It will deliver ACCURATE VOLTAGES to tubes for which it is designed to supply.
- 3. Maximum efficiency is secured through a PROPER BALANCE of copper and iron.
- 4. Ample copper sizes used reduces copper losses to a minimum and permits excellent regulation.
- Careful electrostatic shielding between primary and secondary reduces line noises to a minimum.
- 6. Ample insulation between windings protects against surges as well as operating voltages.

Visit our Booth No. 35, Exhibition Hall, at the Second Annual Radio Manufacturers Association Trade Show, June 11 to 15, inclusive. A Special Demonstration of the Clough Tuned Audio Transformer will be given in our room, No. 536A, Stevens Hotel, Chicago



General Transformer Corporation

900-910 W. Jackson Boulevard

CHICAGO

Radio Retailing's Permanent Directory of

PARTS and MANUFACTURERS

THE following listing is a regular monthly feature use in the assembly of a supply device. The diameter with up-to-date information received from parts manufacturers are nanufacturers are requested to together with the main parts that each manufactures for this permanent listing.

use in the assembly of a radio receiving set or power supply device. The diamond in the column following the manufacturer's name indicates the items made. Manufacturers are requested to supply corrections or additions for this permanent listing.

Manufacturer's Name and Address	Posts	ke	Я.		Conde				Ballasts		Par		1.0	alized	lstand	arbon	Vire			ers, Pwr. Supply	ers, Audio	ables
	Binding P	Coils, Choke	Colls. R. 1	Fixed Mica	Fixed Paper	Electrolytic	Variable	Dials	Filament 1	Jacks	Metal	Composition	Fixed Wir	Fixed Met	Fixed Car	Variable C	Variable V	Sockets	Switches	Transforme	Transformers	Wire & Ca
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(Please turn to second page following)

Modernizing Old Sets-an Outlet for Parts

(Continued from page 113)

has been followed up by advertisements of a similar nature every week and the results obtained have more than justified the decision to make a special effort for the business.

The entire equipment was installed for a few hundred dollars. The opening announcements and the subsequent advertising have cost from \$15 to \$20 per week. Laboratory rent is charged off at \$40 per month. This, together with Larson's salary, is the total expense of the department and it is already showing a respectable profit.

Right now this company is concentrating on three money making sales items—items that are in popular demand and which are not hard to sell. They are: (1) Improving the audio-frequency amplification, (2) installing a phonograph pick-up, and (3) installing a power amplifier pack.

The cost and selling price for improving the audiofrequency job is as follows:

	Cost	Selling Price
2 amplifying transformers	\$10.00	\$20.00
1 '71 type tube	. 2.10	3.00
1 22½ v. C battery	. 1.05	1.75
1 4½ v. C battery	36	.60
Labor\$	3 to 6.00	\$5 to 10.00
T . 1	A10.71	
Total	. \$19.51	\$35.35

Very often the phonograph pick-up is merely a sale over the telephone or the counter, the transaction ranging from \$13.75 to \$35.00 for the unit, but in a great number of cases the customer is convinced of the advantage of having it installed permanently in the set with a

switch and an equalizer so that it does not have to be inserted in the detector socket every time it is used. In that case an additional charge of \$10 is made.

The cost and selling price of installing a power amplifying pack using '10 type amplifying tubes is as follows:

	lost Selling P	rice
1 complete set of parts \$4	9.50 \$82.5	50
6 amplifying and rectifying tubes. 2		00
1 metal cabinet		50
Labor 1	5.00 25.0)0
\$9	6.30 \$154.0	00

Set repairing or rebuilding business is carefully distinguished from the ordinary service work, says Mr. Larson. "When a customer enters the store or calls on the phone concerning repairs to his set," he continued, "a salesman takes care of him and determines whether it is an ordinary service job or a 'major operation' calling for special repairs or alterations, possibly to bring it up to date. If it is the former he is taken care of through the regular routine of the service department. If it is the latter he is referred to me.

"Sometimes it is nothing more nor less than a couple of transformers to improve the audio-frequency amplification of a cheap or an old-model manufactured set. Perhaps it may only amount to changing to a '71 tube with the addition of a C battery if the set is a good one with first class transformers. Then again the improvement may result in a complete power pack with '50 type tubes in a push-pull circuit and a new speaker capable of handling the increased power."

POWER AMPLIFICATION AND HEAVY DUTY PLATE SUPPLY UNITS

The General Radio Company is prepared to supply to the dealer complete equipment for the construction of Power Amplifiers and Heavy Duty Plate Supply units. A new line of transformers and filters primarily intended for use with the new UX 250 power tube has recently been announced. Bulletins describing these units will be sent on request. Our engineering department will be glad to cooperate with the dealer in designing power amplifiers to fill special needs.



TYPE 565-B FULL-WAVE TRANSFORMER

Price - - \$20.00

The primary is wound for 105-102 volt 60 cycle operation, while three secondaries are provided—one of 1200 volts which is center tapped for the plate supply, and two of 7.5 volts for lighting the filaments of the rectifier and power tubes. This transformer has a rating of 200 watts, thus providing adequate power without overheating.

GENERAL RADIO CO

MANUFACTURERS OF QUALITY RADIO APPARATUS

30 STATE ST., CAMBRIDGE, MASS. 274 BRANNAN ST., SAN FRANCISCO, CALIF.

Radio Retailing's Directory of Parts and Manufacturers-Concluded

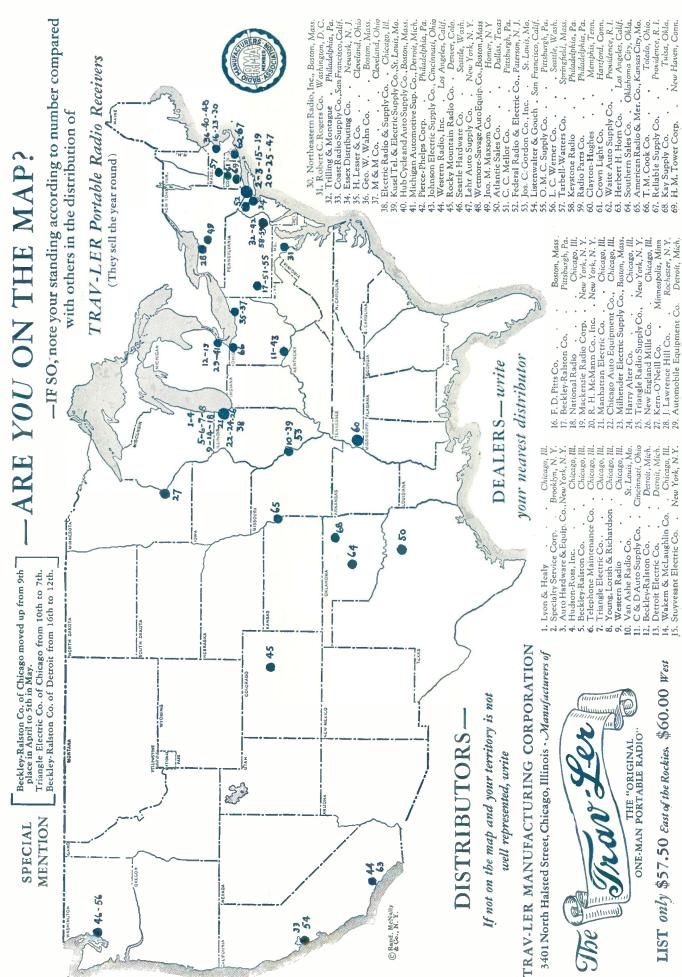
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Kay Supply Co. H. M. Tower Corp.

Rochester, N.Y. Detroit, Mich.

J. Lawrence Hill Co.

LIST only \$57.50 East of the Rockies. \$60.00 West



Manufacturers and Markets

Devoted to the Problems of the Manufacturer in the Design and Distribution of Radio Apparatus

A Section of Radio Retailing

June, 1928

Reducing

Distribution Costs

By Dr. Julius Klein, Director U. S. Bureau of Foreign and Domestic Commerce

THE business community of the country has been so absorbed with the commendable tasks of waste elimination, standardization, simplification, and the various other elements in manufacturing efficiency that it might seem to the average observer that there could be no outstanding problem of unusual gravity which had escaped assault and at least very substantial if not entire solution. But there is such a one and it looms up with compelling magnitude. Viewed from any angle—the values at stake, the persons involved, the extent of areas concerned, the actual and potential losses—the wastefulness of our distribution system is beyond question the outstanding issue now before the industrial and commercial world.

It is true that we have made some definite headway within the last two or three years against a few of the more flagrant wastes in selling, but it took the depression of 1921 to awaken the business world to the fact that the needs of war had concentrated every one's energy upon production to the almost complete exclusion of any economies in distribution. It was only when the grave necessity arose of taking in the slack of inflation that the unpleasant discovery was made that we knew less, very much less about distributing goods than we did of making them.

This situation is today by no means unappreciated; but as compared with the rest of our economic system, it is far behind any other major factor, so far as accurate appraisal and thorough-going widespread, scientific application is concerned. Numerous agencies are now more or less frantically trying to make up for lost time in respect of analyses, surveys, researches, etc.; some of them have made conspicuous contributions. But a canvass of any group of business executives selected at random would reveal far greater interest in lower costs per unit of output, greater volume per worker, betterment in quality and performance, and a hundred other similar items on the production side than in any vigorous attacks upon the costs of distribution.

The details of the "latest" improvements

in our products crowd the pages of our industrial journals and echo from the platforms of our trade gatherings and the laboratories of our technical schools. But does one hear of any similar celebrations, or screaming headlines, or glittering banquets over the newest device for cutting down the wastes of slipshod selling? In our obeisance to the economies and other virtues of mass production have we not lost sight of its indispensable corollary, effective mass distribution?

THERE is no question about the proficiency of our productive methods. The output of each worker in our industries has increased fifty per cent in the last twenty-five years. In some cases the progress has been even more impressive; 247 per cent since 1914 in the case of the automobile industry, and three hundred per cent in tires during the same period.

It is not an easy task to establish even approximately our losses in distribution for the simple reason that there are only the vaguest guesses available as to the total volume of our domestic trade. The one most commonly cited is approximately eighty billion dollars. If we estimate the losses through inefficiency to be only ten per cent, a conservative figure suggested by the calculations of engineers appointed in 1927 by Mr. Hoover to outline his campaign on waste elimination, the result would reveal a loss of eight billion dollars through this medium—one and one-half times the nation's much discussed export trade. How many national conferences and fervid orations have been inspired by the latter as compared with the other far more formidable and ominous red ink item on the national business ledger!

The details of this truly appalling charge on our national resources and earning power could be multiplied almost indefinitely. To take but a single item at random, the careless administration of retail credits through over-extensions, slipshod installment selling, etc., piles up an annual loss which has been reliably estimated at not less than a billion dollars a year. Of course, there is no way whatever of check-

ing in dollars and cents the losses involved through inadequate sales operations—overselling poor markets and ignoring good ones; nor is it possible to appraise or even to guess with reasonable accuracy at the losses involved in scores of other phases of our distributive machinery. It is alleged, for example, that it costs too much to distribute commodities; that the margin between producer and consumer is too great; but when we come to examine the actual profits of wholesalers and retailers, as we shall presently, there is no sign of any opulence. In fact, they are pretty well at the bottom of the scale in terms of business income.

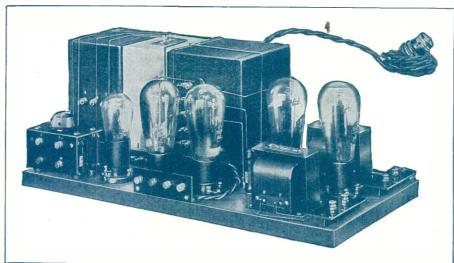
A HOST of new factors have come to the fore in our distributive machinery since the War which have not only made it immeasurably more complicated but have added correspondingly to the difficulty of appraising its weaknesses. Time after time various earnest trade organizations have made determined assaults upon some phase of the problem in their special fields only to be overwhelmed by an entirely new development in distributive machinery.

Chain stores have expanded unbelievably and, what is more important, they have gone beyond their original cash-and-carry principles bringing them into closer competition with the so-called independents. Mail order houses no longer rely exclusively upon ponderous catalogs but are constructing retail outlets of their own in scores of cities. Other factors have developed in abundance; house-to-house canvassing, co-operative wholesale buying, installment selling, hand-to-mouth buying, and numerous other innovations.

With our entire distributive system in such a state of flux it is doubly important that every possible effort be made to gauge these transformations and estimate their effects upon the whole business system. In these days of uncertainty as to the outlook for certain industries or trade areas it is doubly important that every effort be made to eliminate every item of unnecessary expenditure. The fundamental philosophy of lowering prices so as to increase consumption, of minimum margins of profits and mass turnover, which have been so conspicuous an item in the success of many of our industrial undertakings, can be applied with equal effect to distribution. But such application is obviously impossible unless our distributors match our producers in the scrutiny of details in cost and the complete efficiency of their respective processes.

Today every prosperous manufacturer knows accurately each item of his costs. But can we safely make the same statement of our distributors? It is certainly

New Way to Make Any Set an Ultra-Modern A. C. Power Receiver



AMPLI-PACK

Makes Any Radio a Real Musical Instrument

A complete A. C. Power Supply—"A," "B," and "C"—Makes any D. C. Set into a Modern A. C. Receiver—Uses 210 type tubes in push-pull. Gives complete power amplification. Assures full musical scale range found only in the most modern and expensive receivers.

Ampli-PaCk can be assembled in one evening

Any set can be brought up to the most advanced engineering standards of reception by assembling an Ampli-paCk in the home. It can be done easily in one evening. A screw driver, pair of pliers, and a soldering iron are all the tools needed. We supply complete, simple construction diagrams. Standardized mass production methods reduce cost, improve quality, and give you advanced radio instruments at less cost than ever before offered.

Every coil in the transformers used in Ampli-paCk is heat treated and vacuum impregnated with a special compound. This process prevents moisture disintegration and short circuiting. It means long life and dependable operation. Clean cut laminations prevent internal noises or vibrations and insure silent hum-proof operation.

Simple to install. Can be attached to set in three minutes. Consumes no more current than ordinary 50-watt light. Cool, quiet, and dependable in operation.

Send for Free Book

We have prepared a booklet giving the latest information on Power Amplification and A. C. Conversion. Your copy is ready for you, FREE. Write for it. 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. the exception rather than the rule for any establishment to have its sales costs accurately distributed by percentages as among its various commodities or items such as warehousing, delivery, advertising, clerical hire, traveling salesmen, market

analysts, etc.

There can be no doubt whatever as to the need for improvements in our distributive machinery if it is to maintain anywhere near comparable profits to those of other phases of our business life. Recent tabulations by a responsible research agency of the income tax returns of seventeen groups of corporations in industry and trade for 1925 have revealed some interesting facts. It is true that 1925 was only a fair year and the more recent period has been decidedly more profitable; nevertheless, it can be taken as typical point in the post-war development. The data show the post-war development. The data show a profit of 5.8 per cent for manufacturing, 5.7 per cent for amusements, 12.5 per cent for banking, 5.7 for mining, 4.6 for construction, etc. But far below, at the very bottom of the list, save for agriculture, is retailing and wholesaling with a profit of only 2.2 per cent.

BUT in answer to the query directed to these distressed firms, "What are you doing about it?" seventy-three per cent of them reported that they were endeavoring to reduce production costs, and only twentynine per cent indicated any efforts to cut sales expenses. In spite of repeated pro-nouncements in the trade press, and by scores of research agencies and competent observers generally during recent years as to the imperative necessity of more effective, profit-yielding distribution, these facts appear to require repetition and emphasis.

But just what should we know about distribution and how can we discover those facts? Wherein are its major wastes and exactly what is being done to remedy them? The problems which are uppermost in the minds of our distributors, according to the thousands of queries coming to the Departthousands of queries coming to the Department of Commerce each day, seem to be primarily of two varieties: (1) Where can things be sold? and (2) How much should it cost to sell them? In other words, the first confession of our shortcomings in this regard is the field of the wastefulness of "blind" marketing, of attempting to sell in territories whose sales possibilities have not been carefully investigated. have not been carefully investigated.

Then there is the wastefulness of at-tempting to exploit remote territories whose prospects seem promising but whose inaccessability makes for costly traveling salesmen's campaigns. Such far-flung operations are all too frequently for the sole ations are all too frequently for the sole purpose of gratifying the vanity of the executives of the firm whose product has been described to them by some energetic advertising solicitor as "an undoubted national necessity and, therefore, deserving of a national market." For some commodities such country-wide distribution is not only feasible but distribution and the solicities that are feasible but distribution are feasible but distribution and the solicities are feasible but distribution and the solicities are feasible but distribution are feasible but distributions. not only feasible but distinctly profitable. For these the splendid research services set up by some of the larger national periodicals have rendered valuable assist-ance in the development of intelligent farflung operations.

THERE is another phase of the distribution situation which is worthy of special attention, namely the element of the special attention, namely the element of the constant possibility of change in market demand through shifts in buying power or particularly through the introduction of new competing commodities. It is of supreme importance, therefore, that the manufacturer should be intimately in con-

tact with the ultimate consumer of his commodities.

This does not necessarily involve the elimination of the jobber, commission house, wholesaler, or other distributive intermediaries, many of who perform valuations are the commission of the property of the commission of the perform valuation of the performance of the commission of the performance of the commission of the performance o able services in some lines, though they are gradually disappearing in others. I refer particularly to the urgent need of watchful observance by the producer of the conditions and desires of his ultimate consumer in order that any change in demand may be anticipated and production allow-ance or alternation made for them. The distress of certain plants in the older industrial centers of the country is all too frequently due to precisely such lack of contact with their ultimate consumers.

The maintenance of such contacts by no means requires an elaborate costly research The facilities of the Department of Commerce and numerous other organizations are ample to keep any intelligent, farsighted manufacturer advised as to market changes and the factors which affect

the demand for his product.

TODAY the number of agencies conducting research bearing directly or indirectly upon marketing has increased to such an extent as to necessitate a catalog of them and of their functions. The Department of Commerce is now issuing an annual list which in 1927 comprised 544 agencies.

Among the more substantial contributions have been numerous investigations in the engineering and technical fields by such groups as the McGraw-Hill Publishing Company, the Chilton Class Journal Company, the Penton Publishing Company, and others. These agencies have conducted numerous surveys of the distribution of

various products. The Department of Commerce has been concentrating its efforts on four or five major distribution problems, the first of which is the development of a series of regional market surveys which are intended to supply a compilation of basic data on the general commercial structure of the entire country. For the purposes of these surveys the country has been divided into nine regions based on differences in economic and business factors.

A special study is to be undertaken in collaboration with the Retail Credit Men's Association of the costs of retail credits,

with particular reference to the isolation of the factors accountable for excessive losses through unwise credit policies.

With all of these various efforts under way on the part of literally hundreds of agencies, official and unofficial, academic and commercial, it would seem as though the actual materials for the improvement of this situation would be available. The next and major problem, however, is the application of the flow of data produced by these investigating agencies to the actual problems of marketing. Therein lies the great field for the future improvement of commercial conditions in the country. This is the gravest problem now confronting our business world.

Developments in Radio Furniture

Showers Brothers Company is formulating plans for a very active season in radio furniture. One of the company's six big plants is being turned over to the exclusive manufacture of cabinets. An effort will be made to show an increase in volume over the past season, which resulted in radio cabinet shipments totalling over seventy thousand cases. Cabinets for practically all chassis on the market will be included in Chassis of the market will be included in Atlas plywood boxes. The Atlas Plywood Box Company has just received its largest contract with Showers Brothers Company. Branches of the box factory are being built. in Bloomington, Indiana and Burlington, Iowa, especially for the account of Showers Brothers Company, which factories have an average daily shipment under normal production, of thirty-seven carloads of furniture, kitchen and radio cabinets.

The company has now under construction at a cost of \$100,000 a model factory or laboratory that will be the first of its kind in the furniture industry. laboratory, equipped with the most modern type of machinery, will be found a corps of designers, constantly at work on the latest in furniture designs. New suites in furniture and new cabinets for radio will be continually in the making and ready for release at various intervals during the year. The main offices and plants of the company are located in Bloomington, Indiana.

Branch plants are located in Bloomfield,

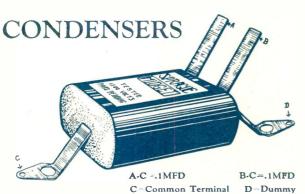
Indiana, and Burlington, Iowa,

Factory Arrangement Speeds Test Work



The "English roundhouse" an unique booth where 3,000 receiving sets are balanced and tested each day at the plant of the Crosley Radio Corporation, Cincinnati, O.

NEW SPRAGUE DUAL



Here's the latest Sprague Condenser development—two condensers in one unit, with a common terminal. Rigid contacts allow for eyeletting direct to metal or insulated base panel. Flexible lugs permit unlimited hook-up possibilities—a space and time saving convenience.

And into each of these condensers goes the same high standard of craftsmanship that has made Sprague Midgets the choice of leading set manufacturers. Available in sizes from .01 to .5MFD.



The Sprague Hi-Volt Condenser is especially constructed for A. C. sets. For these compact midgets are safe for continuous A. C. operation up to 550 volts, 60 cycles, and up to 750 volts D. C. Sizes from .00007 to .1MFD.

All Sprague Condensers are waterproofed with asphalt covering and special process of triple impregnation.

SPRAGUE SPECIALTIES CO. Quincy, Massachusetts



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These and other finely made accessories in the Frost-Radio line are eagerly sought by all classes of radio listeners. The nationwide reputation of Frost-Radio has won a million users for these items, and the high quality of our products insures satisfaction with every sale you make. Use the coupon below for obtaining complete information about this line.



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for increasing the jack capacany set. Complete with cord ug, list, \$2.50. You can sell of these when you display them



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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.

LABORATORIES 30 Keefe Avenue, Milwaukee, Wisconsin

New Radio Patents

April 17, 1928

DESIGNS

74,947. Table for Radio Receiving Sets and the Like. Frederick Schwartz, Brooklyn, N. Y. Assor. to Robert Findlay Manufacturing Company, Inc., Brooklyn. N. Y. 4,948. Table for Radio Receiving Sets and the Like. Frederick Schwartz, Brooklyn, N. Y. Assor. to Robert Findlay Manufacturing Company, Inc., Brooklyn, N. Y.

PATENTS

PATENTS

1,666,071. Grid for Vaccum Tubes. George H. Perryman, New York, N. Y. Assor, to Perryman Electric Company, Inc. New York, N. Y.
1,666,153. Program-Selecting Circuit. John F. Toomey, New York, N. Y. Assor, to American Telephone and Telegraph Co.
1,666,154. Distribution of Programs Over Wires. John F. Toomey, New York, N. Y.
Assor to American Telephone and Telegraph Company.
1,666,163. Radio condenser. Paul A. Chamberlain, Chicago, Ill.
1,666,198. Loud Speaker. Henry M. Dressel, Chicago, Ill.
1,666,206. Modulation System. Zalph V.
L. Hartley, South Orange, N. J. Assor. by mesne assignments, to Western Electric Company, Incorporated.
1,666,262. Sound Transmitter. Harry A.
Mills and William D. Pyle, Denver, Colo.
1,666,303. Amplifier. Joseph Platt, Detroit, Mich.
1,666,412. Audio Frequency Amplifier.
Harold P. Donle, Meriden, Conn. Assor. to Donle Electrical Products Corporation, Meriden, Conn.
1,666,462. Crystal Detector. Frederick E.
Mann, Cherrydale, Va.
1,666,480. Means for Adjusting the Antenna of Radio Apparatus. Arno Zillger, Narberth, Pa. Assor. to Music Master Corporation, Philadelphia, Pa.
1,666,505. Radio Appliance. John M. Peterson, Milwaukee, Wis.
1,666,518. Radio Frequency Amplifier. Frederick K. Vreeland, Montclair, M. J.
1,866,522. Volume-Control for Radio Receivers. Edward F. Andrews Chicago,

N. J. 1,666,522. Volume-Control for Radio Re-celvers. Edward F. Andrews Chicago,

N. J.
1,666,522. Volume-Control for Radio Receivers. Edward F. Andrews Chicago, Ill.
1,666,570. Sound-Amplifying Construction. Jacob Kerstan, Allegan, Mich.
1,666,571. Sound-Amplifying Horn. Jacob Kerstan, Kalamazoo, Mich.
1,666,571. Sound-Amplifying Horn. Jacob Kerstan, Kalamazoo, Mich.
1,666,594. Apparatus for the Electrical Transmission of Visual Images. Paul L. Clark, Brooklyn, N. Y.
1,666,651. Plural Channel Secrecy System. Raymond A. Heising, Milburn, N. J. Assor. to Western Electric Company, Incorporated, New York, N. Y.
1,666,682. Condenser Assembly Control. Harry H. Busse, Cleveland, Minn.
1,666,685. Tuning System. Newsome Henry Clough, Chelmsford, England. Assor. to Radio Corporation of America.
1,666,833. Vacuum Tube. William A. Rhodes and David Bellar, Brooklyn, N. Y.
1,666,834. Radiant-Energy Collector for Aerials. William A. Rhodes and Abraham Bankoff. Brooklyn, N. Y.
1,666,854. Loud Speaker. Leland D. Harris, Salt Lake City, Utah.
1,666,858. Vacuum Tube. Augustus Henry Jahn, Pittsburgh, Pa.

DESIGNS April 24, 1928.

April 24, 1928.

74,969. Radio cabinet. Noel S. Dunbar, New York, N. Y. Assor. by mesne assignments, to Splitdorf Radio Corporation, Newark, N. J.

74,970. Radio Cabinet. Noel S. Dunbar, New York, N. Y. Assor. by mesne assignments, to Splitdorf Radio Corporation, Newark, N. J.

74,971. Radio Cabinet. Noel S. Dunbar, New York, N. Y. Assor. by mesne assignments, to Splitdorf Radio Corporation, Newark, N. J.

74,933. Diaphragm for a Radio Loud

ments, to Splitdorr name Newark, N. J. 74,993. Diaphragm for a Radio Loud Speaker. Benson F. Waddell, New York,

PATENTS

PATENTS

1,666,946. Combination Doll and Radio Set. Charles B. Sherlock, Philadelphia, Pa.

1,667,008. Underground Antenna. Nicholas Kadel, Glendale, Calif.
1,667,058. Condenser. Samuel Harold Smith, Rocky River, Ohio.

1,667,087. System of Electrical Transmission and Transformation. Percy H. Thomas, Upper Montclair, N. J.
1,667,251. Sound Radiating Device. Richard D. Fay, Cambridge, and Robert E. Brewer, Boston, Mass.

1,667,384. Grid-Lead Cell Circuit. Charles Francis Jenkins, Washington, D. C. 1,667,471. Glow Cathode and Electron Tube Containing same. Ernst Friederich, Berlin-Charlottenburg, Germany. Assor. to Radio Corporation of America.
1,667,513. Radio Receiving Apparatus. Clyde J. Fitch, Brooklyn, N. Y. Assor. by direct and mesne assignments, to Radio Corporation of America.
1,667,531. Sound-Reproducing Apparatus. Ben E. Brown, Mountain Lake, N. J. Assor. to B. B. Laboratories, Inc., East Orange, N. J.
1,667,672. Frequency Changer. Samuel P. Mixdorff, Schenectady, N. Y. Assor. to General Electric Company.
1,667,710. Electrical Amplifier Circuit.
1,667,672. Frequency Laboratories, Incorporated, Boonton, N. J. Assor. to Radio Frequency Laboratories, Incorporated, Boonton, N. J.

May 1, 1928

1,667,748. Variable Condenser. Harry Mortimer Specht, Pelham, N. Y. 1,667,907. Electron-Discharge-Tube Struc-ture. Lee Sutherlin and Hubert M. Free-man, East Pittsburgh, Pa. Assor. to Westinghouse Electric & Manufacturing

Company. 1,667,945. Radio Coil. David A. Nicosa, Forest Park, and Harry Sippel, Chicago, Ill.

1,667,945. Radio Coil. David A. Nicosa, Forest Park, and Harry Sippel, Chicago, Ill.
1,668,060. Radio Vacuum-Tube Circuits. Philip E. Edelman, New York, N. Y.
1,668,151. Amplifier Circuit. Lewis M. Hull, Boonton, N. J. Assor to Radio Frequency Laboratories, Incorporated, Boonton, N. J.
1,668,155. Radio Receiving Apparatus. Arthur Atwater Kent, Ardmore. Pa.
1,668,187. Rheostat. Roy W. Augustine, Oak Park, Ill.
1,668,231. Radio Receiving Apparatus. Edward E. Clement and Harry F. Lowenstein, Washington, D. C. Assors. to Edward F. Colladay, Washington, D. C.
1,668,240. Amplifying System. Charles W. Green, Millburn, N. J. Assor. to Western Electric Company, Incorporated, New York, N. Y.
1,668,261. Radio Signaling. Richard H. Bell, Santa Clara, Calif.
1,668,270. Radio Signaling. John F. Farrington. New York, N. Y.
1,668,320. Condenser. Arthur Atwater Kent, Ardmore, Pa.
1,668,418. Radio Instrument Mounting. Pyam L. Pendleton, Providence, R. I. Assor. to Edgar W. Martin, Lawrence C. Martin, and George W. Bleecker, trustees of the Martin-Copeland Company.

May 8, 1928 DESIGNS

5,136. Radio Cabinet Panel. Carl S. Staugaard, Chicago, Ill.

PATENTS

Staugaard, Chicago, Ill.

PATENTS

1,668,630. Circuits for Receiving Radio and Similar Signals. Leroy M. E. Clausing, Chicago, Ill.
1,668,637. Directive Radio Repeating System. Lloyd Espenschied, Queens, N. Y., and De Loss K. Martin, Orange, N. J. Assors. to American Telephone and Telegraph Conpany.
1,668,638. Directive Radio Repeating System. Lloyd Espenschied. Queens, N. Y., and De Loss K. Martin, Orange, N. J. Assors. to American Telephone and Telegraph Company.
1,668,638. Directive Radio Repeating System. Lloyd Espenschied. Queens, N. Y., and De Loss K. Martin, Orange, N. J. Assors. to American Telephone and Telegraph Company.
1,668,674. Directive Radio Repeating System. Lloyd Espenschied, Queens, N. Y., and De Loss K. Martin, Orange, N. J. Assors. to American Telephone and Telegraph Company.
1,668,724. Electron Discharge Tube. Siegmund Loewe, Berlin, Germany. Assor. to Western Electric Company, Incorporated, New York, N. Y., 667,757. Radio Transmission System. Ralph Brown, Maplewood, N. J., and Harold S. Hamilton, New York, N. Y. Assors. to American Telephone and Telegraph Company.
1,669,028. Radio Battery Charger. Arnold Soberg, Mohall, N. D.
1,669,103. Coupling Arrangement. Marius Latour, Paris, France. Assor. to Latour Corporation, Jersey City, N. J. 1,669,103. Coupling Arrangement. Walter Schaffer, Berlin. Germany, Assor. to Radio Corporation of America.
1,669,123. Directive Radio Repeating System. Lloyd Espenschied, Queens, N. Y., and De Loss K. Martin, Orange, N. J. Assors. to American Telephone and Telegraph Company.

1,669,171. Device for Eliminating Static Current and for Tuning Radio Receiving Sets. Jefferson S. Palmer, Farmington, New Mexico.
1,669,189. Wired-Radio Broadcasting System. Robert D. Duncan, Jr., East Orange, N. J. Assor. Wired Radio, Inc., New York, N. Y.
1,669,217. Signal-Receiving Circuits. Albert H. Taylor and Edwin L. White, Washington, D. C. Assors. to Wired Radio, Inc., New York, N. Y.
1,669,218. Radio Receiving System. Albert H. Taylor, Washington, D. C. Assor. to Wired Radio, Inc., New York, N. Y.
1,669,219. Method of Reducing Fading Effects in Radio Communication. Albert H. Taylor, Washington, D. C. Assor. to Wired Radio, Inc., New York, N. Y.
1,669,327. Radio Receiving Instrument for Systems of Broadcast Distribution. Edward E. Clement, Washington, D. C. Assor. to Edward F. Colliday, Washington, D. C.

China Broadcasting Association Formed

The "China Broadcasting Association" for the purpose of providing an efficient foreign broadcasting service, giving musi-cal and instructional programs, has been formed in China, reports the Department of Commerce.

The association, it said, is planning to rent a transmission plant during certain hours of the day. It will charge a subscription of \$10 a year for membership. Funds from membership fees will be used to cover the expenses of providing programs and an announcer.

New Radio Stations for Madagascar

Installation of several new short wave radio stations is reported planned on the island of Madagascar by its Government, states the Department of Commerce. Popularity of radio is growing on the island, it is said. Recention is reported good it is said. Reception is reported good, American radio concerts being heard daily Tanararive between four and eight o'clock in the morning.

Greek Radio Imports Valued at \$50,000

Radio receiving sets bought by Greece last year numbered 233 valued at about 4,000,000 drachmas or more than \$50,000, reports the Department of Commerce, according to figures supplied by the Ministry of Communications.

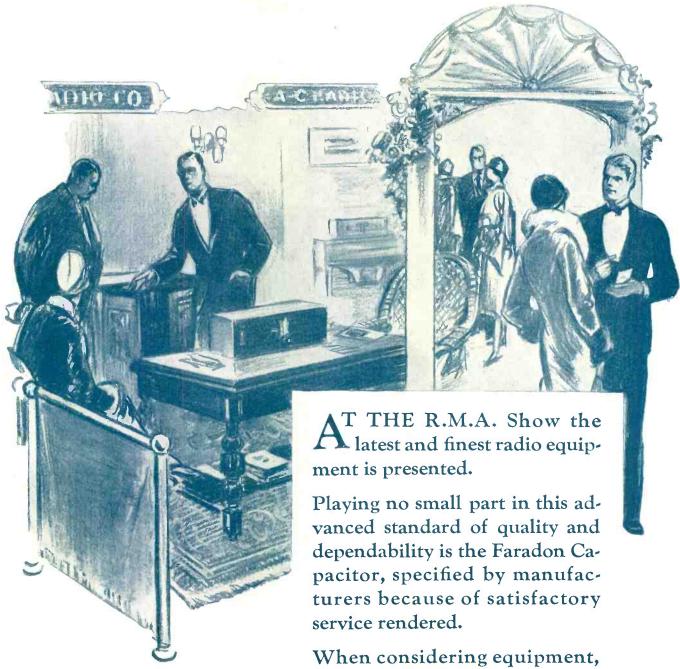
France supplied most of the radio sets imported by Greece last year. The United States was second largest supplier and Germany third. In 1927 Greece bought 105 sets from France, 47 from United States, 29 from Germany, 19 from Great Britain, 17 from Belgium, 12 from Sweden, 3 from Italy and one from Hungary.

Total number of radio sets operated in Greece last year on the basis of licenses issued by the Ministry of Communications numbered 221, compared with 100 in 1926.

Increase in Radio Sets in Denmark

An unusually large increase in the number of radio sets during February brought their number now in Denmark over the 200,000 mark, says a report of the Depart-ment of Commerce. This 200,000 figure, it is said, places Denmark high up in ranking European countries in number of radio sets to population.

In the Finest Sets



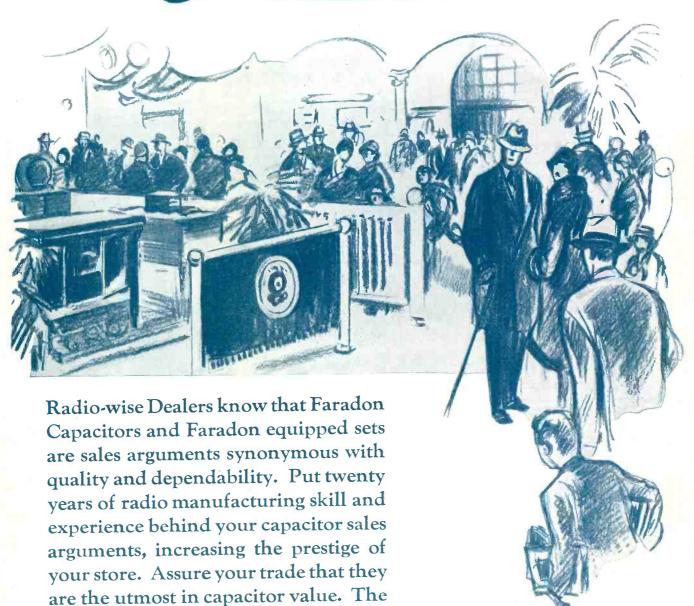
When considering equipment, be sure to stock only quality sets

—Faradon equipped.

Faradon

Electrostatic Condensers

Faradon



Ask us for any information desired.

answer is to standardize on Faradon.

WIRELESS SPECIALTY APPARATUS COMPANY

JAMAICA PLAIN, BOSTON, MASS., U. S. A.

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for all purposes - - - - -

Why YOU should visit the S BOOTH at the Show!

Because:

Thirty - three years spent in manufacturing precision electrical apparatus has given KARAS a background of quality which buyers of parts appreciate.

Because:

KARAS has given the set-building world such sensational circuits as the KNICKERBOCKER 4, KNICKERBUCKER 4, the KARAS EQUAMATIC, the AC EQUAMATIC and the SCREEN-GRID EQUAMATIC, as well as a 3 tube SHORT WAVE KIT. In addition, the A-C-FORMER as nigneered the AC conhas pioneered the AC conversion field, and has scored a real success in its field.

Because:

The KARAS line of transformers will be remarkably complete this season, and in com-bination with KARAS Micrometric Dials and complete KARAS Condensers, will bring rich profits to KARAS dealers. Yes . . YOU should come to the KARAS Booth, and learn what your parts business can bring you!

If you do not attend the Show, write for complete Information to KARAS ELECTRIC COMPANY, 4044F N. Rockwell St., CHICAGO, ILL.

BOOTH B-54—BALLROOM STEVENS HOTEL



TRUVOLT ALL-WIRE RESISTANCES

The ideal Variable, fixed and tapped voltage controls. Air-cooled—remarkably accurate and durable. Potentiometer type, eliminating difficult calculations in building B Eliminators and power packs.



TONATROL

Trade Mark

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.

It Pays to Sell Quality **ELECTRAD RADIO** CONTROLS

UILDERS of sets and power devices, experimenters and owners of receivers -they're all anxious to secure the best performance of their units, and for this reason are buying these Electrad resistances and controls.

The story of the superior quality of Electrad Products is going the rounds because of the satisfaction of thousands of users, 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 find it a money maker. Sell Electrad products.

Please send me FREE circulars on the Electrad line of resistances, also complete dealer information. Name

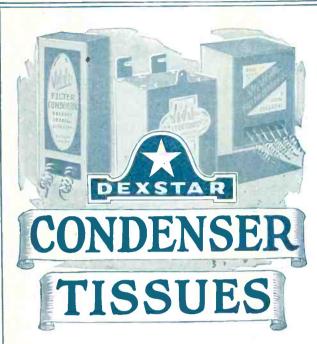
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VARIABLE HIGH RESISTANCES

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 nurpose radio purpose.



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Eliminates the squeals and howls of R.F. oscillations—stops distortion and simplifies tuning. Easily installed and adjustment is permanent.
Electrad specializes in a full line of Controls for all Radio Purposes.



No Radio set is any better than its weakest link, and the weakest link is very often a filter Condenser. No Condenser is any better than the thin strips of Insulating Tissue which separate the layers of metal foil. A pinhole or a speck of metal in the Condenser Tissue means a break down of the Condenser, with the entire set put out of commission.

DEXSTAR Condenser Paper is regarded by Radio experts as being the highest grade Insulating Tissue ever made—the freest from defects, the most uniform in quality, the most lasting under exacting and unusual requirements. DEXSTAR Condenser Tissue is the specialized product of a paper mill which has excelled in Tissue Paper production for three generations.

DEALERS should have the assurance that Condensers which they market are made with DEXSTAR Condenser Tissues. It is insurance against many customers' complaints. The leading Condenser manufacturers are now using DEXSTAR Condenser Tissues exclusively.

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Makers of Highest Grade Thin Papers
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Audio Frequency Transformers and Chokes

Meet Every Requirement of 1928-29 Radio Design

PUSH-pull, power amplifiers, and dynamic cone speakers: these are the things that will hold the public interest in radio for 1928-1929. The complete line of sixteen Ferranti Transformers and Chokes meets every requirement of modern radio design. No matter what Ferranti Transformer or Choke you select, you know that the highest standards of design, construction and testing are incorporated in it as assurance of superior performance.

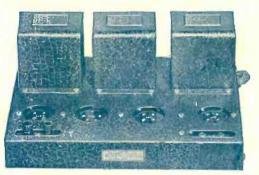
For Push-Pull: Six Ferranti Push-Pull Transformers offer a type for every need in supplying the public demand for this system of amplification. Type OP-4C illustrates the care which is typical of Ferranti methods in anticipating the trend in radio. This transformer is specially designed for push-pull output circuits used with a dynamic cone speaker.

In standard amplification, the Type OP-2 output transformer is likewise specially built to give unequalled results with the dynamic type speaker so popular this year.

Complete literature on the Ferranti line of Transformers and Chokes will be sent to Manufacturers, Jobbers and Dealers upon request. Send 15c in coin for your copy of the 64 page 1928 Ferranti Year Book containing valuable information on audio amplification, power amplifiers, and eliminators for a.c. and d.c. Engineers and manufacturers of quality receivers, amplifiers, and socket power devices will be particularly interested in new Ferranti units especially developed to solve the problems encountered in high voltage circuits.

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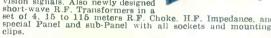
PUSH-PI

for the New UX 250 and UX 210 Power Tubes

For the fidelity and volume of distortionless audio reproduction now required by modern Radio standards and now made possible by recent speaker developments—this new NATIONAL PUSH-PULL AMPLIFIER fulfills all requirements. The curve is "flat" over practically all audio-frequencies, the power output sufficient for the largest hall. The design is compact—the quality is NATIONAL.

NATIONAL SHORT-WAVE 222 EQUIPMENT

This NATIONAL Velvet Vernier Dial Type E and special Short-Wave Condenser are now offered by NATIONAL CO., INC., for experimental work in shortwave reception of broadcast, code and television signals. Also newly designed short-wave R.F. Transformers in a set of 4, 15 to 115 meters R.F. Choke, H.F. Impedance, and special Panel and sub-Panel with all sockets and mounting-clips.



Write for NATIONAL Short-Wave Bulletin No. 127. It will pay you to Sell NATIONAL RADIO PRODUCTS.

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Wound Condensers

By-Pass—Buffer—Filter

Working Voltages 200 to 1200 D.C.

Special Blocks for A.C. sets and Power Packs. Highest electrical properties and permanence based on Life Tests. Information and prices on request.

Manufacturers are invited to visit our plant for inspection of our production and testing equipment.

Special Life Test Laboratory.

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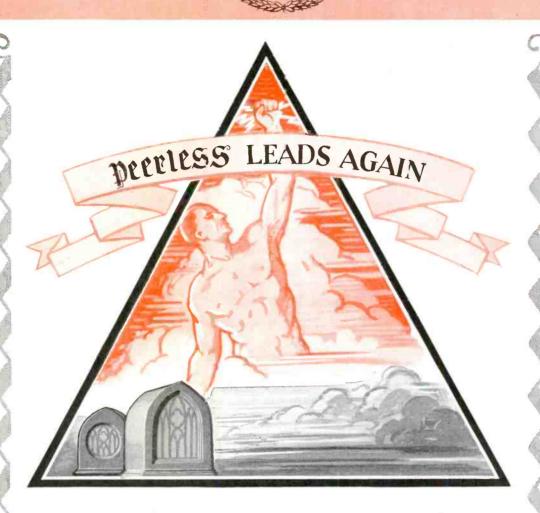
SPRINGFIELD, MASS.

Radio Retailing

R.M.A. TRADE SHOW

67-68

EXHIBITORS' SECTION



AT THE TRADE SHOW

SINCE the day when the Peerless Speaker first took the radio trade by storm, this famous Peerless in the familiar Gothic Cabinet has led every independent speaker in sales.

Today, Peerless leads again—with the Peerless Cone and a new Peerless Dynamic that will set the pace in the dynamic speaker field.

In the independent speaker field, Peerless leads in the application of sound acoustic principles to speaker design. It leads in sturdy, fool-proof mechanical construction that does away with the service problem.

It leads in eye-value, too—carried out in pure classic designs. It leads in availability and distribution—dealers can secure Peerless everywhere. And most important of all, it leads in the hearts of radio buyers, who bought from two to twenty times as many Peerless Speakers last year as any other brand of independent make.

The next three pages tell "What Peerless Will Offer in 1928-29."

LICENSED UNDER LEKTOPHONE PATENTS

The Peerless Line

The NEW Dynamic

PEERLESS announces for 1928-29 a NEW DYNAMIC Speaker, built on startling new principles.

A new design with floating coil, leads and suspension all in one piece.

A transformer with an amazing development in secondary winding, gives a new perfection in the efficiency over the entire range.

Fine wire in coils has been entirely eliminated, doing away with service troubles.

Come and see it—and you will agree that, once again, Peerless is the pace-maker—this time in the Dynamic Speaker field.

Handles the output of any tubes. Equipped with rectifier element providing for light socket operation. Volume to fill a hall, if you want it.

The Dynamic is also made in a manufacturers' model and a complete built-in speaker table.

Until you have seen the Peerless, you haven't seen the Trade Show!

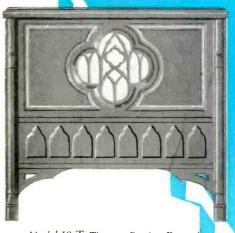
UNITED RADIO CORPORATION

Rochester, New York

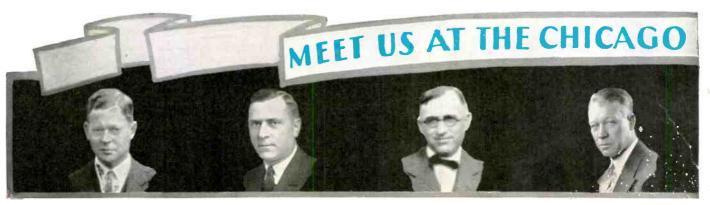
Licensed Under Lektophone Patents







Model 19-T. The new Peerless Dynamic Table. Size 29 in, high by 30 in, wide by 14 in, deep. List price \$100.



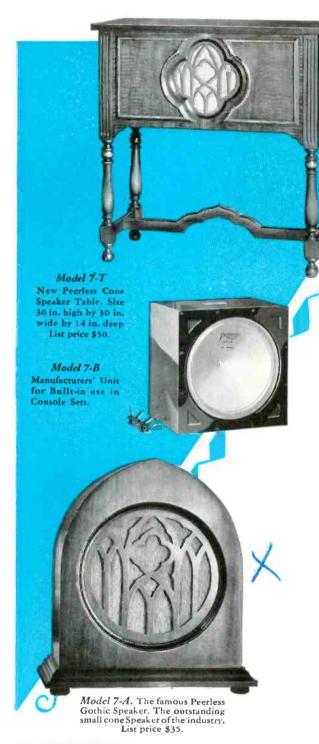
S. E. May

H. C. Goodrich

C. J. Pilliod

F. W. Piper

For 1928 and 1929



The Jamous Peerless Cone

HIS radio reproducer made radio history last season, outselling every other independent speaker on the market.

Thousands went without a Peerless, because our plant could supply but a part of the phenomenal demand. We have doubled our capacity, taken a new plant—and this season we hope that no one will be disappointed.

To the famous Gothic Cabinet Model 7-A, and the Manufacturers' Model 7-B, we have added a Peerless Cone Speaker Table, Model 7-T, at a popular price.

The Peerless Cone is noted for its fine quality on the low notes and its high efficiency at all audible frequencies. Its mechanical construction has been the marvel of distributors and dealers everywhere. Although the largest makers, our returns were less than one-tenth of one percent.

There is no service problem with Peerless. It sells quickly, pays a good profit and STAYS SOLD.

UNITED RADIO CORPORATION

Rochester, New York

Peerless has reinforced its own strong patent position with a license under the Lektophone Patents, giving the maximum protection to its many loyal distributors and dealers.

IF YOU CAN'T COME TO THE TRADE SHOW WRITE FOR THE PEERLESS PROPOSITION



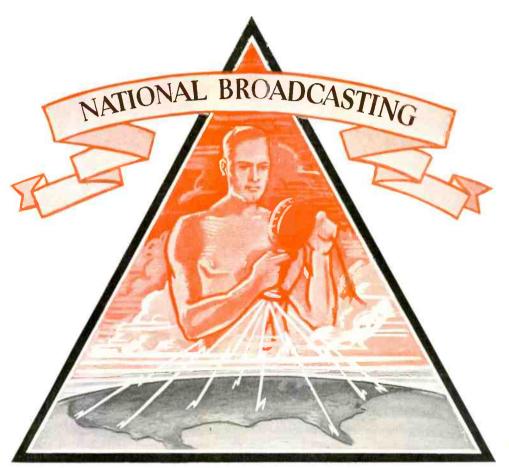
Burton Rigelow

L. M. Wood

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A. T. Haugh

Peerless On The Air



The Biggest Hook-up Ever Attempted by Any Independent Speaker Maker

BEGINNING September 16, Peerless goes on the air each week with a National Program over the following stations:

WEAF, New York; WEEI, Boston; WTIC, Hartford; WJAR, Providence; WTAG, Worcester; WCSH, Portland; WLIT, Philadelphia; WRC, Washington; WGY, Schenectady; WGR, Buffalo; WCAE, Pittsburg; WTAM, Cleveland; WWJ, Detroit; WSAI, Cincinnati; WEBH, Chicago; KSD, St. Louis; WOC, Davenport; WHO, Des Moines; WOW, Omaha; WDAF, Kansas City: WCCO, Minneapolis—St. Paul; WTMJ, Milwaukee; WHAS, Louisville; WBT, Charlotte; KVOO, Oklahoma City—Tulsa; WFAA, Dallas—Ft. Worth; KPRC, Houston; Tulsa; WFAA, Dallas—Ft. Worth; KPRC, Houston; WOAL, San Autonio; KPO, San Francisco; KGO, Oakland; KFI, Los Angeles; KGW, Portland; KOMO, Seattle; KHO, Spokane and also supplemental stations KLZ, Deuver and KSL, Salt Lake City.

Five million people will listen regularly to the Peerless Period. Thousands who never before heard of Peerless will then demand it.

If you haven't had the complete Peerless Broadcasting story, write for it—and a copy of our Program Questionnaire. We welcome your program suggestions.

UNITED RADIO CORPORATION Rochester, New York

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PEERLESS IS NATIONALLY ADVERTISED ON THE AIR!

UR-125

MAGNAYOX DYNAMIC POWER SPEAKERS NOW \$3500 DEPT OF UNITS



DYNAMIC 80
110 volts AC. Has power transformer and dry rectifier. The most popular unit of the new line. Designed to operate with AC. sets. Unit, list \$50.



ARISTOCRAT MODEL Beautiful butt burl walnut cabinet finished in two tones. It louses Dynamic 6, 7 or 80 unit. List prices:

With Dynamic 6, \$70 Dynamic 7, \$75; Dynamic 80, \$85 FW improved models for both AC and DC operation. New low prices, \$35 up. Dynamicspeakers now compete in price with ordinary types of speakers.

Magnavox Dynamic is the original radio loud speaker. Created by Magnavox 17 years ago. Patented and controlled exclusively by Magnavox. 400,000 in use and never has the popularity of the dynamic speaker been greater than right now. Adopted as built-in equipment during the past six months by several makers of fine sets.

Send for Dynamic Speaker bulletins giving full information.

THE MAGNAVOX CO.

Oakland, California

Eastern Sales Office: 1315 South Michigan Ave., Chicago



With dynamic 700 unit, 110 volt, 60 cycle AC. Combining rectifier and power amplifier. Takes place of last audio stage in set. Operates with one 381 or 281 tube and one 310 or 210 tube. Handsome walnut cabinet. List \$175. Unit \$125



DYNAMIC 6
6 volts DC. Field current consumption, .65 amperes. Operates from A battery. Unit list price \$35.

DYNAMIC 7
110 to 220 volts DC. Field current

DYNAMIC / 110 to 220 volts DC. Field current consumption, 45 to 90 milliamperes. Unit, list \$40.

AGIVAY DYNAMIC Power Speakers

Protected under 13 patents. Infringements will be prosecuted.

Smashes All Previous All Previo



Model 34 The 6-tube Zenith Chassis in a beautiful "Low-Boy" Console with Cone Speaker. Completely Electric. Speaker mounted behind attractive grille. Cabinet of figured walnut veneers in dark dull rubbed finish, beautifully shaded and blended. Price—Less

Model 32 The "Low-Boy" Console model for Battery operation.

15 Models-3 different circuits-6, 8 and 10 Tubes including DeLuxe Models-with or without loop or antenna-battery or fully electric-\$100 to \$2,500. Western U. S. prices slightly higher-"Licensed only for radio amateur, experimental and broadcast reception."

WEARE proud to present the new line of Zenith Radio to the industry and to the public. It's the best job of radio building that Zenith has ever done. When Zenith distributors saw the 1928-29 line at the recent convention they placed orders for more than double the entire Zenith business of last year. The outlook is bright. Zenith dealers have made money consistently for the past seven years. This year, with a product that is worthy of Zenith's position as the world's largest manufacturer of high grade radio, the profit possibilities are greater than ever.



Model 33 Zenith 6-tube set in table cabinet. Completely Electric. Single dial control with effectively shielded all-metal chassis. Transparent dial illuminated from underneath, making figured scale stand out with brilliant clarity. Cabinet of matched walnut veneer with dial and escutcheon placed in attractive circular recession at top. Price—Less tubes—\$150.

Model 31 The 6-tube table model for Battery operation. Price—Less tubes—\$100.



WORLD'S LARGEST MANUFACTURERS OF HIGH GRADE

Radio



Model 35 The Zenith 6-tube circuit in a "High-Boy" Console—All Electric with Cone Speaker. Power unit completely contained at left of cabinet. Cabinet of English design in figured walnut veneers. Solid walnut legs and stretcher. Price—Less tubes—\$270. With Power Speaker—\$330.



See the Zenith Automatic at the Show

Watch for this tremendous sensation at the radio show. The biggest thing since All-Electric radio—Zenith is first again with an idea that will sweep the country.

ZENITH RADIO CORPORATION
3620 Iron Street, Chicago, U. S. A.

See ZENITH at the Radio Manufacturers' Trade Show Booth No. 89—Demonstration in Suite 505A



WORLD'S LARGEST MANUFACTURERS OF HIGH GRADE RADIO

Bosch Radio Dealers are way out ahead

Bosch Radio Dealers are way out ahead this season. New and sound merchandising policies in the current Bosch Radio contract provide greater profits and advantages not to be had in any other contract.

Bosch Radio Dealers this year will enjoy the advantages of a more flexible inventory investment, a wider selling range and a price position quite unparalleled in any other quality radio line.

The new plans are so interesting and the profit opportunities so enlarged that the Bosch Radio contract will be the outstanding money maker this year.

A request will bring you the details. Write the Main Office or the Branch nearest you today if you want to be counted in on our plans this season.

Bosch Radio is licensed under patents and applications of R. C. A.—
R. F. L. and Lectaphone.



Bosch Radio 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.



AMERICAN BOSCH --

SPRINGFIELD, MASSACHUSETTS



NEW BIRNBACH ACCESSORIES

Birnbach Acid-Proof Battery Cables



For Every Circuit and Purpose

These Battery Cables are composed of Stranded Wires insulated with Colored Rubber and enclosed in an attractive Braid over all wires. For use in connecting A, B and C Batteries or Eliminator to Set. Furnished with brass soldered lug terminals on all ends for neat and quick attaching of cable to batteries or eliminator. Each wire of separate Solid Color. Made in 5, 6, 7, 8, 9, or 10 Wires.

110- 5 Wires, 54 inc	es	 	 	\$0.50
111- 6 Wires, 54 inc				
112- 7 Wires, 54 inc	es	 	 	.70
113-8 Wires, 54 inc				
126- 9 Wires, 54 inc				
119-10 Wires, 54 inc	es	 	 	1.15

The New Birnbach 10 Foot Battery Cable

Now you can place the Batteries or Eliminator in the basement or in another room—away from the Set with the BIRNBACH 10 Foot Battery Cable. All ends of wires complete with Soldered Lugs for neat and instant attaching of Cable to the Set and Batteries or Eliminator.

114 5	Wires.	10	foot.	 							. 4	\$1.25
116 6	Wires.	10	foot.	 					,			1.55
117 7	Wires.	10	foot.	 								1.85
118 8	Wires,	10	foot.	 								2.15
127 9	Wires.	10	foot.	 								2.45
128-10	Wires.	10	foot	 								2.75

Birnbach Riga Battery Cable



This Cable is made of flexible stranded wires, and insulated with Colored Rubber. The wires for the A Battery are made of heavier gauge conductors and assembled with storage battery clips. Other wires furnished with Soldered Lugs. A Battery Cable for Heavy-Duty Service.

100- 5 Wires, 60 inches	.\$1.00
160- 5 Wires, 54 inches	90
161- 6 Wires, 54 inches	. 1.05
162-7 Wires, 54 inches	. 1.20
163-8 Wires, 54 inches	. 1.40
164-9 Wires, 54 inches	. 1.55
165-10 Wires, 54 inches	. 1.70
150- 5 Wires, 10 foot	. 1.60
152- 6 Wires, 10 foot	. 1.80
153-7 Wires, 10 foot	. 2.25
154— 8 Wires, 10 foot	. 2.55
155- 9 Wires, 10 foot	2.85
156—10 Wires, 10 foot	. 3.15

BIRNBACH Extension CORDS

ATTENTION! RADIO DEALERS

Hundreds of people who bought their Radio Sets from you last fall and winter need Birnbach Extension Cords and extra Loud Speakers that



New Birnbach

Moisture-Proof

Extension Cord Units

You can move your Radio Speaker into any room desired—bedroom, kitchen, dining room, baby's room, or living room, by connecting the

cord of your Speaker to the BIRNBACH EXTENSION

CORD UNIT. Attaches instantly.

BIRNBACH CORDS are made of

Stranded Copper wires and in-

sulated with rubber to protect the Copper Strands from moisture;

which causes leakage from one conductor to another, and covered with a beautiful brown mercerized braid. All Cords furnished with

166— 10 foot, complete\$0.75 120— 20 foot, complete 1.00

Replacement Cords

These Cords are used in replacing

worn-out cords from head sets or

102—Speaker Cord with Pin Tips... \$0.35 103—Speaker Cord with Pin and

loud speakers. Five feet long.

Spade Tips

105-Head Set Cord, Pin and Spade

107-Head Set Cord with Pin and

Connectors.

can be placed in any room or on the porch and lawn and be entertained.

Birnbach Cords In Beautiful Silk Colors



Now you can select a BIRNBACH CORD to harmonize with the Color of the base-board in the home.

Made in OLD GOLD, MAROON, and WHITE.

A Color to satisfy every possible taste.

620—20 foot White Silk Cord	1.50
621—20 foot Old Gold Silk Cord	1.50
622—20 foot Maroon Silk Cord	1.50
630—30 foot White Silk Cord	1.90
631—30 foot Old Gold Silk Cord	1.90
632—30 foot Maroon Silk Cord	1.90
650—50 foot White Silk Cord	2.75
651—50 foot Old Gold Silk Cord	2.75
652—50 foot Maroon Silk Cord	2.75

Birnbach Cord Connector

Made in one piece. Built to withstand heavy wear and abuse. Neat in appearance—easy to use. Cord tips can be attached quickly without the use of tools.



151—Cord Connectors Only, each......\$0.30

Battery Connectors

BIRNBACH

Made of Stranded Wires insulated with rubber and covered with a distinctive braid. All ends assembled with brass soldered lug terminals to fit the binding post or clips on all batteries. A handy accessory for use in connecting Dry Cell "A" Batteries, B and C Batteries. Carton contains 25 of each size.

RC 3-3 in. Connectors, each	0.04
RC 6-6 in. Connectors, each	.05
RC 8-8 in. Connectors, each	.06
RC12-12 in. Connectors, each	.07

"SOLD THROUGH YOUR FAVORITE JOBBER"

.50

-50

BIRNBACH RADIO CO., 254 West 31st Street, New York, N. Y.





Every dealer who has ever sold Gold Seal Radio Tubes knows that he can count definitely upon two things—a product that never fails to satisfy his customers and a factory policy that goes the limit to satisfy him.

If you are interested in a new plan for selling radio tubes, which is a natural development of that liberal dealer policy, write us and we'll lay the complete details before you. And now is the time to act if you want to "get set" for Fall business!

GOLD SEAL ELECTRICAL CO., INC. 250 Park Avenue, New York RAIDI (

28

The Mode. 28 Bosch Radio Receiver has many new features reflecting the newest developments of the radio ant. The famous Bosch precision workmanship is much in evidence in every detail.

The Model 28 has seven alternating current amplifying tubes and one power rectifying tube. There are three radio frequency stages, a detector stage and two audio frequency stages using three tubes. Two audio stage tubes are on the same circuit employing push-pull amplification permitting greater volume without distortion and achieving clearer reception and more faithful reproduction.

Single dial, electrically illuminated; grouped controls; shielded and armored; solid mahogany cabinet—all selling points which instantly appeal.

National advertising, newspaper advertising, window displays, literature and mailing campaigns plus a fair and solid selling policy make Bosch Radio outstanding in attractiveness to the dealer who wants to make money and build a successful radio business.

Prices slightly higher west of Rockies and in Canada Authorized Bosch Radio Dealers are now showing Model 28A console illustrated, specially designed for them with the standard Bosch Radio Speaker. Gonsole 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.





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, heautiful craftsmanship and selected woods. Bosch Radio Dealers are offering this console 29B with superdynamic speaker and special high-power speaker supply with Bosch Radio Model 28 Receiver for \$295.00.



MAGNETO CORPORATION

BRANCHES: NEW YORK CHICAGO SAN FRANCISCO



BROADCASTING

THE MOST DRAMATIC RADIO ANNOUNCEMENT OF 1928

New "Pace Makers" in Radio, with Full FEDERAL ORTHO-SONIC TONE!

PEDERAL will christen two new, distinctive, popular-priced, all-electric receiving sets, using A. C. tubes; a new, low-priced 6-tube battery model – and other business-getting additions to its line – at the R. M. A. Show. These new sets will be "Pace Makers" in Radio – a step ahead of the rest of the field.

Beautifully designed · Distinctly new in style

Compact in size · Marvels in selectivity

Deep, rich, Ortho-sonic tone · All self-contained

Inviting low prices that will bring

new Radio business to the retailer

And
Built by a manufacturer whose reliability and products are firmly established in the Industry.

FEDERAL ORTHO-SONIC*

the New



Air Chrome

NCE again Temple steps to the center of the stage with a new offering to the radio industry—the new Model 20 Air Chrome Speaker. Its entry promises to be just as sensational as that of the famous Temple Air Column when it was first announced, and its bow to the public will receive the same enthusiastic approval.

Coupling as it does the latest and most advanced principles of reproducer design with an unequalled engineering and manufacturing experience this new model promises unheard of sales possibilities and will be in great demand especially among the class that is satisfied only with the finest in tone reproducers.

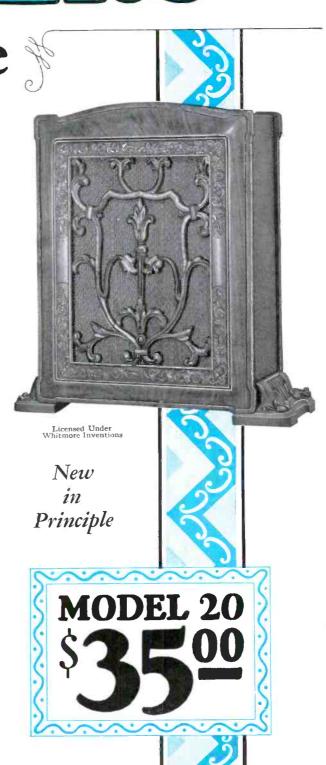
Model 20 is of the open radiator type with a large surface diaphragm. The balanced tension principle of its construction however, lifts it bodily out of the class of cone type speakers. In Air Chrome construction the larger, or front half of the diaphragm is tuned to the lower frequencies while the smaller, or back half is tuned to the higher frequencies. Each and every tone reproduced may be said to be individually distinctive, its frequency range is from lowest bass to the highest treble, all with a degree of naturalness that is as startling as it is pleasing.

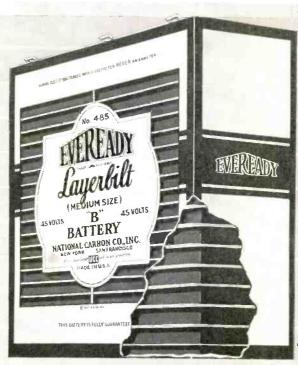
Of refined beauty, its design adapts itself with harmony into the surroundings of the most fastidious—its genuine walnut frame together with the leather effect of its sides give it an eye appeal most pleasing, to say the least.

> On demonstration in Room 457 Stevens Hotel—during the R. M. A. Show

TEMPLE, INC.

1929 S. Western Ave. Chicago, U.S.A.





This great modern Battery

The Eveready Layerbill is now made in two sizes

This is the new medium-size Everendy Layerbilt "B" Battery No. 485. 314

THERE is a new Eveready Layerbilt "B" Battery, marked "Medium Size" on the label and bearing the number "485." This has the same outside domensions as the medium-sized cytindrical cell Eveready No. 772. But because this new battery is a genuine Everendy Laverbilt containing unique flat cells, it will long outlast the cylindrical cell hattery of the same size. All our tests show that the new battery is the longest-lasting one of its size, just as the famous big Eveready Layerbilt No. 486 has proved to be the superior Eveready in the heavy-duty size.

Now that the Everendy Layerbilt comes in two sizes, the remarkable economy of the Eveready Layerbilt construction can be had by everyone. These two batteries will fit the needs of ahout 99% of modern receivers. If you have heen buying heavy-duty batteries, ask your dealer for the "big" Eveready Layerbilt No. 486, which is the one that has been so popular for over two years, in heavy-duty service. If you use medium-size batteries, ask for the "Medium Size" Eveready Layerbilt No. 485. The flat cell construction is patented—no one else can make an Eveready Layerbilt. Look for the name on the label.

Each Eveready Layerbilt provides Battery Power, the pure Direct Current that is essential to best operation of radio receivers. Battery Power is silent, hum-free, uniform, making no changes in the natural tone of your receiver and speaker. Use Battery Power for maximum radio reliability and enjoyment, and get the Eveready Layerbilt in the size you desire, for maximum economy and convenience.

NATIONAL CARBON CO., INC.
New York San Francisco

ENERGADY



Hiustrated above is the famous Eveready Layerbilt No. 486, 47/16 inches thick, 45 volts, 85.00.

> at the left is a typical battery, showing seen the cells

EVEREADY Radio Batteries

Pettery Power

Tuesday night is Eveready
Hour Night
East of the Rockies
8 P. M., Eastern Standard
Time
Through WEAF and associated N. B. C. statious
On the Pacific Coast
8 P. M., Pacific Standard Time
Through N. B. C. Pacific
Coast network

The air is full of thing you shouldn't

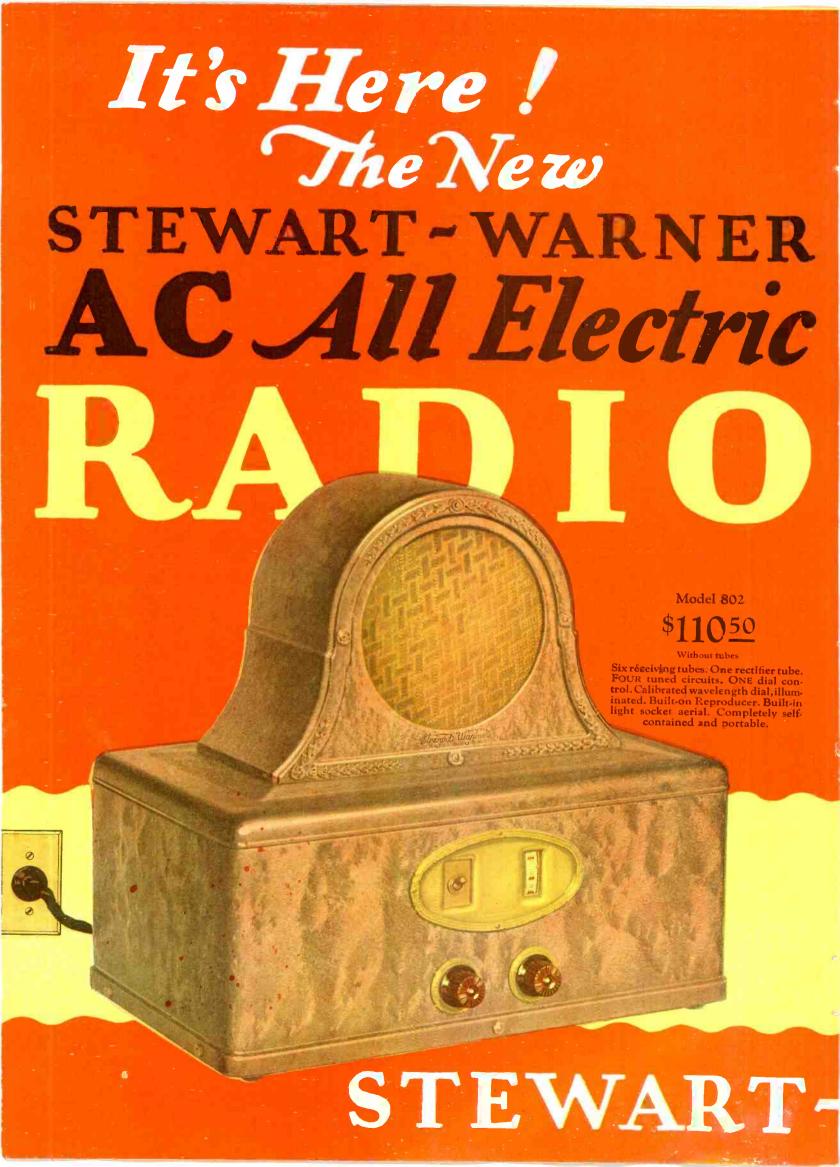
This is the Eveready Layerbilt story told to your customers in the May 26th Saturday Evening Post.

Visit the Eveready Exhibit at the R. M. A. Trade Show— Hotel Stevens, Chicago, June 11th to 15th

-and now

news about the New
STEWART-WARNER
ACAIL Electric
RADIO

and 1 1070-



REALISM in RADIO

Good news for everybody! A wonder set for new-day needs in Radio! New features that open vast new fields of selling opportunity!

UNMATCHED REALISM of voice and music reproduction sounds the keynote among the big sales features of this new line. It will make thousands of Stewart-Warner dealers succeed in 1928 and in years to come. Through an exclusive method—the Electrical Ear Process—Stewart-Warner Radio exactly reproduces music in all its original tone, depth, color and volume.

The Electrical Ear is a sensitive mechanism which records the minute tone vibrations of the music itself and also the vibrations of the same music recreated by the Stewart-Warner set—then compares the two records for perfect reproduction.

Many times more accurate than the human ear, this device enables Stewart-Warner to build sets with Realism approaching absolute perfection. This assures Stewart-Warner and Stewart-Warner dealers undisputed Radio Leadership.

One of the new line leaders is Model 802. In sensational features this great set stands alone. An All-Electric A. C. Receiver, portable, self-contained, with built-on reproducer, built-in power unit and built-in light socket antenna. A small compact metal cabinet, beautifully finished in Bronze Moiré (pronounced Morāy).

Three stages of radio frequency amplification with FOUR tuned circuits. Utilizes six receiving tubes,

one rectifier tube. Protected by safety cartridge fuse. Operates on voltages from 105 to 130, with taps for high or low voltage, insuring maximum tube life and efficiency. Gold-plated dial, calibrated in wavelengths. One control for tuning, one for volume. Has phonographic pickup receptacles, re-creating record music equal to any new-type phonograph.

The new Stewart-Warner Reproducer harmonizes with the set in lines, finish and performance. It also comes as a separate unit, Model 435.

Model 801 Receiver has the same cabinet and chassis as 802, but is without the built on reproducer. D. C. Model 806 is identical with Model 801 except that it is designed for battery or battery eliminator operation.

CONSOLES—A complete line of popularlypriced console cabinets, strikingly beautiful examples of master craftsmanship by the Buckeye Cabinet Co., Springfield, Ohio, are approved for the new Stewart-Warner models.

Get the full news about this great new line and the advertising and merchandising help that will back it. If the Stewart-Warner franchise is open in your territory, write or wire us now. It's an opportunity to make more money and build big permanent trade. Territories closing fast! Don't delay! Act!

STEWART-WARNER SPEEDOMETER CORPORATION · Chicago See the Stewart-Warner Line at the June Trade Show, Space B-46 and 47



650

Model 435 Stewart-Warner Reproducer

cone speaker revealing a new depth and magnificence of tone.



9450

All-Electric A. C. Model 801

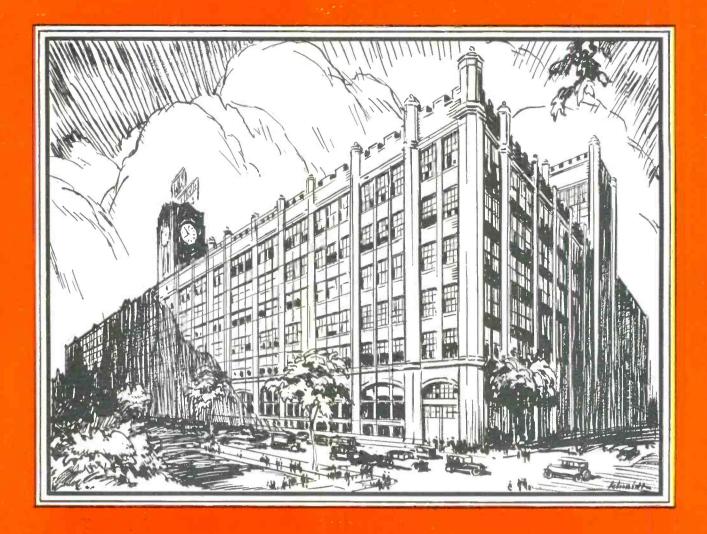
Same as Model 802, but without built-on reproducer.

This same style in battery operated set, \$67.50

Prices slightly higher west of the Rockies

WARNER

The Voice of Authority
in RADIO



Back of STEWART-WARNER Radio are the Reputation and Resources of this \$50,000,000 Corporation

When you handle Stewart-Warner Radio you make a business hook-up with the prestige of the Stewart-Warner name; with a 22-year record of success and achievement; with 18 million products in use; with public good will built on manufacturing quality and merchandising service.

The 1929 Stewart-Warner Radio will win ready

acceptance on the strength of its name, its quality, performance and price. Unparalleled opportunity awaits the dealer who secures this line.

We want aggressive dealers, who seek to give their patrons greatest radio value; who want to win new business in the best and biggest way. Learn about our plans to increase your radio sales.

Write or wire us today

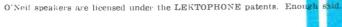
STEWART-WARNER SPEEDOMETER CORPORATION • Chicago

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

SEE US AT THE JUNE TRADE SHOW, CHICAGO, SPACE B-46 and 47

STEWART-WARNER

The voice of authority in radio



nnouncing the new line

The FAMOUS O'NEIL RADIO SPEAKERS

RED stripes on a peppermint stick make it look good to a youngster and he wants it. The New Line of O'NEIL RADIO SPEAKERS "looks good" because they are designed to appeal to the eye as well as the ear and to see them is to want them.

The New O'NEIL Super X unit, a conceded standard of comparison in speaker units, is an integral part of these speakers. This unit is a non-adjustable condensed type in which the vital parts are protected by a transparent shield from dirt, dust, or any foreign element, thus insuring the smooth operation of the speaker at all times. O'Neil speakers are "fool-proof" being permanently adjusted at the factory.

O'NEIL Speakers are completely FACTORY BUILT and TESTED. Their full, rich, natural and mellow tones proclaim them as quality instruments for use with the new electric or battery sets. They range in price from \$14.75 to \$69.50—

an appeal to the pocketbook—and full appreciation of them means to SEE, HEAR and EXAMINE them.

Set and Cabinet Makers will be especially interested in the New O'NEIL Chassis Speaker which also has the new Super X Unit. It's made with or without a Baffle Box (10-in. x 10-in. x 6¾-in.). Special prices on request.





On continuous demonstration at the R.M.A. Show, June 11-16, Booth 77-78, or Rooms 1604-5-6, Stevens Hotel, Chicago

O'Neil Manufacturing Corporation

"The Famous O'Neil Radio Speaker"

West New York, New Jersey



Model C.105. Clock model, walnut 12-in, high Super X° anis. List



Model D. X. 606—Fitted with our dynamic speaker, equipped with a standard dry disc electrifler and powerful transformer for operation from house current. No other auxiliary apparatus required, \$65.



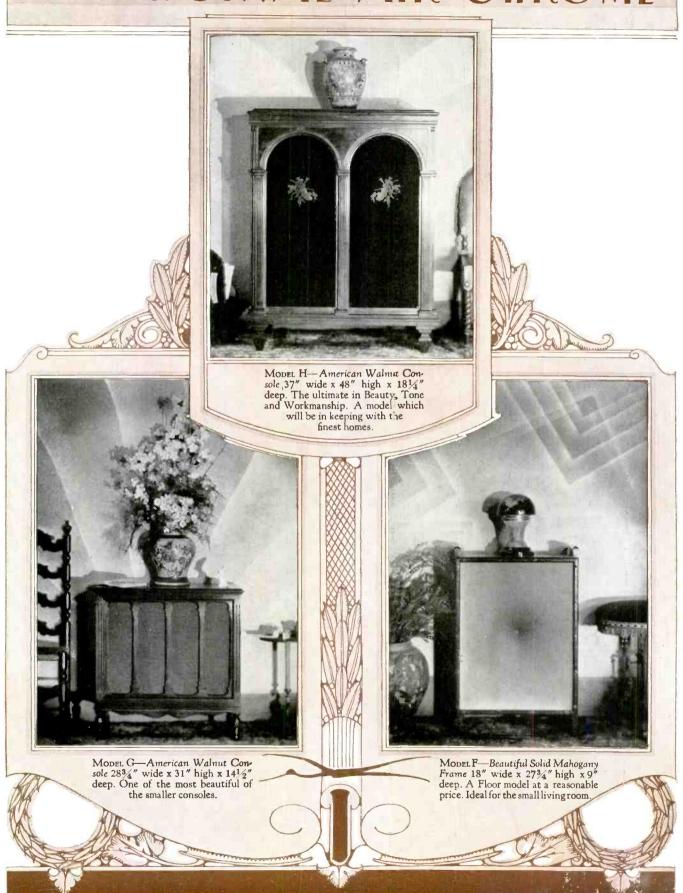
Model L.C.501 Conso Cabinet. Two tone wanted Super K unit H313 in, f W39-in, x D1434-9 Listed \$69.50,

Also

THE O'NEIL LINE
D.99 Round 17-in. dia. Beauffül Mahogany List \$14/75
L.S.19 Full Rigged Ship 26-in. Bronze finish 25.00
C.105 Walnut Clock 12-in 30,00
L.C. 501 Consolet Cabinet two tone walnut 78:503 Consolette Trible Two Tone Walnut (X21 Chassis Speaker without Baffle Box 16.00
CB.18 Chassis Speaker with Paffle Box 18.00
Also complete line of dynamic speakers.



"" ORIGINAL AIR-CHROME





NOW IN CABINET MODELS .-

New Models · · · New Sales Policy New Standards of Reproduction

AST year, long after the season started, Air-I Chrome startled the radio world with the finest speaker which had ever been heard. The demand was so great that we could do nothing but supply the crude box types to set builders. We had no sales organization.

Still with all of these handicaps, our factory was kept so busy that we never caught up with orders until late in April.

Now with increased facilities, with a line of what we believe to be the finest speakers ever designed, we are able, at last, to talk business to the dealers and jobbers on the proper basis.

Only Three of the Seven Models Shown

On account of lack of room we are only show-

ing three of the seven superb cabinet models, covering the complete price range. Of course Air-Chrome will have a Dynamic Speaker in its inclusive line, and we will continue the box types which have been so popular with set builders.

Jobber and Dealer Organization being Formed

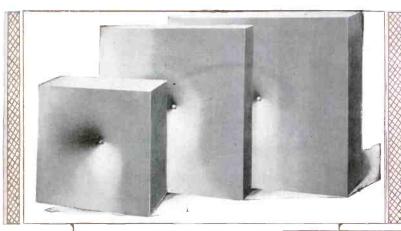
The jobbers who will be selected to handle the Air-Chrome line of speakers will be limited. Territories are rapidly being taken. If you have not made arrangements with us, may we advise you to look over our line at the Show and sign up before it is too late.

Send the coupon for complete information.

AIR-CHROME STUDIOS, Inc.

W. B. WHITMORE

Licensor of Temple, Inc. and Browning-Drake Corporation 170 Coit Street Irvington, N. J.



Box Models for Set Builders 24" x 24" 18" x 23"

Air-Chrome Studios, Inc. 170 Coi: Street, Irvington, N. J.

Being interested in the finest speaker line for 1928-29, kindly send us complete information on the Air-Chrome Speakers. Jobber





PERRYMAN RADIO TUBES

"DISTANCE WITHOUT DISTORTION"



See the
Perryman Exhibit
at the
Chicago Show.
We'll be in
Room 502
Hotel Stevens.
Be sure to get our
attractive 1928
proposition.

All the A. C. Types.

Get our 1928 proposition. Easier sales, unlimited guarantee and extra profit.

- 1. Extra profit in the sales price.
- 2. Extra profit because Perryman Types 226-227-280 and 281 have been perfected and improved and are guaranteed to give extra long life and service.
- 3. Extra profit because they stay sold. No replacements to eat up profits. (They must make good or we do.)
- 4. Extra profit because they bring back new business on their excellent performance.

Perryman Electric Co.
33 West 60 Street, New York, N. Y.



PERRYMAN RADIO TUBES

A Complete Line of Standard Equipment for every Radio Purpose





Proved by the Test of Time

Among the earliest radio pioneers—today, Bremer-Tully stand second to none for radio dependability, satisfaction and economy.

During seven years every single B-T product has been a continued outstanding success—time-tried and time-proved!

Where can you find a better guarantee of merit—of net profit?

There is no need to gamble on untried products if the B-T franchise is still available.

See the latest B-T models at the Radio Show—Room No.

Chicago, June 11th to 15th.

They're better than ever!

557—Stevens Hotel,



Here is a combination that is sure to win instant favor with your trade—the new B-T 6-40 radio and the B-T Speaker.

It may be had in one cabinet or separately as preferred.

Compact in form and attractive in appearance—these radio products will outperform everything at equal price—\$190.00 for the console with standard B-T Speaker built-in, but less tubes; \$130.00 for the table model, less tubes; \$35.00 for the speaker.

Further details on request.

Bremer-Tully Mfg. Co. 656-662 Washington Blvd. CHICAGO, ILL.



The Largest-EXCLUSIVE

Radio Tube Manufacturers in the World

Have you ever stopped to figure the volume of your tube sales and the amount of real profit you get? Unless you are handling CeCo, it is very probably disappointing.

CeCo is the only one of the three leading makes of tubes that offers larger profitmaking possibilities.

The longer discount given by CeCo enables dealers to make real money—a matter well worth considering in this day of keen competition and high operating costs.

The outstanding performance also of

CeCo Tubes accounts for their quick turnover. Those once trying CeCo Tubes continue to use them because of their clearer tone, greater sensitivity and longer life, due at least in part, to the exclusive process of evacuation. These features also make CeCo Tubes the choice of leading radio engineers and circuit designers.

If you are a CeCo dealer, write us for unusual and business-building dealer helps and our latest catalogue.

If you are not yet one of our many thousand CeCo dealers, ask us today for our special proposition to dealers. It means a material addition to your income from tube sales—and increased satisfaction to your customers.



Rectifier R80 (280)



Millions in use

Special Types for A.C **Operation**

O MEET the demand for A.C. operation of Radio Receiving Sets, CeCo offers the most complete line of tubes available.

M-26 Amplifier-An audio or radio frequency amplifier. List price \$2.50

Hi Mu 26 Amplifier-An audio amplifier for use in resistance or impedance coupled amplifiers. List price \$4.00

N-27 Detector and Amplifier—A 5-prong base detector or amplifier of the separate heater type. List price \$5.00

S-27 Detector and Amplifier—A separate heater type with a 4-prong base and side pins for heater filament contacts. Can be used in sets using Kellogg type of tube.

List price \$5.00

A.C. 22 Screen Grid 5-prong Tube of the separate heater type operated directly on alternating current.

List price \$8.00

R-80 Rectifier—A full wave filament type rectifying tube for A, B or C Eliminators or power packs. List price \$4.50

R-81 Rectifier-A 1/2 wave filament type rectifying tube for A, B or C Eliminators or power packs. List price \$7.50

L-10 Power Amplifier—A 7½ volt 1.25 amp. power am-

L-50 Power Amplifier-A 71/2 volt 1.25 amp. power amplifier for extra heavy duty requirements. List price \$12.00

F-12A (112A) Power Amplifier—A 5 volt 1/4 amp. power List price \$3.00

I71-A (171-A) Power Amplifier—A 5 volt 1/4 amp. power tube for output audio stage. . . List price \$3.00 including

O1-B (201-B) Amplifier and Detector—A 5 volt 1/8 amp. general purpose tube, D.C. List Price \$3.50



Power Amplifier L-50 (250)



N27 (227)

When you are at the Chicago Show (June 11th to 15th) do not fail to look us up at Booth 107.



CeCo Manufacturing Co., Inc., Providence, R. I. Theres a CECO Tube for every Radio need



HE Radio Trade Show opens—and Sterling enters its 23rd year of service and profit to the electrical and radio industries.

As has already been hinted in the trade, Sterling will show new items which will be demanded by purchasers of practically all the newest types of radio outfits.

This means immediate sales, quick turnover and clean profits during the usual summer slump. And Sterling will be ready to deliver.

Come to the Sterling booth with full confidence that you will find

- 🔌 new products in step with the latest demand
- ** stable year 'round sellers in testing equipment and power supply units.
- merchandise built on experience, sold on performance . . . radio merchandise that brings its price—the year through.

If you think these make for dollar-profits, meet us at booth 36.

Sterling

dependable radio products

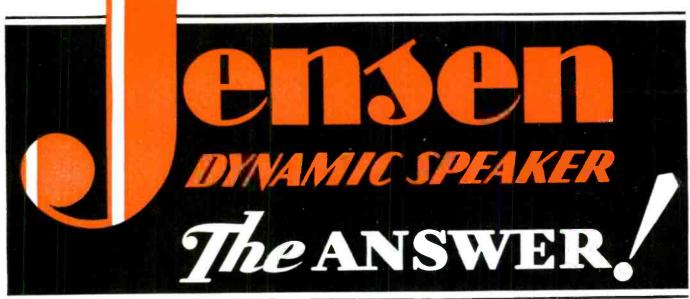


OUR engineers will explain some of our newest products in demonstration room No. 225, 5th floor, Hotel Stevens.

THE STERLING MFG. COMPANY Cleveland, Ohio



THERE is no occasion for confusion in selecting the right dynamic speaker for your trade this year. Consider only actual evidence of a manufacturer's ability to provide what you know are the essential factors in any successfully merchandised radio product. The field narrows quickly. Jensen is the answer.



A dynamic speaker clearly reflecting the genius and experience of Peter L. Jensen

- a speaker conceded in scientific circles to represent the finest known application of the dynamic art.
- a year's unqualified success—production never equaling public demand.
- Peter L. Jensen has supervised the development and manufacture of nearly a half million dynamic speakers. He was co-inventor and designer of the first dynamic speaker ever built.
- cabinets originated in the studios of one of America's foremost designers.
- a new big Chicago factory to supply the demand in the East and Middle West.
- a dealer and jobber policy dictated by a genuine spirit of fairness and understanding.
- a generous advertising program which will actively support Jensen jobbers and dealers.
- Jensen Dynamic Speakers range in price from \$40 upwards.

(Licensed under Magnavox patents)

MANUFACTURERS, JOBBERS AND DEALERS
See the New Jensen Models at the R. M. A. Trade Show, Exhibit,
Space 48, Stevens Hotel or address our Chicago office
for complete information.

Jensen Radio Manufacturing Company

338 N. Kedzie Avenue

CHICAGO, ILLINOIS



N ORDER to obtain 100% results in the way of tone quality, volume, distance, and even more important than this, to get satisfactory life out of A.C. tubes, an R-B-M VOLTAGE REGULATOR is an absolute necessity on every A.C. set. This device is guaranteed to deliver the correct voltage to your set regardless of your line voltage, the make of your set, or the number of A.C. tubes that it uses. It is small, compact, beautifully finished, and attaches to your radio set in just a few seconds' time. It does not require the use of any tools or the connecting of any wires, other than plugging it into the light socket. No rheostats or voltmeters required with this device. It does not waste or consume any current, nor heat up.

How it works

The R-B-M VOLTAGE REGULATOR will deliver 110 volts to your A.C. set no matter whether your line voltage is 90 volts or 130 volts or at some point in between. By delivering the proper voltage at all times to your set, it will give you the maximum efficiency in the operation of your receiver since it will always burn your A.C. tubes at the voltage for which they were designed to give the best results. In districts where the line voltage is exceedingly high, it will prolong the life of your A.C. tubes to their rated number

R-B-M MANUFACTURING CO.

Logansport, Indiana

of hours. On the other hand, where the line voltage runs as low as 90 volts, this device enables you to get all of the kick and volume out of your set because it will boost the voltage up to the right point for which the set was designed, viz: 110 volts. Thus you never have to worry about ruined reception due to low voltage which is very common in many districts.

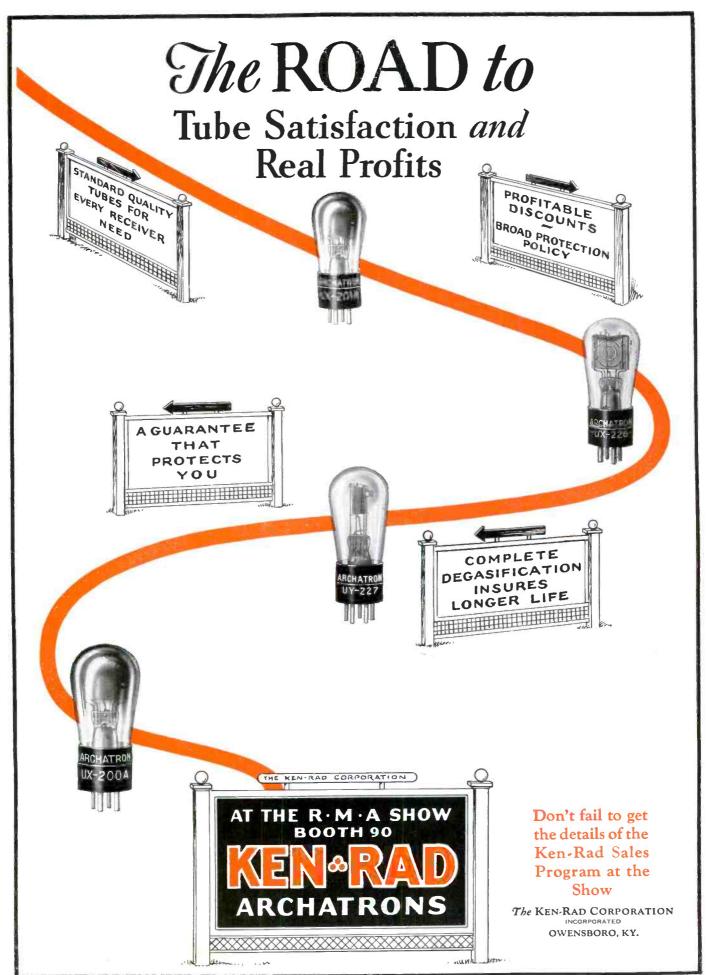
Sell it over the counter

Think what it means when one of your customers comes in with a burned out A.C. tube. Immediately you sell him this device right over the counter. Your customer can install it just as efficiently as you can. It does not require the use of a service man, voltmeter, or any tools to install it. Once set for the proper voltage there is nothing to get out of order. You not only make a profit on the sale of this device but it means satisfied customers and no more free service calls due to burned out A.C. tubes. The R-B-M VOLTAGE REGULATOR is fully covered by patent applications.

DEALERS— If your jobber cannot supply you with R-B-M VOLTAGE REGULATORS, write us direct.

MANUFACTURERS desiring to equip their sets with this voltage regulator will receive special attention.

R-B-M Logs	Manuf insport	acturi India	ng C	o.,	71 Sixi	h Street	,
	me by	return	mail	full My	details Jobber	regarding is:	the new
		I - <u>-</u>	Jobber	's N	ame)		1-66.
Name							
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BOOTH No. 158 Stevens Hotel, Chicago June 11-15

A. C. CONVERTER See it on display at the trade show

Dealers will see in the new Abox a rich opportunity to create more business and quick profits.

Over three million D. C. set owners want A. C. operation of their sets. Naturally, they resist any suggestion to discard their sets, tubes and equipment. The dealer who explains that the Abox A. C. Converter will give them A. C. operation of their present sets, with the same tubes, will be rewarded with profitable sales.

Tell the story to your mailing list of D. C. set owners. Dress up your window with an Abox Girl*. Tie up with the big Abox newspaper campaign. Circulars which we will gladly supply in quantity describe the Abox and its uses in a clear, understandable way. This is your opportunity to participate in another big, successful Abox year.

*The Abox Girl is a life-size, ten color, lithographed display which is sent free to Abox dealers while the supply lasts.



Dynamic Table Model for 110volt A C operation. Price \$75.



Dynamic Table Model for use with battery sets.

Price \$60.

New Rola Dynamic Power Speaker

New Rola Dynamic Power Speaker At the Chicago Radio Show * * * * * *

When you hear the new Rola Dynamic Power Speaker, you will instantly pronounce it the finest loudspeaker on the market today. It meets every demand for volume and

range, with a superb quality of reproduction. The Rola engineers are confident that it will be the standard by which all other speakers will be judged.

VOLUME: The new Rola Dynamic Power Speaker, under actual test with a given input, has nearly twice the volume of any other dynamic now made. With a 171 type tube the Rola Dynamic gives approximately four times the output of the electro-magnetic type of reproducer.

RANGE: The new Rola Dynamic Power Speaker reproduces with equal intensity all frequencies within the range of the most modern broadcast stations.

TONE QUALITY: An exclusive feature of the new Rola Dynamic is the almost complete

absence of not only resonance peaks but resonance blind spots. It has a wonderful rich bass, but the bass response is not disconnected from the rest of the tone values.

The new Rola Dynamic Power Unit will be sold as follows:

Unit only for use with 110volt alternating current excitation \$50

Unit only with 90-volt field for plate current or equivalent DC excitation . \$45

Unit only for use with 6-volt battery excitation . \$35



MANUFACTURERS: Write or wire for samples or particulars on dynamic units for installation in your cabinets.

The Rola Company

612 North Michigan Avenue, Chicago, Illinois 47 West Sixty-third Street, New York City Forty-fifth and Hollis Sts., Oakland, California

AND NOW -

the dealer can see it through!

PEEDY AND EFFICIENT SERVICING of radio receivers gives the best assurance of continued interest in radio developments. It creates a desire for the best possible reception which means a more responsive market for new models. It produces a quicker turnover with bigger profits for manufacturers and dealers. Moreover, it helps sustain all commercial activities associated with, and dependent upon, the progress of the radio industry.

TAKE TIME

-to write for complete descriptive literature

But it's up to the dealer to insure this progress by every means at his command. Radio set servicing is one of the stabilizing factors of the radio business. For only by maintaining broadcast receivers, sold to customers, in the best operating condition will radio come fully into its own as an essential and permanent utility. Only then will the market con-tinue to absorb a desirable increase of the better prod-ucts of the

industry

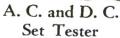
TAKE TIME -to see the Weston Radio Line of instruments at the Chicago R.M.A. Convention



Model 537



528



Meter Equipment:—
Two 3¼-in. diam. high-grade
Weston models.
3-range A.C. voltmeter—
150/8/4 volts.

D.C. Volt-Milliammeter-4 Voltage Ranges-600 / 300 / 60 / 8 volts with 1,000 ohms per volt resistance. 2 Current Ranges — 150/30 milli-amperes.

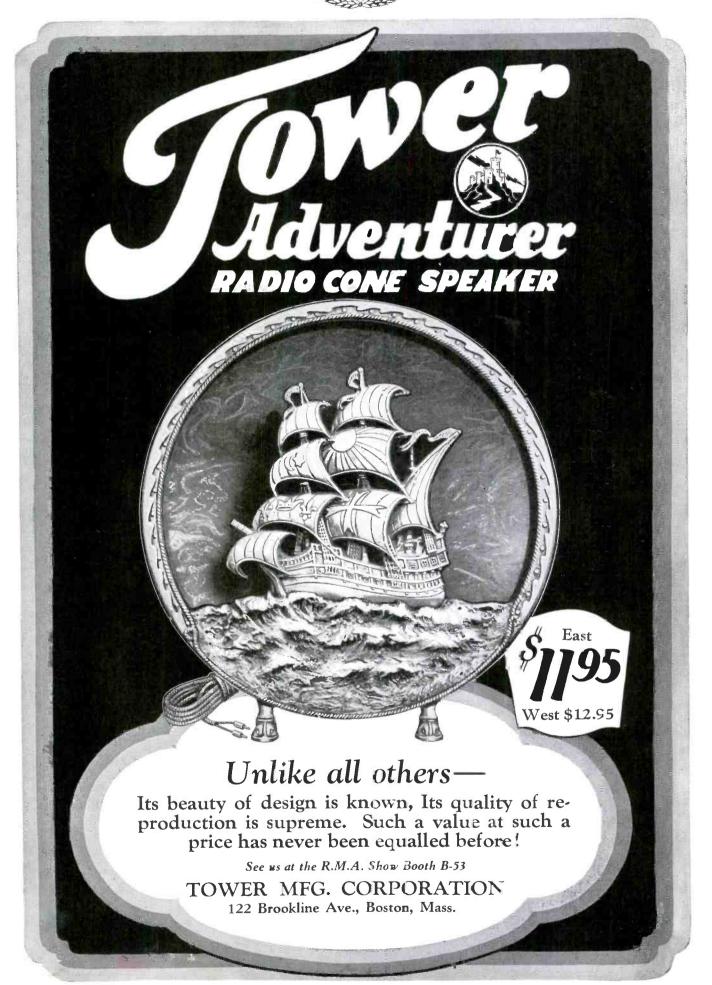
Lack proper testing proper testing
equipment to
satisfy both A.C.
and D.C. requirements no longer complicates the dealer servcing situation. Weston icing solves this problem with a new design of A.C.—D.C. Radio Set Tester known as Model 537. With this complete, light-weight, simpleto-operate set tester a thorough checkup on any type of receiver can be made in ten to twenty minutes. The dealer can make more calls per day with a substantial increase in profits—both in servicing work and in the sale of accessories. It effectively reduces overhead. In other words, whatever the manufacturer's program, the dealer can see it through. Write for descriptive circular.

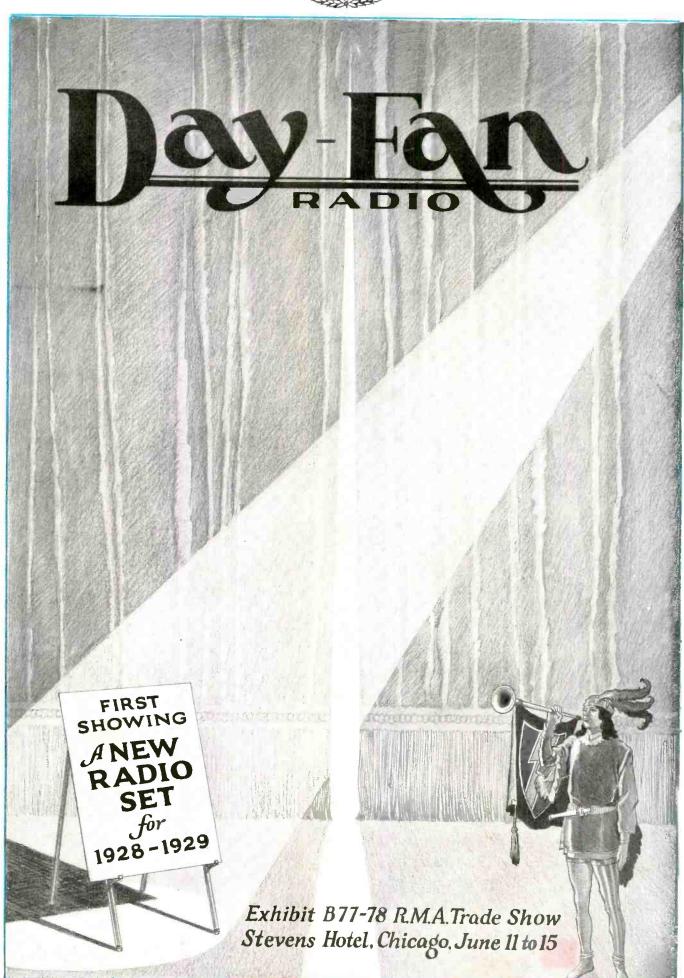
It will pay you to take TIME to investigate.

WESTON ELECTRICAL INSTRUMENT CORPORATION 581 Frelinghuysen Ave

A. C. 3-Range Voltmeter

150/8/4 volts for testing A.C. supply and tube voltages of radio receivers. A compact, light-weight, portable instrument with red and black mottled bakelite case. Also made as double range voltmeters up to 600 volts, and single range ammeters and milliammeters.





TIMMONS TALKER

A Miracle of Reproduction

Yes, a new and marvelous Cone Speaker designed by John S. Timmons, a pioneer in the radio industry, whose reproducing inventions were used during the war on battleships and aeroplanes - a nationally known authority in the field of acoustics

Unsurpassed Reproduction

This remarkable, new Timmons Talker gives you a uniformity and fidelity of reproduction that is comparable only with the actual performance of the living artist. It covers the entire range of tone-low notes as well as high notes - with matchless uniformity.

The deep, bass tones of the drum or organ are clearly heard. The soft, low notes of the viola retain their character. The most delicate shadings of voice or instrument are preserved in the fullest detail. No rattle, no distortion no smothering of tone even at greatest volume. A sensational advance in radio Speaker construction.



THE TIMMONS TALKER

A Speaker of tremendous power, yet small, compact and exceedingly attractive. Gives even greater volume of tone than many large, un-wieldy Speakers of the past.

This Test Convinced the Experts

When the Timmons Talker was perfected, we realized that a word description of this wonderful Speaker would sound just like claims made by others for far inferior performance. And so we arranged a test before a group of experts in sound reproduction.

ers were hooked up side by side with the Timmons and instantaneous comparisons were made by electric switching devices.

When this test was over, the listeners enthusiastically agreed that a new standard in tone reproduction had been established. The difference was so marked that it left absolutely no room for doubt. It was freely admitted that the new Timmons Talker vastly improved reception on any radio set



at \$25° the Greatest SpeakerOffer of the Day!

The retail price of the new Timmons Talker is only \$25. At such a low price it will be the outstanding speaker value of the day -a real bargain.

A single hearing will convince listeners that it positively out-performs Speakers that are offered to the public at considerably more money. The outstanding superiority of the new Timmons Talker at this low retail price of \$25 will double or even triple your Speaker business.

Trade-In Plan

With the marked improvement in Speaker reproduction, millions of old Speakers are becoming obsolete. This means big business for dealers who have the right trade-in plan. Timmons offers this year a trade-in plan that will protect your profits. Send coupon below for full information.

Trade Discounts

Dealers handling the new Timmons Talker will make money-net cash profits. Discounts will be liberal; the margin of profits more than sufficient. Mail the coupon below and we will quote you prices and discounts in a personal letter or by personal call through your nearest Timmons jobber.

Backed by a Nation-Wide Advertising Campaign

The Timmons Talker will be advertised to the public throughout the radio season in an aggressive national campaign. Magazines and the big daily newspapers will carry the message of the new Timmons Talker to the radio-buying public over the entire country. This advertising will be *action* advertising—written to produce actual sales for you immediately.



Convince Yourself by Actual Test

Do not think of signing any Speaker agreement—do not make the mistake of stocking any Speaker—until you, yourself, have heard this marvelous new Timmons Talker. We want you to test it for yourself in comparison with other Speakers—test it thoroughly in every way. And then you will absolutely be convinced of its overwhelming superiority.

Send Coupon

Timmons Radio Products

Timmons Radio Products

Dept. 5026

Dept. 5026

Timmons Radio Products

Dept. 5026

Talker and Timenons

Talker and all details of your Advertising, Merchandising

Name

Address

State

Merely sign your name and address to this coupon and mail it in to us. The moment we hear from you we will send you the complete descriptive literature, prices, discounts and the full details of our national advertising and retail selling plans.

Here is your opportunity to secure the dealership for a Radio Speaker of unsurpassed excellence and remarkably low price—a fast-selling combination. Send the coupon today for full details. It does not place you under the slightest obligation.

TIMMONS RADIO PRODUCTS CORPORATION

Dept. 5026 GERMANTOWN, PHILA.

IMMONS ALKER







MILLIONS IN USE Millions to be replaced



As long lived as Raytheon Tubes are, they do wear out finally.

Somebody in your city will get a good share of that business. Why not vou?

Put this attractive sales-making carton where it can be seen instantly by everyone entering your store. It will automatically bring you the business.

the characteristic feature of all Raytheon Tubes, made the B-power unit possible. For ruggedness, long life and sustained voltage the Raytheon "Ionized Helium" Principle has no equal in the entire radio field.

Without any exaggeration—there is no substitute for a Raytheon BH Tube, because the eliminators originally equipped with Raytheon, can use nothing else for replacement.

RAYTHEON MFG. COMPANY, Cambridge, Mass.

The Following "B" Eliminators Were Made to Use Raytheon BH

Majestic (Master. Acme Electric
All-American Super & Standard) Amplex Malone-Lemmon Martin-Copeland Mayolian Apco Apex Arbrophone Arco Batteryless Metrodyne Benjamin Elec. Midwest Modern Mohawk Mu-Rad Bosch Bremer-Tully Briggs-Stratton Muter National Buckwalter Buell Burns Bush & Lane Ozarka Paragon Chamberlin Cloverleaf Colonial Consolidated Crosley Day-Fan Simplex Dongan Dragon Dubilier Durkee-Thomas Eagle Charger Electron Epom Erla Federal Ford Mica

Gilfillan Grant Grebe Greene-Brown Harold Herberk Jefferson Jordon-Carisch Knight

Freed-Eisemann

General Instrument General Radio National Nat'l Lead Battery Operadio Pilot Pioneer Precise Precision Premier Prestolite Silver-Marshall Spartana Sparton Standard Radio (Worcester) Standard Radio (Canada) Sterling Stewart Thordarson Timmons Triple A
United Engine
Universal
U. S. Light
Valley Varion Walker Warren Webster Webster Electric Wells White Wise-McLung Yale York Zenith



AT THE R·M·A SHOW SEE THE NEW

BalkiteRadio

AN

A-C RECEIVER

WORTHY
OF A
GREAT
NAME

As a manufacturer of Radio Power Units, Balkite has built one of the greatest names in the industry. That name has been built on a very simple principle—manufacturing to a standard of quality.

This standard is continued in Balkite AC radio. Balkite has not attempted to go into the low-priced field where the market is already full



The BALKITE HIGHBOY A-7

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



BALKITE A-5 TABLE MODEL

Cabinet by Berkey and Gay. Complete except for tubes and

speaker—\$235

and well-served. Balkite has attempted to produce the finest commercial receiver that money can buy.

Balkite recognizes that such a receiver must be authoritative furniture as well as fine radio. Both Balkite table model and console are housed in cabinets by Berkey and Gay. Nothing finer can be said.

The receiver as an electrical instrument leaves little to be desired. 7 AC tubes. Neutrodyne circuit. Pushpull audio. Single dial tuning. In the console a dynamic speaker, because only the finest speaker will bring out all Balkite tone. In all models, a dynamic drive is part of the set, so a dynamic

Balkite Radio

CABINETS

Berkey & Gay

can be installed more simply and at a lower cost. A phonograph jack for operating your phonograph is provided. Single dial, direct drive, silent tuning. Complete shielding. Protection against fluctuating voltages. Unique Balkite condensers. Construction that for simplicity and accessibility has to our knowledge never been equalled —construction worthy of an automobile. Yet these are details. Judge the set by its fidelity.

The receiver will be backed by sound policies. It will be advertised in the typical Balkite manner. Dealers who sell it, like Balkite dealers in the past, will make money. If you



The BALKITE HIGHBOY A-7 Cabinet by Berkey and Gay. Includes dynamic speaker. Complete but for tubes - \$487.50



BALKITE A-3 TABLE MODEL

For those who want all radio. Housed in a simple but sightly allmetal case. Complete but for tubes and speaker—\$197.50

haven't yet seen the set, consult our jobber.

Fansteel Products Company, Inc., North Chicago, Ill.

> HAVE YOU SEEN

THE BALKITE SYMPHION

It is the finest instrument in music

SEE IT AT THE SHOW

BOOTHS 85-6-7



The Open Sesame—the "Magic" of radio reception . .



The new 1929 MARTI Electric Power Radio Receiver, symbolic of modern engineering, is equipped with Automatic Tuning . . . No more "groping blindly for stations" . . . No more guesswork . . . The door to delightful radio reception is now open-open to young and old the experienced and the uninitiated.

What care you, what tuning means. . . . No more "hair line" adjustments. . . . Set the automatic meter selector . . . listen to the

numerals "click" into place-and the receiver is tuned to exact resonance with the desired broadcasting station. . . . The Marti Automatic meter selector is a revelation. . . . It is not a new development—it is a radical departure from the conventional—it is a new invention! . . . You adjust the meter selector—and the receiver is automatically tuned. . . . You are not limited to one station-to ten stations-the whole broadcast spectrum is yours to select from.

The Marti Radio merchandising foundation is powerful, sound and dependable The Marti dealer will obtain utmost co-operation—utmost protection—enthusiastic support. . . . Marti Radio were pioneers in A. C. receiver design and construction. . . The engineering ability—the laboratory—the foresight responsible for the first successful A. C. receiver, again unreservedly guarantees complete satisfaction and permanence to the Marti Dealer.

See our exhibit Booth No. 110, Exhibition Hall Suite No. 819A-820A

A few franchises are still open. Communicate with us.



Table Model. 7 tubes, three stages of tuned radio frequency amplification, non-regenerative detector, three stages of resistance coupled audio with 210 output tube, with "pickup" jack. Power plant in cabinet, is 281 half wave rectifier with two-section filter... Dunlex filament wiring in receiver, for either 227 type or Kellogg tubes.

Cabinet, two-tone Walnut.





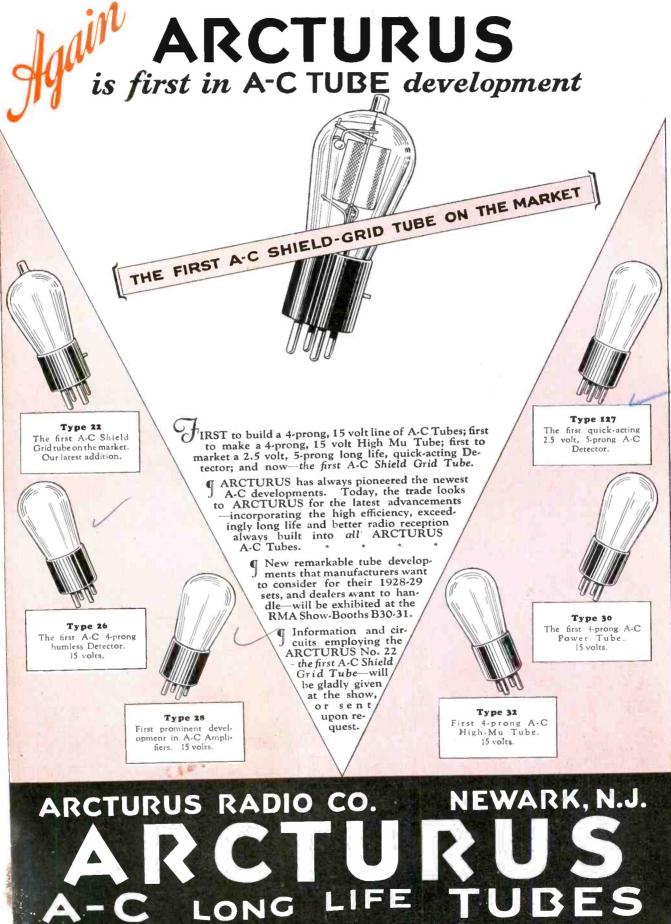
Cansole Model. Two-tone Walnut, available with or without phonograph pickup unit. All receivers furnished with pickup unit "input" jack.

7 tubes, three stages of tuned radio frequency amplification, non-regenerative detector, three stages of resistance coupled audio with 210 tube output. Duplex filament wiring in receiver for 227 or Keilogg type tubes.

Power plant within cabinet, is 281 half wave rectifier, with two-section filter.

Marti Electric Radio Co., 222 Central Ave., West Orange, N. J.





The OPERA

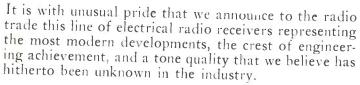
This magnificent Console contains the combination Amrad Radio French Renaissance design, of richly figured wahut, rom panel legs and stretchers decorated by overlays of hand carved wahut and hand carved ornaments.

Dimensions 56% x32x18½ in. The radio is purely electrical house current type, using power tube UX-250 or UX-210. Extremely sensitive and selective, and completely shielded. The Dynamic Power Speaker is R.C.A. 105, and represents the highest achievement in radio tone production, giving both high and low musical notes with full heatily and power. Illuminated dial with broize excurrence plate enameled in color, and single dial control. Has fluest type of modern electrical phonograph, record compartment, etc. Price 8x25, (without tubes)

iced slightly higher West of the Rookies.

rice \$875 (without tubes)





Four console models, the product of America's foremost designers, perfect pieces of modern furniture, each one equipped with a Dynamic Power speaker specially mounted on a baffle board, each one purely electrical in operation—and with a radio chassis produced to obtain the finest possible results under present day broadcasting conditions.

Authorized AMRAD distributors now have sample sets on display, and we urge you to hear them, test them and carefully examine them before determining upon your line-up for 1928.

In the field of fine radio receivers there are few that match the symphonic Series in appearance—none that surpass it in radio efficiency, and in tone production AMRAD stands alone!

> AMRAD models in the Symphonic Series are designed and priced to SELL! They represent extreme value-and will be advertised nationally to ten million consumers. And the prices are astoundingly moderate.

THE AMRAD CORPORATION Medford Hillside Mass.

The AMRAD Electrical Chassis uses three stages of radio; detector; two stages of power amplification and two rectifiers—8 tubes in all. Uses Uses power tube UX-210 or UX-250.



AMRAD sets are manufactured under license contract between Radio Corporation of America and Crosley Radio Corporation. Licensed under Hazeltine and La-Tour patents issued and pending for radio amateurs, experimental and broadcast reception.

J. E. HAHN, President.

POWEL CROSLEY, Jr., Chairman of the Board



Purely Electrical Operation!



Special Features

The Chassis includes a tone control in the rear of the Chassis, enabling the user to adjust the tone of the receiver to suit his taste, emphasizing either the high or the low notes.

low notes.
It also has an electrical phonograph pickup attachment which hecomes effective by
throwing a small switch, employing the
audio amplifying system and electric dynamic speaker for phonographs of any type
—giving the full richness and volume of
tone, even in the case of small portable
phonographs.

phonographs.

One of the outstanding features is that which permits the use of the electrical connection for the receiver (through the lamp socket) as an antenna and ground, in which case neither outdoor nor indoor antenna is necessary. Best results, however, can be obtained by use of an outdoor antenna and ground whre. The principal use of the antenna plug-in is in demonstrating the receiver either in the home or in the display room.

The CONCERTO

The CONCERTO

This beautifully proportioned cabinet reflects undernistic tendencies in furniture. Finest veneers are used with top and sides of American walnut and front of diamond matched ordental walnut. Exquisite satinwood border. Doors swing fully back. The decorations are of genuine solid brass in antique finish. Dimensions 49 ½x30 ½x17 % in. The CONCERTO contains the purely electrical Amrad Chassis using power tube UX-250 or UX-210. The unique tone quality is achieved by an electric Dynamic Power Speaker built into the cabinet, with exclusive Amrad construction. If is double shielded and has extreme selectivity and sensitivity. Illuminated single dial control and bronze escuttheon plate enameled in color. Price \$320 (without tubes.)

Priced slightly higher West of the Particular

Priced slightly higher West of the Rockies.

The SONATA

Louis XVI, finished in light walnut with Butt Walnut doors and inside panel. Decorative panels of satinwood and zebra wood, add character as well as beauty. A fine piece of furniture for any home, in harmony with modern design.

In harmony with modern design. The inside panel contains a handsone bronze enameled secutiheon plate with illuminated single dial control. The radio is the most modern purely cleetrical design, using power tube UN-250 or UX-210. Double shielded, extremely sensitive and designed for utmost selectivity, with a full rich tone that has never before been achieved in a Copsole radio, and is due to the use of the very finest type of Dynamic Loud Speaker (I.C.A. 105) giving the entire range of the musical scale with exquisite beauty and power. Dimensions 51½x34x17 in. Price \$47.5 (with out tubes).

Priced slightly higher West of the Rockies.





Newcombe-Hawley Dynamic Cone Reproducers

A remarkable free floating dynamic cone unit, made under Magnavox patent license protection, is the heart of all Newcombe-Hawley Dynamic Models. Unsurpassed tone quality and plenty of volume are obtained.

All models can be furnished with dynamic cone units for battery or light-socket operation. Special condition equalizer assures perfect reproduction.

P P P

All models are in beautiful walnut, finished to harmonize with the finest interior appointments.

The All All

Never before has such an outstanding and complete line of radio reproducers been offered to the radio trade by one manufacturer. The 1928-1929 line of Newcombe-Hawley Radio Reproducers includes the three most successful types—Dynamic—Magnetic—Air Column.





LARGE CONSOLE
Large size A. C. receiver such as R. C.
A. Model 18. Equipped with Dynamic

A. Model 18. Equipped with Dynamic Cone Reproducer for light socket operation. Blank panel furnished, cut to fit any standard receiver.

MODEL 969 PORTABLE

Equipped with D.C. Dynamic Cone Reproducer for Battery operated sets or A.C. Dynamic Cone Reproducer for light socket operation. Condition equalizer is provided for controlling quality of reception.

This attractive reproducer is mounted in a beautifully finished Walnut cabinet. Its small size and low cost combined with the remarkable tone quality of Newcombe Hawley Dynamic Reproducers makes it a very attractive unit.

Air Column Reproducers

MODEL 70
AIR COLUMN
CHASSIS
Has genuine N

Has genuine Nathaniel Baldwin Rival Unit 86-inch air column. Furnished without cabinet,



Wide enough to hold most radio receivers. Equipped with Newcombe-Hawley 72-inch air column and Baldwin Unit. MODEL 73 DRUM REPRODUCER

Equipped with genuine Nathaniel Baldwin Unit. Air column 54 inches long.



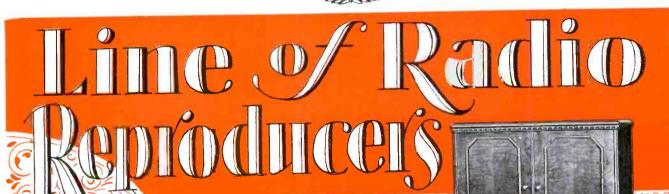
Has Newcombe-Hawley 72-inch air column reproducer and Nathaniel Baldwin Unit. Accommodates popular radio sets.







NEWCOMBE-





MODEL 909 TABLE

A popular table model in beautifully finished burl walnut. Unusually compact, yet large enough to hold most table type radio receivers. Has D. C. Dynamic Cone Reproducer for battery operated sets or A. C. Dynamic Cone Reproducer for light socket operation. Condition equalizer is provided for controlling quality of reception.



MODEL 929 SMALL CONSOLE

Has compartment above reproducer grill for average receiver. Blank panels cut to fit any standard receiver. Equipped with Dynamic Cone Reproducer for either storage battery or light socket operation.



MODEL 109 COMBINATION CONSOLE

With Dynamic Cone Reproducer, electric phonograph turntable, and space for radio receiver. Has radio-phonograph selector switch.

LERT radio dealers and jobbers will instantly appreciate the enormous sales advantage of the complete Newcombe-Hawley line. Pave the way for profitable reproducer business by hooking up with Newcombe-Hawley.

Mail the Coupon Today

Magnetic Cone Reproducers



MODEL 80
MAGNETIC CONE
A powerful magnetic cone of exceptional tone quality.
Furnished in chassis form with wood baffle box.



For large receivers such as R. C. A. Model 18 all-electric sets. Has magnetic cone reproducer.



MODEL 83 PORTABLE A beautiful portable reproducer with a high quality magnetic cone unit. Furnished in burl walnut cabinet.

NEWCOMBE-HAWLEY, Inc.

NEWCOMBE-HAWLEY, Inc.

201 First Avenue North

201 First Avenue North

51. Charles, Illinois

52. Charles, Illinois

Please send full details about the complete
Please send full details about the complete

Newcombe-Hawley 1928-29 Reproducer

Newcombe-Hawley 1928-29 Reproducer

Newcombe-Hawley 1928-29 Reproducer

Newcombe Hawley 1928-29 Reproducer

Newcombe Hawley 1928-29 Reproducer

HAWLEY

Name

Address



Worth while profits for you in this year 'round seller—

When you sell a Samson "Pam" Amplifier you can usually sell tubes, phonograph pick-up, turn table, microphone, radio set, loud speakers or head sets and wiring for installation.

SAMSON
"PAM"
Amplifier



Type 16-17
Without Tubes
List Price \$125

A self contained, rugged, all electric, two-stage audio amplifier, with the famous Symphonic and Symphonic Push-Pull Transformers, uses the new AC tubes and operates from 110 volt 50-60 cycle AC current. Compensation is made for line voltage variation. Designed to meet Underwriter and ALE.E. Standards, and made for either dynamic or ordinary type loud speakers as specified.

Wide variety of uses make the Samson Pam Amplifier a universal all year ready seller for:—

Electrification of Phonographs.

Quality Power Amplifier for Home Entertainment.

Announcement Amplifier.

Public and Private Institutions.

Incidental Music in Theatres, Lodges, etc.

Beauty Parlors, Shops, etc.

Distribution of Radio Programs to Apartments, Hotel and Hospital Rooms, etc.

Dance Music in Tea Rooms, Dancing Schools, Dance Halls, Restaurants, Cabarets, etc.

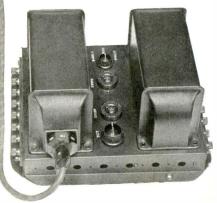
Roadside Stands, Filling Stations, etc. Athletic Contests, Races, Fairs, etc.

If you did not receive our broadside containing a special offer for one sample Pam amplifier, write for details.

Samson ABC Eliminator type ABC—71

supplies raw AC filament current from 105, 110, 115, 120 volt, 50-60-cycle power source to five 226, two 227 and two 171 type tubes. Also supplies B voltages as follows: 30 to 75 volts variable and 90, 135, 180 fixed. C voltages supplied are $-4\frac{1}{2}$, -9, and -40. This is practically a constant voltage eliminator, and has a total output of approximately 70 mils.

Tubes required: 1-UX280, 1-UX874.

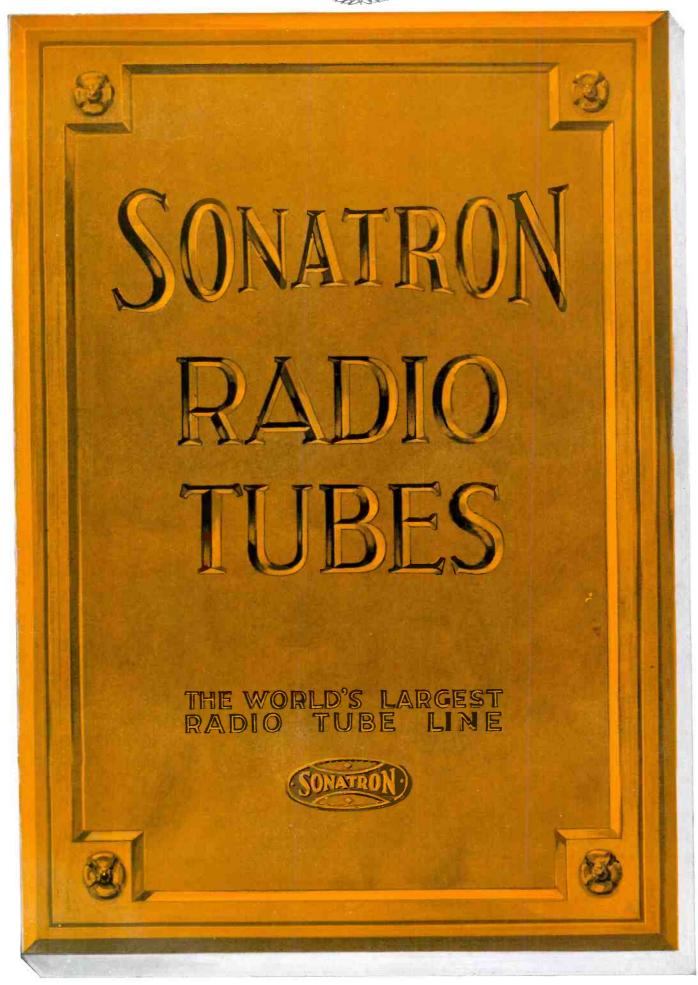


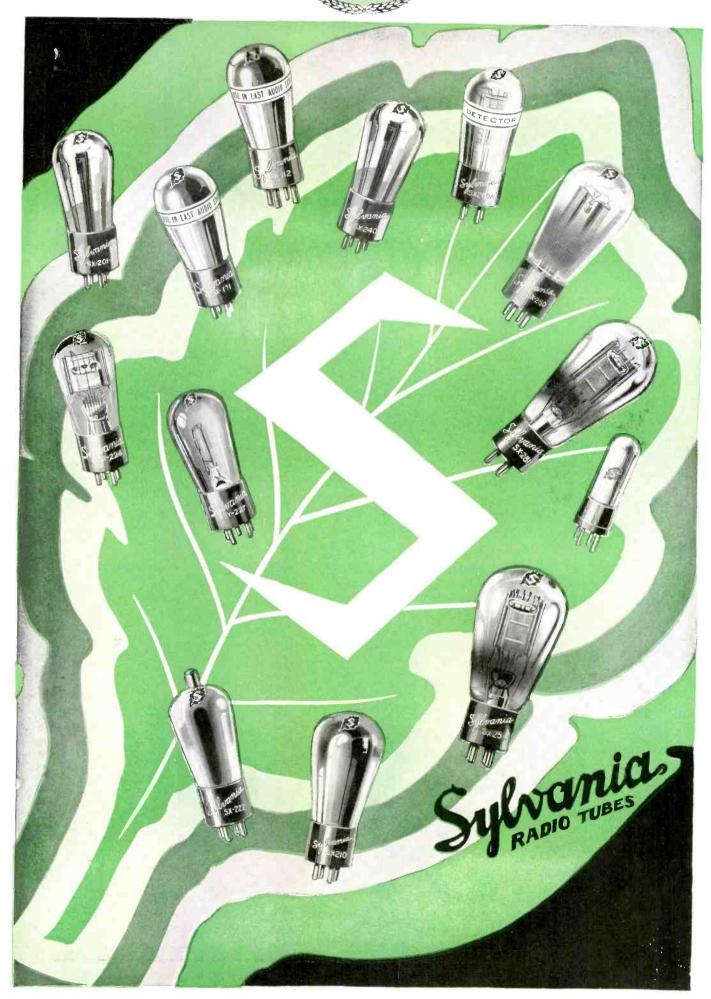


General Offices: Canton, Mass.

Manufacturers Since 1882

Factories: Canton and Watertown, Mass.









When you hear Operadio, instantly-you know it's better! The tone values are all there.





The "New Senior"

Better than ever. Added refinements in appearance and finish will make this model more popular than ever. Weight materially reduced. Price \$25.00.

The Junior

New finish—lighter weight. One of the greatest values at the Price \$15.00.

A complete line ranging in price from \$15.00 to \$250.00, including Dynamic models in cabinets. All Cabinet models supplied with or without the new Operadio Super Power Amplifier.

Amplifier.

The Bloe-type has established itself as an entirely new, different and better kind of Speaker. Stonite, the inert material of which the tone chambers are made, prohibits distortion and wave absorption. It has at last made possible radio recreation supreme in musical beauty—an accurate reproduction over the wide range of musical sounds.



Prices slightly higher west of the Rockies and in Canada.

OPERADIO SPEAKER

Modern! Beautiful!

The last word in Speakers for use in the home. Operates efficiently with any set---A. C. or D. C. ---regardless of design. The new Westminster Model at \$35.00 will be on demonstration at the R.M.A. Trade Show.

See It---Hear It---Don't Miss It!

SUITE 705, STEVENS HOTEL

Manufacturers **OPERADIO**

MFG. CO. St. Charles, Illinois

BLOC TYPE SPEAKERS

Sales Department THE ZINKE

CO. 1323 S. Michigan Chicago, III.

Slagle Radio

of
Surpassing Quality
Mark Another Milestone
of Slagle Progress

For the 1928-29 season Slagle models will again utilize the Technidyne Circuit which achieved such a decided success during the past year. Valuable additions and refinements have been adopted, and the new Slagle most admirably provides allelectric operation, loop control, dynamic power speaker, phonograph pickup connection, — completely housed in cabinetry to harmonize with surroundings of the most fastidious home.





See them at the Second Annual Trade Show of the R.M.A., Stevens Hotel, Chicago, week of June 11th. Exhibition spaces 88-89, Grand Ball Room. You can hear all models in operation in Room 445-A, and we will be glad to see you.

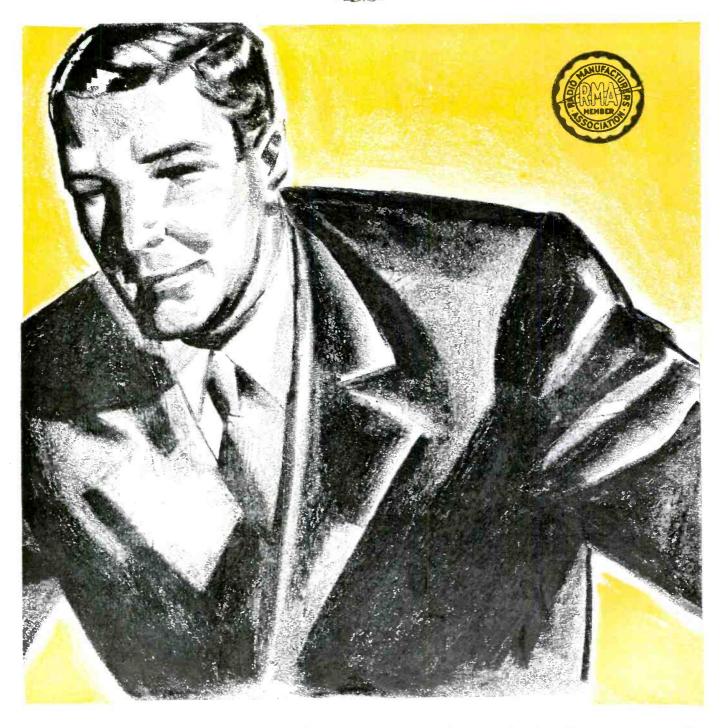
Slagle Radio Company

Fort Wayne, Indiana

Division United States Electric Corp.



HESE cards will be laid on the table at the RMA Trade Show, New Stevens Hotel, Chicago, June 11 to 15.* The dealer who sits in on the business of 1928-9 with this hand is sure to rake in the blue chips! The will have a card to play on Table Models that will be ace high over any competition. The will have Console Models of such a style and quality at such a price that lots of his customers who thought they



could only afford a Table Model will change their minds. ¶ And he will have Power Reproducers and a Table Cone which will run up a nice volume of business by themselves. ¶ Such is the Kolster Hand for 1928-9

¶ Keep a poker face to everyone until these cards are laid face up on the table, and take no action till then.

(*) NOTE: The Kolster Line will be on display at Booths 60, 61 and 62, on the ballroom floor. As you approach the Booths take note how strongly the beauty of the cabinets impresses you as you get your first glimpse. That first impression is valuable because that's the customer's point of view as he enters your store.

© 1928. Kolster Radio Corporation



Cunningham AC tubes CX-326 and C-327 are outstanding in their performance and will bring the AC power receivers you sell up to their highest efficiency.

Cunningham
Booth No. 134
Exhibition Hall
R.M.A.
Trade Show
Stevens Hotel
Chicago
June 11-15

There are now twenty types of Cunningham Radio Tubes, each one designed to perform efficiently a definite and particular task in modern radio receivers.

E. T. CUNNINGHAM, INC.

NEW YORK

CHICAGO

SAN FRANCISCO

Manufactured and sold under rights, patents and inventions owned and/or controlled by Radio Corporation of America









EVEN years ago Shamrock pioneered in radio. Every year has meant improvement—every season has meant engineering perfection more nearly achieved.

Here's Shamrock's newest—the Electric Dynamic—the result of seven years of radio engineering and experiment. We could go into details—tell you how it is built—tell you how its fine mechanism is adjusted—tell you how it is shielded—how perfect a job it is mechanically.

Performance however is the real test. All we ask is this: Hear the Shamtock. Let your ears tell you the truth. Write for details today!

Everybody likes a Shamrock



SHAMROCK

LEADERS BY PROVEN PERFORMANCE SHAMROCK MANUFACTURING CO.

152 Summit St., Newark, N. J.

Demco Socket Powers

Enduring as the Rock of Gibraltar Unfailing as Niagara's Power

AST season we made a promise to the trade. We have kept that promise. There was no overproduction of Demco Socket Powers—no over-stocking of our jobbers and dealers, and therefore, no dumping to the gyp, and there never will be any. Owing to an oversold condition, it was necessary for us to disappoint many of our jobbers and dealers last season, and now anticipating an even greater demand, we have extended our manufacturing facilities and are in position to make insmediately



ties and are in position to make immediate and continuous deliveries.

The Demco Socket Power, today, stands forth as the ultimate in socket powers. It has been proven in the actual use by those who have purchased them that its lasting qualities are without a parallel. As a matter of fact, only twelve socket powers were returned throughout the entire season for repairs.

Last season, when we announced to the trade in general that we guaranteed the rectifying element in our socket powers unconditionally for the life of the transformer, our statement was received with skepticism, yet jobbers and dealers have reported no service was necessary after the installation was made. Once a Demco is installed you can forget it, and a Demco sale means profit that is service-free and a satisfied customer. Compare these facts with your own service experience.

The Demco A power is guaranteed to deliver 2½ amperes at 6 volts DC, absolutely free from hum or distortion. Line voltage fluctuations have no effect whatever on operation of unit.

Demco Socket Powers are available in A, ABC, B and BC units, and are furnished for all frequencies between 25 and 60 cycles. Each unit bears the same rigid guarantee.

All 25-cycle units are interchangeable on 25, 30, 40, 50 and 60-cycle current.

Dooley Electrical Manu Wheeling

Our engineering department will in the design of special



and now-Demco Receivers

We believe that the radio buying public will demand several outstanding features in the radio receiver they purchase this season.

R M A Show Stevens Hotel Chicago week of June 11

1st —Simplicity of Operation:

Only a single tuning control, a single volume control, and the customary on-and-off switch.

2nd—Fidelity of Reproduction:

The ability to reproduce faithfully the full range of audible frequencies from the bass notes of the mighty pipe organ to the tenor strains of the violin.

3rd—High Selectivity and Quietness of Operation:

The receiver must be selective and free from any trace of the undesirable AC hum at any dial setting.

4th -Automatic Protection of Tube Filaments:

The supply current must be automatically controlled to compensate for the ordinary fluctuations in line voltage, which causes burnt out and paralyzed tubes. This undesirable feature has never before been overcome.

IT IS not a simple task to build a receiver, incorporating these features. Only through months of experimental engineering can a receiver be produced that will work satisfactorily for AC operation. A battery receiver rebuilt for AC operation will not qualify, nor will a receiver that is not specifically designed and built solely for AC operation. For the past eighteen months we have constantly worked in our laboratory to perfect a circuit that DOES operate satisfactorily on AC current.

It is our pleasure to offer, for the initial showing at the RMA trade show in Stevens Hotel, Chicago, during the week of June 11, a complete line of receivers, which we believe will thoroughly fill the demand of the buying public. These receivers are absolutely free of any trace of AC hum. Special attention has been given to simplicity of construction and operation. The tone quality, we believe to be surpassed by none, two type 171 tubes in push-pull being employed in the last audio stage, providing a filtered output. While of unusually sturdy construction, the entire line presents an appealing appearance.

We will merchandise only through the recognized and legitimate jobber-dealer trade, and we believe our sales policy to be of unusual interest. We invite your inspection in space number 79.

facturing Co. West Virginia

gladly cooperate with manufacturers units to meet their requirements.

DOOLEY ELECTRICAL	MFG.	CO.
Wheeling, W. Va.		
The second secon		

Send me address nearest Jobber

Send me information regarding Socket Powers and Receiving Sets. Dealer

Distributor

Receiving Sets. Dealer Distributor

Name Address

City..... State.....

\$16950 to \$775

Now the Price Range of the New Kellogg Line

TO BE DISPLAYED AT THE

R.M.A.Trade Show CHICAGO June,II-15th



Model 517 with Chassis "A" and Air Column reproducer, \$775 (Phonograph "Pick-up" extra)



Model 514 with Chassis "A" and Air Column reproducer, \$495 (Phonograph "Pick-up" extra)

All Kellogg Models
Priced Complete
with Kellogg A-C Tubes

With this wide price range there are exceptional profit possibilities in selling Kellogg Radio. Everyone, regardless of pocketbook, is now your prospect—if you are a Kellogg dealer.

At the Trade Show see the new Kellogg models in our booth, B 25 and 26, Hotel Stevens Ballroom—and hear the marvelous Tone of Kellogg reproduction in the Kellogg Demonstration Salon, room 719, Hotel Stevens.

For the benefit of dealers unable to attend the Trade Show we have prepared a complete presentation of this new line, which will be sent on request.

Kellogg Switchboard & Supply Co., Dept. A-547, Chicago



Model 519, Chassis "B", Conetype reproducer, \$275 Model 516 with Chassis "A" and Air Column reproducer, \$375

Kellogg Radio

As Conceived by GREENE Engineers

Superac Reception

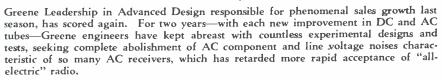
The ULTIMATE in Radio Power

-meeting the 1928-29 DEMAND of 4,200,000 DC Set-Owners

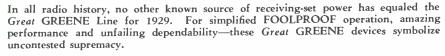


HE Great GREENE Line for 1929—built to win. One of the foremost engineering achievements exhibited at the 1928 RMA Trade Show. Important new Radio Power advancements—beyond Compare—for troublefree AC light-socket radio at lower operating cost.

Insured Leadership in Sales









Whether newest AC-tubes or less expensive DC-tubes are used, there is a special GREENE A, AB, and ABC Unit—batteryless and entirely DRY—for scientifically converting radio-receivers of every type to AC (alternating-current-from-the-light-socket) operation.

For Distributors and Dealers.

Here are power devices for Super-AC-Reception and "over-the-counter" selling. Any novice can install them. By concentrating selling efforts on this line you secure total elimination of the service problem, plus definite profits. Use the coupon.

For Manufacturers and Set-Builders.

The Great GREENE AC Syncrofiltors permit correct application of AC-tube sales advantages to any surplus or "trade-in" battery sets now unsold. Send for full particulars. Use coupon.



A Model for every type of Radio



Fits Inside of ANY Radio Cabinet

Small, compact AC Syncrofiltor Model for Manufacturer's Power Pack requirements, Supplies correct AC and DC voltages for all tubes, including C grad-voltage for power tubes. No other "B" Unit needed.





PRICES:

East of Rockies Start at

\$27.50

LIST

At the RMA Trade Show



The Complete GREAT GREENE Line for 1929 ON DISPLAY

See Booth 16.



Pin this to your Letterhead

MAIL TODAY!

Greene-Brown Mfg. Co. 5100 Ravenswood Ave., Chicago, Ill., U. S. A. Please send full description of the Great Greene Line for 1920.

Name										٠				٠		
Addres	3						,									

□ Dealer □ Jobber □ Manufactur



New Sales Policies, New Products,

the highest Standard of Quality, Backed by an Aggressive Merchandising and Advertising Campaign.

> A Statement by P. R. MALLORY President, P. R. Mallory & Co. of which Elkon, Inc. is a Division.

We are announcing here a new plan in which the jobber and dealer is given their proper place in the merchandising of Elkon Radio Products. We are definitely committed to a new and aggressive merchandising and advertising campaign to the consumer.

We are also definitely committed to the policy of maintaining the high quality which has always been synonymous with Elkon Products.

No Elkon Product will ever be made to be sold "at a price". We are not interested in "cheap" merchandise. We believe that there is a real market, especially in radio, for quality merchandise, sold at a fair price and backed by advertising.

The jobbers who will be given the new Elkon Line will be limited to those who want to handle the best. regardless of price, knowing that there will be a consumer demand created by advertising.

If you are not on our approved jobbers' list now send the coupon. If you are a dealer fill in the dealers' portion of the coupon. In any event see us at the show and talk things over.

Replaces tubes in "B" Eliminators Not a Tube. Dry. Longlife Take out the fragile 1000 hour tube—plug in the sturdy No changes Take out the tragile 1000 hour tube—plug in the sturdy 5000 hour EBH and the change is made. No changes in wiring—no adjustment. n wring no adjustment.
Sturdy, solid, dry none of the frailties of a tube—not
Sturdy, solid, dry none of the frailties of a tube—not
greeted by accidental overloads or line armos—it is sale. Surdy, sond, dry none of the frailties of a tube not affected by accidental overloads or line surges it is selfnearing. The power is smoother, quieter.

Over a million ready-made customers for this new Elkon

Over a million ready-made customers are now a

rodner. To make sure of vour share size on a anected by accidental overloads or time shealing. The power is smoother, quieter,

Over a numon ready-made customers for this ne product. To make sure of your share, sign up now! Dry High Capacity Condensers are ying the Elkon was the first all dry condensers as called the capacities—must not be continued with so Elkon the property of the capacities—must not be capacities—must not be capacities—must not be capacities—must not be capacities—which are in resulty moist. The Elkon the capacities which are in results at a tunner sure which are in 24 hours and in three condensers are baked string in capacities are 2 % x 2 % x 3 % in all the capacities from 750 to 2000 microfarads.

Tapering Charger
The new idea in trickle chargers. Charging high the latery high the condition of the battery is desired with the condition of when the battery is low, low when the dot on the when the battery is low, low when the dot on the when the battery is low, low when the dot on the whigh. Guarantee and instruction grant Lambe, no high. Guarantee and hearing no trouble, and the container. Maximum correspond to the exclusive moving parts.

Absolutely dry, no corrosion, Elkon rectifier attention. Has the exclusive moving parts.

Astention. Has the exclusive moving parts. I couglife.

May be used for radio or automobile bal-teries. Noiseless, absolutely dry, no atter-teries. Noiseless, absolutely dry, no feature teries. Noiseless, absolutely dry, no decade teries. No mos-tion required las Uses the Replication of the floor Recutiver so it will not pro-fer years. No mosfor years. No mov-







Hand and eye must coordinate in testing the EBH Rectifiers

Mallor

THE

ELKON

5000 hour

Over 2,000,000 Prospects for FLKON Replacement Units





FIKON-

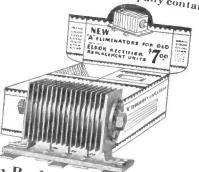
For Type J Balkite Large Charger.

the only authorized Replacement Units for Balkite Chargers

Over 900,000 Balkite trickle chargers are still in use. Several hundred thousand Balkite Type J chargers are also in consumers' hands. The Elant Bonlacement Units shape into place are enargers are also in consumers names. The Eackon Replacement Units snap into place, are kon replacement Units snap into place, are solid, dry, noiseless, need no attention and perform perfectly for years. The Elkon Replacement Units and those made

I nertison replacement units and those made by the Fansteel Products Company contain-

ing the Elkon Dry Rectifier are the only ones ing the Elkon Dry Keetiner are the only ones authorized for replacing the acid jars in Balkite Power Units. All of the Elkon Replacement This Chargers hear the andorse. Units for Balkite Chargers bear the endorsement of the Fansteel Products Company. The market is tremendous. The attractive Display Boxes for your counters will sell the Units for you.



Elkon Replacement Rectifier for "A" Eliminators

For "A" Eliminators

Elkon Dry Rectifiers are standard equipment on the Knapp "A" Power, Majestie "A" is and many others. Hundreds of thousands of these units have been sold. Elkon Rectifiers. The Display Box will be just the thing for the dealers' counters—a Likon Rectiners, The Display Dox will Just the thing for the dealers' counters. Just the dung for the dealers counters—a constant reminder to the consumer that his Rectifier needs replacing.



Elkon Replacement Rectifiers for Trickle Chargers

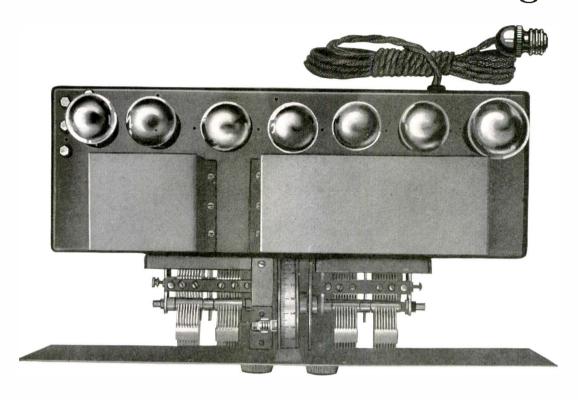
Thousands of Trickle Chargers—Elkon—Acme—and many others, using the Elkon—TypeV-4Unithave been sold. There is nothing in these chargers to wear out—the ing in these chargers to wear out—the ing in these enargers to wear out—the rectifier only needs replacing every 5000 hours. Three of these dry units in astandsivent in an attractive distribution of the second secon nours, inree or these ary units maser—andsix sets in an attractive displayearton.

Radio Department ELKON,

P. R. Mallory & Co., Inc. Port Chester, N. Y.



Here's the latest from Buckingham



THE BUCKINGHAM CHASSIS

Extremely selective, with clear natural reproduction, free from regenerative noises or alternating current hum. Four gang condenser, single control, illuminated drum dial. All four stages completely shielded.

Easily installed in any type of cabinet

An A C ELECTRIC CHASSIS

Scientifically Built—Low Priced

A new standard in high quality—a new level in low price. 99% of all parts that go into the Buckingham chassis are made in our own factory. That's why we are enabled to offer this astounding value.

Buckingham chassis offer you an unusual money making proposition—enables you to compete in price and quality with any other set on the market.

SEE BUCKINGHAM CHASSIS AND CABINETS

At the Second Annual RADIO TRADE SHOW

Stevens Hotel—Chicago

Main Ballroom—Booth 71 Demonstrations—Room 547

JUNE 11th to 15th, Inclusive

BUCKINGHAM RADIO CORPORATION

440 West Superior Street, CHICAGO, ILL.

Reliable Radio Resistors FOR EVERY APPLICATION

Bradleyohm-E

Provides accurate plate voltage control for B eliminators and other radio applications which require accurate ad-



justment of high resistance over a wide range. Not affected by time, atmospheric conditions or use.

Bradleyunit



This fixed resistor provides a fixed resistance value that does not change. It is not affected by age, temperature or humidity, and w.ll not deteriorate in service. Furnished in a wide range of resistance values. Provides accurate, unvarying resistance values.

Radiostat



A reliable filament control rheostat for supply transformers of 500 watts or less. Improves appearance of any transmitter panel. Endorsed by leading radio engineers.

Bradleystat

A noiseless, stepless rheostat for filament control. Its flexible adjustment provides the ideal resistance. One Bradleystat handles all tubes. Scientifically treated



cally treated discs providing the resistance do not deteriorate in service.

Tapped Bradleyunit



Has all the characteristics of permanence provided by the Bradleyunit and is provided with taps for obtaining varied resistance values. Very accurate and does not deteriorate in service.

Radioleak



Provides stepless grid laak resistance for transmitters. The graphite discs assure permanence and dependability of operation. Not affected by atmospheriz changes.

Bradleyleak

This variable grid leak assures the ideal grid leak value for all tubes. Is easily installed on any set and enables operator to get

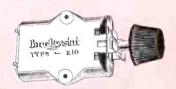


erator to get the best possible results, under widely varying operating conditions.

THE extensive use of Allen-Bradley Radio Resistors by manufacturers is significant evidence of their merit. Their enviable record since the very inception of popularized radio assures a ready acceptance for every Allen-Bradley item.

Hock up with the well-known Allen-Bradley Line and pave the way to bigger profits from parts business.

Bradleystat E-210



For transmitters up to 10 watts. Provides noiseless, stepless adjustment of filament circuit on transmitters up to and including 10 watts. A favorite with amateurs.

ALLEN-BRADLEY CO., 489 Clinton St., Milwaukee, Wis.

Allen-Bradley

PERFECT RADIO RESISTORS

The Outstanding Feature at the June Radio Show

will be the

Mohawk-American RADIO

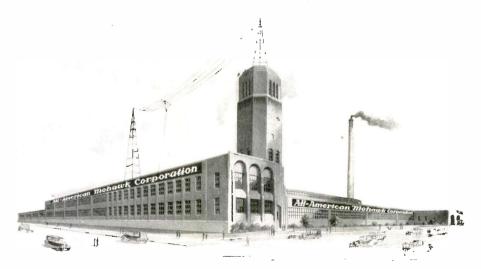
THE recent consolidation of the Mohawk Corporation of Illinois with the All-American Radio Corporation has resulted in one of the outstanding organizations in the radio world.

All the latest manufacturing facilities of these two successful corporations are now merged under one roof. Most capable engineering and production authorities now closely supervise every detail of construction. Experts in radio circuit and constructional development have combined to make possible a truly great radio receiver.

That is why the Mohawk-American Radio is destined to be one of the outstanding features at the June Radio Show. Selective, clear-tone quality in full volume, distance, easily operated... this remarkable receiver is a leader for performance.

The Mohawk-American Radio is merchandised by an aggressive organization composed of executives whose background of experience began with the birth of the industry. Good dealers will write or wire us immediately for full details.

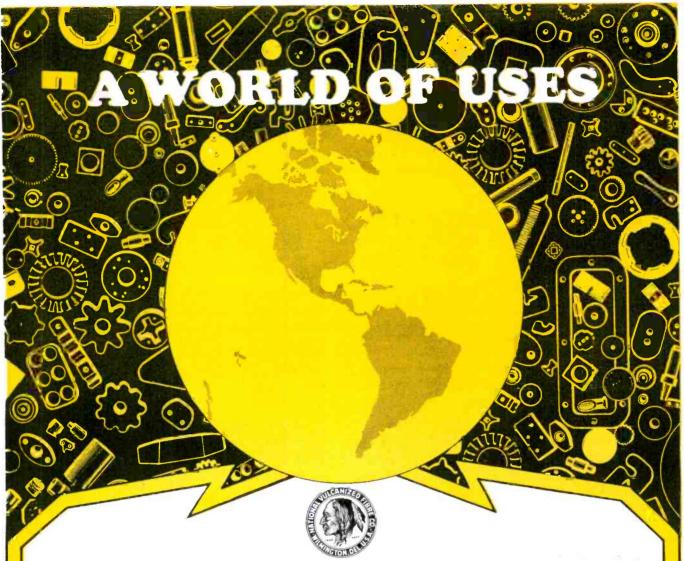
Ask for the name of the exclusive distributor in your territory. Secure your Mohawk-American franchise NOW!



ALL-AMERICAN MOHAWK CORPORATION

4223 Belmont Avenue

Chicago, U. S. A.



Laminated BAKELITE

SHEETS RODS: TUBES: SPECIAL SHAPES

While all laminated bakelite is fundamentally the same, its composition and properties are comparable to aloy steels in extent and purpose.

What is exactly right for one job may be entirely unsuited to another.

Tell us what you want laminated pakelite to do, and our service engineering department will work with you in the development of a formula which will give the exact results you require. Experimental work of this nature is carried on here constantly, and is at your disposal without cost or obligation. Write us today. Adequate stocks of Phenolite are carried at all times in six standard grades and in three basic forms . . . Sheets, Rods and Tubes . . . as shown.

There seems no end to the uses for National Vulcanized Fibre! From locomotives and liners to watches and wastebaskets, this versatile material finds a thousand and one instances where it is used in preference to metal, wood, glass, porcelain, rubber, or paper.

In the warehouses and seasoning rooms of the world's largest producers of vulcanized fibre are countless bins, each containing a different size, a different thickness, a different grade of vulcanized fibre. Every sheet, rod and tube that "National" makes is scientifically built to meet the requirements of specific use.

Put it up to us to determine, by actual test, what formula is best suited to the service conditions your products face. A letter involves no further obligation on your part.

PEERLESS INSULATION

When the electrical industries first demanded a very thin, very flexible fibre of high dielectric and tensile strength "National" was ready for them with Peerless Insulation. Since 1898 it has been the standard "fish paper" of the electrical world, and has insulated more armatures than all other "fish papers" combined. Peerless has remarkable bending strength with the grain and against the grain. It is absolutely uniform in thickness and has a dielectric strength which can be depended upon throughout every square inch of its smooth, even finish.

If your product requires an insulator with all of these advantages, only Peerless will do.

"Old Timers Stick to Feerless"

NATIONAL VULCANIZED FIBRE CO., Wilmington, Del., U. S. A.

Makers of laminated insulation since 1873 Offices in Principal Cities



THE NEW SPARTON

An announcement of new achievements that will sharply influence the entire radio industry is to be made by Sparton at the Chicago show. Dealers not attending the show are invited to file their names with us AT ONCE, to receive by mail the full details of a very definife step ahead in sactio design and sales. We promise interesting disclosures. THE SPARKS-WITHINGTON COMPANY JACKSON, MICHIGAN

Be SURE to visit our DEMONSTRATION ROOMS

Rooms 505, 2049 905 and 906 Stevens Hotely Chicago

June 11th to June 16th



MAIL THIS CO. Jacksor, Mich.

The Spork of Millington about the new Sporen and the

Jealer Franchise.

Address Thy



ew. Short Wave Set. Public Address Amplifier!



"Round the World Four"

ND now—an entirely new type of short wave receiver is ready, incorporating all of the sound engineering principles and advanced developments that have made S-M the most popular quality parts today. Heralding Silver-Marshall's definite entry into the short wave field, the new "Round the World Four" and "Round the World Adapter" introduce advanced features and an entirely new design technique. This set, the first to include screen

grid R. F. amplification with one-dial tuning for a range of 17.4 to 204 meters, is simply irresistible.

grid R. F. amplification with one-dial tuning for a range of 17.4 to 204 meters, is simply irresistible. Completely shielded in a thick aluminum cabinet, it can be had as a two-tube tuner to adapt any standard set to short wave reception, or as a complete 4-tube set with loud speaker range of half way round the world and back. These new S-M short wave sets are the first to be offered designed especially for broadcast and phone reception primarily, and for code secondarily. They alone have the smooth regeneration control that provides the enormous sensitivity necessary to long distance voice and music reception—yet they are absolutely poperadiating. non-radiating.

If you're after the thrill of real, world-wide DX, the "Round the World Four" is the set for you. Amateur station 9VS reported loud-speaker reception from six continents in an evening. Station 9BBW, operating the set, conducted amateur two-way communication with Germany, France, England, and Italy in one evening. In daylight, east and west coast amateur stations are heard in Chicago—Nauen, Germany, and England come in like locals. Five, ten, fifteen, and fifty-watt amateur telephones all over America and Canada are regular reception on the "Round the World Four."

Type 730 "Round the World Four" kit, ready to assemble, including all parts and cabinet just as illustrated, is \$51.00. Type 731 is the two-tube "Round the World Adapter" kit, to adapt any broadcast set to long distance short wave reception, and is priced at \$36.00 complete, with identical aluminum cabinet. Price, 131T, -U, -V. and -W. coils, tuning from 17.4 to 204 meters, \$1.25 each, or \$5.75 for set of four plug-in coils with 512 socket. Type 130 winding forms cost but 50 cents each. Type 732 "Round the World" essential kit includes all above coils, coil socket, .00014 tuning condenser, .00035 tickler condenser, and three R. F. choke coils, with complete instructions, \$16.50. choke coils, with complete instructions, \$16.50.

685 Public Address Unipac

HE S.M type 685 Public Address Unipac is a high power socket-power amplifier that can be heard by from 2,000 to 30,000 people at once. It will operate one to twelve loud speakers and can be used interchangeably for voice, phonograph record or radio amplification. Good electrically cut symphony orchestra or jazz band records will be reproduced at volume equal to or greater than original, and with tone both natural and perfect.

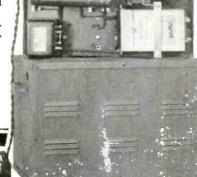
Using the microphone, clear, understandable announcements or speeches can be made to crowds of 5,000 to 10,000 people, either indoors or outdoors. Record or radio music can be heard half a mile away on clear days.

Type 685 Unipac fills a long-felt want for an economical portable or permanent public address amplifier. It is complete in itself, requiring only one UX226, one UX227, one UX250, and two UX281 tubes and connection to a 110 volt, 60 cycle lamp socket for operation. Any speakers

may be used, with any microphone, radio set, or magnetic record pick-up.
With political conventions, sporting events and elections coming on, for the
wide-awake experimenter there is a wide and profitable market, both in sale and rental, to conventions, lodges, clubs, theatres, schools, churches, amusement parks, dance halls, and many other places. For thoroughly high quality outdoor demonstrations the 685 Unipac has no equal. (685 Unipac is not suited to nor intended for home use.)

Price, factory assembled, ready to use, less tubes and accessories, \$160.00. Type 685 Kit, ready to assemble, with complete instructions, is priced at \$124.00.

SILVER-MARSHALL, Inc. 838 W. Jackson Blvd., CHICAGO, U.S.A.

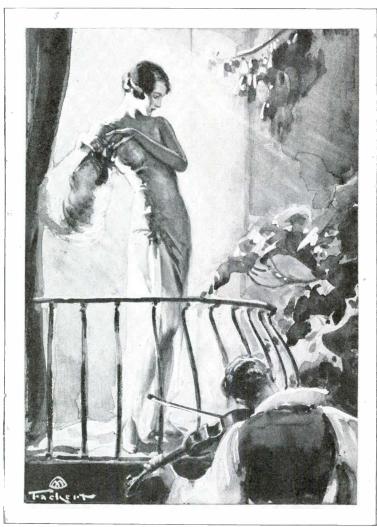




No. 701 FAIRFAX CONE

The Romance of Wood

Since the dawn of the first day, the symphony of Life has been carved on the bark of trees...Wood is nature's chosen and unsurpassed method of expressing the universal language of



BRAND NEW!! Outstanding 1928 Achievement



A Complete Line

- Tripl-Tone floor models
- 2. Exponential air column floor models
 Equipped with Fairfax "green cap" units
- Air column table models
 Cone type table models
- 5. Tone chambers, mounted and unmounted "A size for every cabinet
 6. Fairfax units—the "green cap" unit
- 7. Fairfax cone type units For cabinet installations

Combines the advantages of the exponential all-wood tone chamber with the best elements of the cone.

Tripl-Tone—the three-tone speaker with the golden voice.

In combination with our Fairfax Unit (the unit with the green cap), Tripl-Tone speakers actually move the depths of human emotion. Enjoy a thrill of realism hitherto thought impossible by radio.

"Eye-appeal," "value-giving" speakers—our full line on demonstration, Room 450-A Stevens Hotel, June show.

Send for catalog and wire for full details

MOLDED WOOD PRODUCTS, INC. 219 West Chicago Ave., Chicago, Illinois

cost and bother of aerial and lightning arrester or ground so while permitting use of electrical outlet

Last year a million people made this saving—about 80% of the total installation cost. This year many additional advantages will be gained by using the new Tobe Four-Purpose Light Socket Antennas:

Static is Minimized

Construction of plug prevents excessive pick up of static. Increased selectivity, improves tone quality.

Permits Use of Electrical Outlet

Just plug in your electric lamp or electric radio set to Tobe Antenna as you now do to baseboard flush receptacle or lamp socket. You will not interfere with this usual use of the outlet.

National Advertising to Help Dealers

Send for full details of dealer imprint literature, extensive magazine and newspaper advertising campaigns, and counter displays.

Tuning is Sharpened

Your set will tune much more sharply when you use a Tobe Antenna than when you use an outdoor antenna.

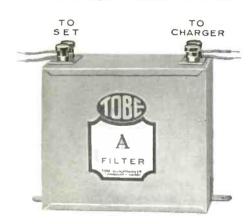


10 Days' Free Trial—2 Years' Guarantee

These plugs are made by the manufacturers of the famous Tobe Condensers who guarantee them for two years and will cheerfully refund purchase price if user is not satisfied after ten days' trial.

Here's Another Wonderful Seller

Letters from all over the country are being received complimenting us on the performance of our new "A" Filter and asking where they can be bought. Those who have at-



tached it as above have discarded A batteries for all time. At the price you can sell this, all competition will be eliminated.

Allowance Plan for Old Battery

will be made; circular and magazine or newspaper advertising and other dealer helps will be given you.

Tobe Deutschmann Company

Engineers and Manufacturers of Technical Apparatus

CAMBRIDGE, MASS.



The PRE-SHOW CHAOS of CLAIMS

10 minutes

with Arborphone's Surprise A-C Models and the aggressive merchandising plan behind them will reveal to you unprecedented opportunity. Be sure to see our private showing, Suite 1605A at the Stevens. R. M. A. Show, June 11 to 18.

MX

ATTENTION Dealers Unable to Attend the Show

We will send you the complete illustrated story of Arborphone's Surprise A-C models ranging from \$75 to \$350, and details of our aggressive merchandising plan—write today.

WAX ST

CLAIMS — claims — claims — what a chaos of claims. Lowest price claims — claims of supreme receptivity — naturalness of tone and clarity. Claims of keenest selectivity — claims of unequalled beauty — claims, ad infinitum.

No new claims can be added. The perfect radio and the supreme value in radio has been built in words time and time again. But what manufacturer has actually come nearest this coveted goal, the Show will reveal. Claims will give way to facts. The nation's most alert radio merchandisers, marshalling these facts, we believe, will award highest honors to Arborphone's Surprise A-C models.

Be sure to see our display at the R. M. A. Show — June 11 to 18 Stevens Hotel, Chicago.

Booth No. 104

Private Showing, Suite 1605A.

Arborphone is licensed under patents

of
General Electric Co.
Westinghouse Electric & Mfg. Co.
American Telephone & Telegraph Co.
Radio Corporation of America
Loftin-White
Meissner

ARBORPHONE Div. Consolidated Radio Corp. ANN ARBOR - MICHIGAN - U.S.A

ARBORPHONE The Smart Modern S

Here It Is Che Set That

A. C. Ready To Plug Into
The Light Socket—No Batteries—
No Fuss—Perfect Reception—
Sharp Tuning

market of millions of people—millions of dollars—has been practically untouched by radio.

The people who now have no sets—or have crystal sets—who can't afford a high priced radio.

This new Acme set promised in last month's Radio Retailing reaches them—reaches the bottom of the pyramid—the class of people who made Ford's fabulous fortune.

Hardly anyone but can afford this set. The volume of sales will be enormous and dealers who get in on the ground floor will make big money.

It is a splendid set. Gives perfect reception—has an artistic cabinet—in every way a high-grade job.

Uses A. C. Tubes—B power built in—no batteries of any kind.

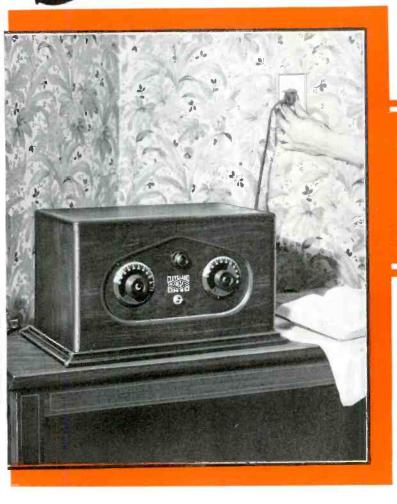
Get full information today—put your business on a volume sales basis.



1446 Hamilton Avenue,

Established 1917

SellsTheMillions





See it in operation at Radio Show or send for information today

List Price

Complete with Tubes

Company
Cleveland, Ohio

Now-your own

dealer will m

your batter

by dealers Power

an A. C. De In Power Amplified LET Electric DEAL with the famous

MOD

IF YOU HAVE A "B" ELIMINATOR just hook up Powerizer A and install new A. C. Tubes, Easily attached or wired into your set by dealer at nominal charge. POWERIZER A

IF YOU HAVEN'T A"B" ELIMINATOR -just hook up Powerizer Junior and you THE HOOK UP TOWETZET JUHOT and you are all ready for complete A. C. operation. Attach it yourself or have Powerizer Attach it yourself or nave rowertzer.

GET TONE QUALITY OF \$500 to \$800 RECEIVER

Ask dealer for demonstration of the Poweriser amplification. The unit that gives power and in radio. The unit tone quality in radio. The richest tone unity in radio. The richest tone with amazing realism those deep tones with amazing Poweriser in those deep tones with arrange. A Poweriser greater volume—greater distance. A powerise greater volume—greater distance. The purse and purpose.

RADIO RECEPTOR COMPANY 106 SEVENTH AVENUE : NEW YOR and by Radio Corporation of American & Assoc ated

great advertising organization has been entructed with an ample appropriation to bring the ans powerizer message to the

Advertising will be released in the country's greatest magazines, dominating space in the leading newspapers throughout the

DROFITS MADE

who turn battery sets into Amplified A. C. ELECTRICS

A POWERIZER FOR EVERY PURSE AND PURPOSE



POWERIZER A-

converts battery set to 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 171 Tubes, and also a "B" connection and "Hum control." Can be wired into set or we supply Harness and volume control.

\$12.00

POWERIZER 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. Humcontrol—External on and off switch.

\$35.00

POWERIZER-

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

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

\$84.00

AMPLIFIER POWERIZER—Two Stage.

Two-stage amplifier, using UN-226 in the first stage and UN-210 in the second, used with radio set or phonograph pickup gives marvelous results.

\$75.00

Also Amplifier Powerizer-three stage UX-250 type.



D. C. TUBE POWERIZER-

For those sets which operate only with the UX-199 Tubes UX-222 Screen Grid Tubes, Super Heterodyne 812, Radiola Grand, Radiola 26.

\$80.00

Through Powerizer's amazing invention—and effective advertising—buyers everywhere will be looking for the dealer who makes every battery set a Power Amplified De Luxe Electric. Wire for details on becoming a Powerizer sales and service station and for Bulletin 615 which tells how to make every radio or phonograph a power amplified A. C. All Electric.

RADIO RECEPTOR CO.

106 Seventh Avenue, New York

RMA Show - Booth B-69

Licensed by Radio Corporation of America and Associated Companies



Reprint of
Current
PARVOLT
Advertisement
in Leading
Magazines

A CME PA Matter DELATISTE COKING AND ENSE

CONDENSER

ACME

ACME

CONDENSER

CONDENSER

CONDENSER

ACME

ACME PARVOLT FILTER CONDENSERS

are supplied in all standard mfd. capacities for 200, 400, 600, 1000, and 1500 Volt D. C. requirements. Uniform height and width for easy stacking. Supplied singly or in complete housed blocks for the important power supply units such as Thordarson, Samson and others.

ACME PARVOLT BY-PASS CONDENSERS are supplied in all standard mfd. capacities and for all the required working voltages.

The ACME WIRE Co.



New Haven, Conn.

You Too, Mr. Dealer—
Play Safe with the Condensers
That STAY SOLD!

SEE US AT CHICAGO RADIO SHOW

The Bigger and Better EBY Line Again Sets the Pace



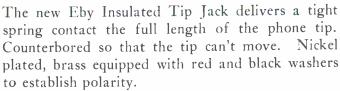
Eby UY and UX Sockets are made in only one completely universal model. That means one stock. Can be mounted above or below metal, Bakelite or wood panels. Moulded of genuine Bakelite with built-on guide for the tube prongs. Phosphor bronze contacts. List price UX type forty cents—UY type fifty cents. Standard packages of ten.



Bottom View of EBY UX Socket

Showing construction of contacts which deliver a tight wiping spring contact the full length of the tube prongs. Prongs are made of phosphor bronze which cannot be damaged by continual insertion and with withdrawal of tubes. Ideal for A.C. tubes which do not require cushion type sockets.

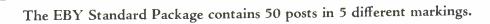






The Famous EBY Binding Post

They don't lose their heads. The tops of EBY Binding Posts are non-removable. Available either with tops plain or engraved in forty of the newest markings. See border for some of these markings. List price 15 cents.





4710 Stenton Avenue, PHILADELPHIA

























































METERS, TUBE TESTERS AND TEST SETS for RADIO SERVICE

Electrical Instruments are made for hard service, yet they are sensitive and retain their handcalibrated accuracy over long periods of profitable use that would put more delicately and lightly constructed instruments out of the running. Hoyt's long experience in making meters for Automotive Service (since 1904) insures your satisfaction in Hoyt Radio Service Meters and Equipment.



Universal A.C. and D.C. Tube Tester, Model 400

Small and light enough to be carried on a service call. Operates from (1) A.C. line (2) batteries, or (3) a radio set tube socket.



A.C. Attachment for D.C. Tube Testers, Model 101

Has heavy duty rheostat and low reading voltmeter responsive to either D.C. or A.C. Includes Special 227 adapter and leads for Kellogg type Tubes.

List Price complete \$15.00



A.C. Pocket Voltmeters Type 5473

For measuring voltage on A.C. Sets. 3 scales cover all ranges, 0-3, 3-9, 50-150 volts. Also available with middle range of 4-15 volts. Complete with leads, and heavy leather case.

List Price\$16.00



Universal Service Set Tester Model 500

Makes all A.C. and D.C. tests on ALL types of sets and tubes, in-cluding tests under working con-ditions. Has 1000 ahm per volt D.C. Volt-Milliameter and 3 scale A.C. Voltmeter.

List Price, \$90.00

Hoyt makes a full line of Meters and Test Sets for RADIO. These include, in addition to those shown here:—A. C. and D. C. Meters in flush and switchboard types for Dealers' built-up test equipment and for transmitting sets, Storage Battery Cell Testers, Cadmium Test Meters, etc.

SEND IN FOR NEW CATALOG R-6 "HOYT Meters for Radio." Send it in today.



Hoyt Electrical Instrument Works, 857 Boylston Street, Boston, Mass.



Established leadership in the Electric Pick-up field

The NEW De Luxe Models of the **Pacent**

THE Electric Pick-up

LTHOUGH scarcely introduced, the reception already accorded the new De Luxe Pacent Phonovox, indicates that the Phonovox will easily maintain its position of leadership in the electric pick-up field.

Dealers and jobbers who have heard this latest Pacent creation, recognize its outstanding selling features and assured profit-making possibilities the year 'round.

Makeit a point to see one-to hear one, before the big summer selling season starts in! Order one from your jobber and test it out in your own home. If you experience difficulty in obtaining one-write us direct and we will see that you are supplied promptly.

PACENT ELECTRIC CO., Inc. 91 SEVENTH AVE. · NEW YORK CITY

Makers of the famous Pacent Radio Speaker Manufacturing Licensee for Great Britain and Ireland: Igranic Electric Co., Ltd., Bedford, England

Each one of these 6 features is a real sales building talking point. Compare with

any other pick-up!

- The ONLY pick-up device designed for use with the fibre needle without loss of volume. Using fibre needle gives truer tones without the objectional needle scratch.
- Permits changing from radio to electric phonograph reproduction without the necessity of removing the detector tube.
- Gives complete coverage of the musical range due to the scientifically designed magnetic generator.
- Counter-balanced tone arm provides correct weight at needle point for obtaining best reproduction.
- Swinging Tone Arm Attachment on De Luxe Model 105A without Tone Arm, permits installation on phono-graphs with either left or right hand tone arms.
- New design triangular needle holder takes either steel or fibre needle and assures proper angle of needle to the record.

Each model comes complete with special adapters for both A.C. and D.C. sets and with volume control.

A revolutionary AC radio by Walbert

tuned by inductance and entirely eliminating the variable condenser

Walbert is today one of the acknowledged builders of fine AC radio. One of the first to introduce AC operation, it is now in its third AC year. During that time it has pioneered some of the most important developments in the AC field.

At the R. M. A. Show Walbert again presents an AC receiver that is fundamentally different.

The new Model—Walbert 77—is a complete unit in itself with self-contained power pack. Operation is controlled by one dial without supplemental controls. It is an eight tube set, with four tuned R. F. stages.

Chief among several novel features in this new receiver is the tuning arrangement. Variable condensers, one of the commonest sources of trouble in radio, are eliminated entirely. All tuning is by inductance—the acknowledged method of securing equal efficiency at all wave lengths over the entire wave band. Walbert as usual has made this method entirely practical by sound and simple engineering.

This revolutionary feature comes at a time when most manufacturers are inclined to rest on their oars, with the result that receivers are more alike than they have ever been. Walbert 77 is therefore certain to be one of the outstanding receivers of the season.

Walbert 77 will be moderately priced. It will be on display in Booth B-49, and on demonstration during all Trade Show hours in Room 553-A, Stevens Hotel. If you attend the show, by all means see it. If not, write us.

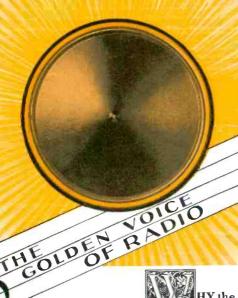
WALBERT MANUFACTURING CO., 1000 Fullerton Ave., Chicago

Walbert Radio

At the R.M.A. Show - Display Booth B-49 Demonstration Room 553-A, Stevens Hotel

The New Stevens Speakers

Double action — and perfected units to handle the new A. C. sets





Burtex Diaphragms are entirely water-proof. Moisture can never affect the musical quality.

reat quantry.
Licensed and manufactured under
Patent Numbers:
1,414,803; 1,414,804;
1,454,504; 1,506,160.

Other Patents Pending.

HY the dealer should investigate the Stevens line—Substantially constructed - trouble proof - eliminating profit destroying servicing. Double point suspension, non-freezing-non-rattling armature unit. The only seamless waterproof fabric Diaphragm, insuring uniform performance regardless of climatic conditions-no adjusting required.

Conceived to appeal to the widest range of tastes to command volume of sales. Universally good on all sets, insuring a more uniform product for the dealer. Price range and models to meet all standard market conditions. Sustained net profits to the Dealer.

STEVENS MANUFACTURING CORPORATION Formerly Stevens & Company, Inc.

46-48 East Houston Street New York City









-beautiful in design; within is water-proof Burtex Conoidal Cone \$25 which never requires readjusting.

B-28 DeLuxe Model. Burtex Conoidal Diaphragm, 17½ inches backed by double acting five-ply laminated wood sounding board, renders supplementary supplementary

A-28 Standard Model. Full 14½ inch Burtex Seamless Diaphragm, mounted on Jasper Brown Mahogany finish sounding board. Tone thatcan: \$1.850 not be judged by its price... \$1.850

BOOTH 157 STEVENS HOTEL, CHICAGO RMA SHOW

SOCRC SOKETS



1 MACHINE

30,000 DAILY



1 MACHINE

40,000 DAILY



70,000 DAILY

A small part of Radio— BUTa large part of

Successful Radio

OLD, EXPERIENCED COMPANY

For practically five years this organization has been actively engaged in the development and production of Sockets, Socket Strips, Sub Panels, and Gang Sockets in Metal and Bakelite.

IN BIG DEMAND

Today we have expanded to the point where our socket assembling machines (3 pictured here) produce more than 200 stock models, accurately, uniformly, and quickly.

QUALITY THROUGHOUT

In addition to Central Radio Sockets being practically and efficiently designed, they are made of genuine laminated bakelite and special silver alloy — NO PLATING.

SPECIAL SERVICE

Because of our experience and facilities we can satisfactorily and economically produce special sockets in any quantity.

STANDARDIZE ON THEM

You can be sure that the Socket part of your radio will be most reliable if you include Central Radio Sockets. You eliminate experimentation.

We sell direct to radio manufacturers only. Write and let us give you complete information.

See us at the R-M-A Radio Show, Booth 44, Stevens Hotel, June 11-15; also at the National Radio Show, Booth EE-3, Coliseum, Chicago, October 8-14 incl.

CENTRAL RADIO CORPORATION BELOIT, WISCONSIN, U.S.A.

THE LINE OF DISTINCTION

McMILLAN

TRADEMARK REG U S PAT OFF

ELECTRIC

Offers A New Line—New Values

A mechanical achievement—a tonal triumph! That's what everyone is saying about the new McMillan. And more than this—it's a set in style and price well within the range of popular demand.

Concentration upon a few definite cabinet styles makes possible such outstanding values. Exclusive McMillan furniture combined with the extremely sensitive, perfectly engineered new 8-Tube McMillan receiver, makes a combination that will sell on sight anywhere. See the full display at the R. M. A. show, or write for complete information regarding discounts and McMillan EXCLUSIVE FRANCHISE offer. Here's the radio opportunity you've been seeking!

McMillan Radio Corporation, 1421 S. Michigan Ave., Chicago



THE WARWICK

Combining unusual grace of line, this Console promises unprecedented popularity. Its features are: Compactness and accessibility; the last word in design—unrivalled tone. Height, 52 in., width 26½ in., depth 17½ in.; shipping weight, 120 lbs. Surfaces veneered with five-ply walnut. Top proper of fiddle-back walnut with accentuated cross-fire; doors in four way match, highest quality American walnut, satinwood below. Reversible gun metal hinges. Unequalled quality of reproduction.

Combines These 12 Distinctive Features

A.C. Operation
Eight Tubes

(‡ Radio Frequency, completely shielded Detector and 3 stages audio frequency, pushpull amplification)
Tremendous volume without distortion
Extreme sensitivity
Entire set is built upon rigid steel frame
Uses full wave rectification
Low power consumption

(Cost of operation is just equal to burning one 60 Watt Lamp at the time set is turned on)
Exclusive cabinet designs
Latest creation in speaker construction
Licensed under R. C. A., Hazeltine, and
Hogan Patents
Low original cost

Prices Ranging from \$160 to \$285



THE WESTCHESTER

Simple, compact — another exclusive model. American Walnut of finest grade on top and front panel. Bevelled corners, exquisite shadings and a general note of richness combine to make it a striking piece of furniture. Height, 10 in., width, 25 in., depth, 16 in.; shipping weight, 40 lbs.



THE WESTMINSTER

Exclusive McMillan model. Unmatched beauty of finish—surfaces of finest American walnut. Top proper, fiddle-back walnut veneer showing close cross-fire. Latest design speaker of unmateched tonal quality. Doors in two way matched figure, divided in center by bead. Reversible gun metal hinges. Instrument fits into sliding drawer at top of interior. Height, 51 in., width, 26½ in., depth 17½ in.; shipping weight 120 lbs.

See us at the R.M.A. Show, Space B79 and Demonstration Room 557-A

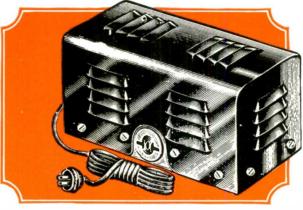
WEBSTER



Announcing the new Webster Auto-Potentialator

HE Webster Auto-Potentialator is a markable new product that instantly and automathat instantly and automatically regulates the local A. C. line voltage and produces an even flow of A.C. current of the exact voltage necessary for the most successful exerction of A.C. cessful operation of A. C. Receivers or A and B Eliminators. It contains no tubes, no liquids, no hand switch or rheostat. It is entirely automatic in operation, and is a voltage regulator that regulates without a particle of attention or adjustment.

The Webster Auto-Potentialator not only provides the exactly correct voltage at all



Size: 4 in. wide, 75 in. long, 4 in. high

or low line, but also automatically protects A. C. tubes from sudden line fluctuations that occur in any A. C. line. This assures longer life to the tubes, makes the operation of the A. C. receiver much more enjoyable, and saves the owner money. The Auto-Potentialator has

times, on the normally high

been subjected to grilling tests that have proved beyond question its ability to deliver unvarying voltage under the widest fluctuations of line voltage. It is compact in size, requires no at-tention, and operates with sensational smoothness that is almost mystical.



WEBSTER RELIABLE "B"

Supplies ample voltages for the most powerful receivers, adjustable to meet requirements of any set by means of duplex Clarostats with slotted shafts for screw driver adjustment—a new feature that insures against voltages being accidentally changed after being set. Superbly designed.

WEBSTER A.C. POWER PACKS

Designed to supply all A. C. and D. C. voltages as well as all grid biases for all makes of receivers utilizing A. C. tubes. Made in two styles as follows:

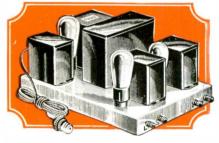
Style A—6 in, wide, 6 in, high, 11½ in. long, price \$35.00, including cable. Style B—2¾ in, wide, 6½ in, high, 16 in, long.



USE THE COUPON **BELOW**

Price, Less tubes \$18.50

Price: \$85.00 Less Tubes Prices of other models supplied on request



THE WEBSTER AMPLIFIER

Webster Amplifiers are designed for use in phonograph reproduction where an electric pickup is employed, or to replace the audio system of a radio receiver so as to obtain greater amplification and greatly improved tone quality. The Amplifier illustrated above is a simple two stage power amplifier. We can supply other models up to a three stage double push-pull amplifier incorporating the new 250 Tubes, a unit capable of operating two dynamic speakers. All models operate this type of speaker. Webster Amplifiers are mounted on a steel base, beautifully plated in a dull cadmium satin finish, with individual covers in contrasting black crackie.



The

WEBSTER COMPANY

854 Blackhawk

Street, Chicago

AN INVITATION

We invite manufacturers, jobbers and dealers to visit our Booth B-97 at the R. M. A. Trade Show where these new Webster Products will be on display. Make our Booth your Chicago headquarters.

THE WEBSTER COMPANY,
854 Blackhawk Street, Chicago
Please ship me.......Webster Auto-Potentialators, price \$12.50 each. I enclose \$.....
My jobber is

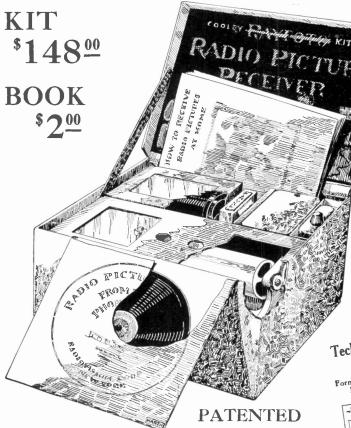
Also send me complete data on all Webster Power Units.

Name Address

MAIL THIS COUPON

To enable you to secure the new Webster Potentialator without delay in case your regular supplier cannot furnish promptly from stock, you can order direct from us by filling out coupon at left.

RADIO PICTURE KIT



KIT CONTAINS — Synchronizing Filter Transformer; Corona Modulation Transformer; Selective Synchronizing Relay; Argon Corona Indicating Tube; H. F. Corona Coil; Flexible Recorder Coupling; Stop-Start Drum Recorder; Rayfoto Practice Phonograph Record. Price \$148.00.

BOOK CONTAINS—Complete Constructional Data; Actual Size Drilling Template; Point-to-point Wiring Instructions; Comprehensive Picture and Schematic Diagrams; Sample Pictures; Trouble Analysis; Profusely Illustrated. Price \$2.00.

EXCLUSIVE INTRODUCTORY PROPOSITION IS AVAILABLE FOR YOUR TOWN

For Sample Kit send 20% cash with order. Regular 40% discount or ask about our Dealers' Proposition. Order Sample direct from us. For reorders, see your jobber.

Inquire during

R. M. A. Show AT HOTEL STEVENS

Rooms 1039-1040

Ask for Mr. Edgar H. Felix or Mr. Stuart Rogers

RADIOVISION CORP.

62 W 39th Street

New York City

LICENSORS

HOME RADIOVISION

Be the first dealer in your town to demonstrate

RAYFOTO in your store window

IT DRAWS THE CROWDS

WHAT NEWSPAPERS SAY ABOUT THIS INVENTION



One of many letters from Dealers DAYLIGHT RECEPTION OF RAYFOTO PICTURE BROADCASTING at 125 Miles

This broadcasting from WOR was done during the morning hours.

ZENITH

SENT BY 'MUS

(REBE

CROSLEY

The Radio Store .

BAKER'S BATTERY SERVICE

GETTYSBURG, PENNA.

May 1, 1928

Radiovision Corp., 62 West 39th St., New York City

Attention Mr. Felix

Gentlemen:

I am enclosing several more pictures that I have received today. I can get them very good when WOR is on high power. The best picture appears to be the one of Lindbergh, that I only got a part of.

I want to thank you for your attention and suggestions on the other pictures that I sent you.

H or Bala



















Allan Manufacturing Company

Factory and Offices: 102 North Fifth St. Harrison, New Jersey

Los Angeles: 487 Chamber of Commerce Bldg.





Transfor

Makes the Light-Socket Set Possible

For Light Socket Receivers

OR years Dudlo has stated that no Radio Set or Radio Unit is any better than its coils. It is more true now than ever—with the power supply being transformed from the city current to any and all voltages required by any set.

Here are engineering problems to test the coil specialist's skill. Poly-Power Coils are made in any combination to suit each Receiving Set or Power Supply Unit. They can be wound and tapped to furnish voltages from $1\frac{1}{2}$ to 450.

DUDLO DIRECTORY

Main Factory and Home Office

Fort Wayne, Ind. Wall Street

EANSFORMER

Stocks

Cleveland, Ohio A. B. Weeks D9 High St.

wankee, Wis. uffivan's Delication Former St.

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Mices
Atlanta, Ga,
J. W. Rall
274 Tvy St.
Chicago, Ill.
R. A. Connor
160 N. LaSalle St.
Minneapolis, Minn.
Wm. P. Johnson Elec. Co.
43 St. 3rd St.
Shreveport, La.
Bennett Sales Co.
P. O. Box 298

Eastern Factory and Stock

Newark, N. J. Dudlo Mfg. Co. 56 Earl St. F. H. Phillips, Mgr.

acific Coast

A. S. Lindstrom Co. (Stocks in all cities) Salt Lake City, Unah 4 Interurban Bldg. San Francisco, Calif. 274 Brannov St. Los Angeles, Calif. 324 N. San Pedro St. Portland, Ore. 355 Everett St. Seattle, Wash, 95 Connecticut St.



MANSFORMEN

Engineer now brings to Modern Receiving Sets

POWER mer Coils

and Radio Power Supply Units

They can be designed to handle receiving sets of any circuit or any number or styles of tubes.

With designing experience covering thousands of different coils and winding experience totaling over 100,000,000 coils for every electrical purpose, it is small wonder that Dudlo has become headquarters for the latest and greatest achievement in the art of coil winding—the Poly-Power Transformer Coil.

This type of coil, with all its secondary windings, taps and leads, requires not only special facilities to manufacture but highly perfected methods of precision testing.

So again Dudlo meets the needs of the Radio manufacturer by preparing far in advance for volume production of these, the most intricate of all Radio coils. Special machin-

ery has already been designed and installed in anticipation of the greatest season the industry has ever known.

Furnishes
A, B and C
Current at
any specified
Voltages

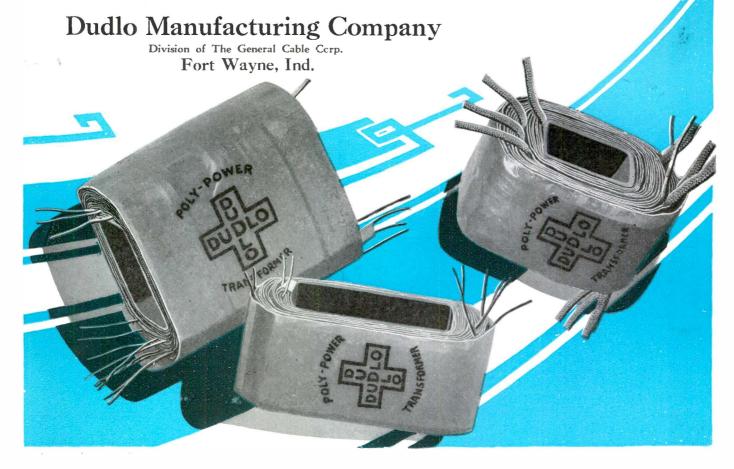


Plate Voltage Meter No. 50

0 - 300 Volts for use on either A.C. or D.C. Sets. List Price \$3.00

Grid Bias Meter No.55 0 - 50 Volts for checking proper "C" battery voltage. List Price\$3.00

A.C. Filament Meter No. 60

0 - 7½ Volts
for testing filament voltage of any A.C. Tube.
List Price \$2.50
Adaptor for five prongs can be supplied.



Line Voltage Tester No. 75

This very convenient meter is designed to be used in checking line voltage for A.C. Receivers when plugged into any electric light socket or receptacle. List Price\$3.00



A.C. Voltage Control No. 275

for reducing excessive line voltages to proper operating voltage for electric sets. Accurate A.C. Voltmeter and Power Rheostat mounted in Bakelite Case. Attractive appearance, well made and moderately priced.

List Price

Beede Test Kit.

Consisting of Plate Voltage
Meter No. 50, A.C. Filament
Meter No. 60, A.C. Line Tester
No. 75, Grid Bias Meter No. 55
together with adaptor for converting from 4 to 5 prongs.
Fitted in attractive carrying
case in black leatherette and
leather handle.

A complete and accurate testing outfit at a very low price. List Price\$15.00

a complete line of A.C. and D.C. Radio Panel Meters, as well as the popular line of Beede Pocket Meters.



EETING requirements as they should be met has always been a distinguishing feature of Beede Radio Meters. They are accurate and are designed to make their use as easy by the novice as by the expert service man. Considered from the price angle Beede Meters are without an equal as they are Quality products throughout.

The new Test Kit should interest the dealer or service man who plans to be the best equipped for rendering the most efficient service. The "Fan" will find the Socket Test Meters just what he needs to do his checking up. And in either case the price is an attractive one.

With the new power sets the Beede A.C. Line Control is more than an accessory. It is a decided necessity for the protection it affords the tubes. It eliminates also the possibility of imperfect reception. And once again the price is no obstacle.

Selling the Beede Line means assuring yourself of a steady volume of real profits.



BEEDE ELECTRICAL INSTRUMENT CO. 136 LIBERTY ST., NEW YORK

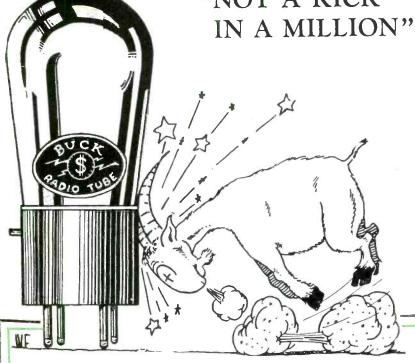
Your jobber can supply you with Beede meters; if not, write us direct.



During the Chicago Show our representative, Mr. John L. Madsen, may be reached by telephoning Central 8078.

BUCK dio Tubes

"NOT A KICK



"The Tube That Stands the Test"

Buck Products sell fast because—

they are sold at a popular price.

"The Best for Less"

they are of superior quality and highly efficient

Guaranteed for six months

Don't pass the "Buck" for this season—if vou're interested in quick sales and big profits.

> Distributors—Jobbers—Dealers! Write for details of our merchandising plan!

Bring in the Bucks

We Offer

A Complete Line

-all popular types

	A. C.
BX-226	BX-280
BX-227	BX-281
B-Rectifier	BX-210
85 M.A.	BX-250
	D. C.
BX-201 A	BX-120
BX-199	BX-222
BV-199	BX-112 Reg.
B. Std. 199	BX-171 Reg.
BWD-12	BX-200A
BWX-12	BX-112A
BUX-12	BX-171A
	BWD-11

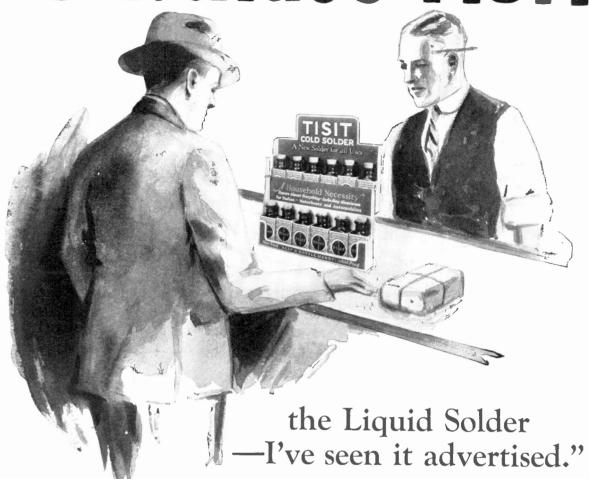
—and Selling Helps That Buck Competition

Unique and original displays-posters that attract and sales boosters to please your trade.

Universal Electric Lamp Company

Newark, New Jersey

"Oh! that's TISIT-





"I want to take home a bottle of that. The magazine advertisements and my friends have told me how TISIT can be used for any type of soldering, including radios, radio aerials, repairing kitchen utensils, gasoline tanks, radiators, cracked cylinder heads and hundreds of other uses—and it is the only known solder for aluminum, too."

That is the scene that is taking place every day in thousands of stores throughout the country.

TISIT is a liquid solder that is applied cold with a stick without heat or soldering iron and dries in from ten to twenty minutes. Heat-proof and acid-proof, non-corrosive, TISIT has hundreds of uses in every home.

Advertising in leading periodicals is bringing dealers a demand for TISIT. If you are not already handling it, ask your jobber or order dozen direct from us today, giving us your jobber's name.

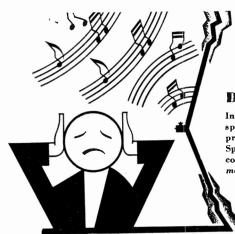
TISIT costs \$4.00 per dozen in attractive self-selling display carton. Retails for 50c per bottle—\$2.00 per dozen profit.

LETELLIER LABORATORIES, INC.

Manufacturing Chemists

119 MAIN STREET, EAST

ROCHESTER, N. Y.



Eliminate

In free-edge or uncontrolled cone speakers, distortion cannot be prevented. Lektophone Licensed Speakers eliminate distortion. They control the edge... and control the market.

LEKTOPHONE licensed speakers

are installed in the *more expensive* instruments sold by the three Leading Phonograph Companies of America.

LEKTOPHONE licensed speakers

are built by the following manufacturers of Phonograph and Radio Products, licensed under the Lektophone patents in the United States:

American Bosch Magneto Corporation
Amplion Corporation of America
Brandes Products Corporation
Farrand Manufacturing Company
Marcus C. Hopkins
O'Neil Radio Corporation
Pathe Phonograph & Radio Corporation
Radio Corporation of America
Radio Foundation, Incorporated
Stromberg-Carlson Telephone Manufacturing Company
J. S. Timmons, Incorporated
United Radio Corporation
Utah Radio Products Company

The merits of Lektophone construction ... the controlled edge ... are understood both here and abroad by responsible manufacturers, assemblers, jobbers and dealers.

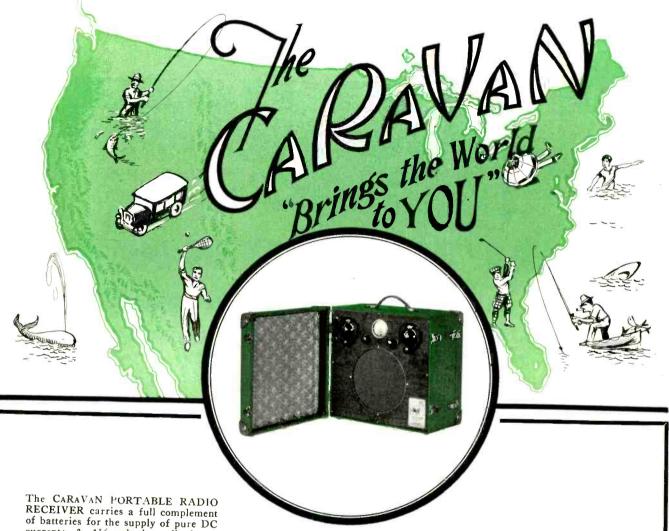


LEKTOPHONE CORPORATION •

15 Exchange Place, Jersey City, New Jersey

ALL AMERICA ON VACATION

will want



The CARAVAN PORTABLE RADIO RECEIVER carries a full complement of batteries for the supply of pure DC current: 3-1½ volt dry cells for A current; 3-45 volt batteries for the B supply; 2-C batteries, of 22½ and 4½ volts respectively.

The six tubes (five CX299's and one The six tubes (five CX299's and one CX220) have non-microphonic sockets on the Catacomb, which, mounted on brass springs, contains all the radio and audio frequency coils and transformers. This Catacomb is an especial feature of the CaRaVan. Built entirely in our own Laboratories, it has a compactness and efficiency hitherto unapproached.

The highest quality cone-speaker delivers the audible translation of the radio-waves intercepted by the loop-in-the-door aerial, in this 31 lb., 13½x14x8½ inch, "REALLY PORTABLE, REAL RADIO RECEIVER."

The season for portable radio sales is on. An ever increasing number of vacation bound families and the growing popularity of radio will make the 1928 vacation season the greatest portable radio season ever experienced.

Yet, radio fans are becoming more discriminating. They know the quality of reception of their home sets and they'll demand the same operation in the portable set they buy.

A CARAVAN portable radio offers, in a compact self contained unit, all the advantages of selectivity, clear tone, and quality of reception that the radio fan has learned to expect.

Radio Dealers are awake to this market, looking for the set they can safely recommend and sell.

We have an attractive proposition for Manufacturers' Agents and Factory Distributors. It will pay you to know about it.

CARAVAN RADIO LABORATORIES =

4725 Clifton Ave.

Chicago, Ill.

Invitation

Distributors and dealers attending the Radio Trade Show and the R. M. A. Convention at Chicago are cordially invited to visit the Colin B. Kennedy Incorporated Exhibit at the Blackstone Hotel.

Each of the newest Kennedy models on display is in pace with the style mode and is also designed from the standpoint of performance to meet the requirements of those discriminating buyers who are so hard to satisfy with anything less than "The Royalty of Radio". * * * The prices of the latest Kennedy models give the dealer and distributor an ample range to work in . . . plus a very desirable profit opportunity in exclusive territories.

EXPANDED MANUFACTURING AND SALES FACILITIES

Colin B. Kennedy Incorporated is also happy to announce that on June 1st its general offices and entire production and sales organization have been moved to much larger and more improved quarters at Highland, Illinois. All inquiries should be addressed to

COLIN B. KENNEDY INCORPORATED HIGHLAND, ILLINOIS





A Complete Line
of
HIGH-VACUUM
Quality Tubes



Two A. C. Types

L. S. 227

L. S. 226

Other Standard Types
for Battery Power

Every La Salle HIGH-VACUUM Radio Tube is made in our own factory; where every detail of construction and testing is controlled by La Salle engineers... We just you to visit us while in Chicago. Let us show you why HIGH-VACUUM quality is so important in radio results.

LA SALLE RADIO CORPORATION · · CHICAGO, ILLINOIS

HIGH-VACUUM RADIO TUBES



THE outstanding feature around which La Salle quality is built is the degree of highest, possible commercial vacuum.

Through our HIGH-VACUUM process all impurities and foreign matter are eliminated from the tube, leaving the three vital elements within the tube to function solely upon the signals they are intended to pick up, clarify, and make audible to the ear.

In La Salle HIGH-VACUUM Tubes the art of doing this thoroughly has been brought to greater perfection than with any comparable tube of similar design, power or price.

LaSalle HIGH-VACUUM "AC" Tubes are the finest products of the radio industry. They do not perceptibly diminish in volume after a thousand hours of use. Burned out filaments do not occur. They eliminate that characteristic AC "hum" and produce a volume and clarity of tone that will surprise you.

Dealers and jobbers who are interested in high quality tubes are invited to write for complete information.

Manufacturers

LA SALLE RADIO CORPORATION

149 West Austin Avenue

Chicago, Illinois

Sole Distributors

MATCHLESS ELECTRIC COMPANY
143 West Austin Avenue Chicago, Illinois

2

When you visit

the CHICAGO TRADE SHOW



All dealers who attend the Chicago Trade Show are cordially invited to drop in at Sonora Headquarters



S this publication goes to press it that the working models of the new Sonora instruments can be heard at the time of the Chicago Trade Show. But at least enough information is now available to arouse more than a passing curiosity in the marvelous new things

that Sonora is soon to announce. is too early to promise definitely During the Chicago Show, officers of the Company will be present to unfold to interested dealers something of the new vista of profits which is ahead for them and for Sonora. Sonora's Chicago offices are located at 64 East Jackson Boulevard, Chicago.





Not once a year—but every month your progress may be exhibited

THE Radio Trade Show at Chicago this month brings before the eyes of the industry in one place the major product developments of the last twelve months. Colorful exhibits of the newest in receivers, speakers, cabinets, tubes and every other type of radio product will make the Radio Trade Show the biggest event of the radio year.

Keeping step with this progress Radio Retailing—in service to those who attend as well as those who cannot attend the Show—is exhibiting on paper in this June Trade Show Issue the specifications and descriptions of the new radio products to be exhibited.

Even as the Radio Trade Show is the assembling place once each year for all new or refined radio products in the industry so *Radio Retailing* is *each month* the one place where the latest news of the industry, the most successful sales ideas, and every other type of useful radio information may be found.

The radio industry's acceptance of Radio Retailing's leadership is well proven by the following facts:

1. Radio Retailing has the largest paid circulation of any radio, music, phonograph or talking machine trade publication. This is a direct result of Radio Retailing's practical sales-helpfulness to radio dealers, jobbers and manufacturers.

2. Radio manufacturers spend more money for advertising in Radio Retailing than they do in any other radio, music, phonograph or talking machine trade publication. Make a magazine necessary in the business lives of radio dealers, distributors, and jobbers and the radio manufacturers will soon find its value as an advertising medium.

Radio Retailing's July issue, containing as it will the report of the R. M. A. Convention and Trade Show activities, offers exceptional reader interest and a commensurate advertising opportunity to manufacturers.

Radio Retailing

a McGraw-Hill Publication

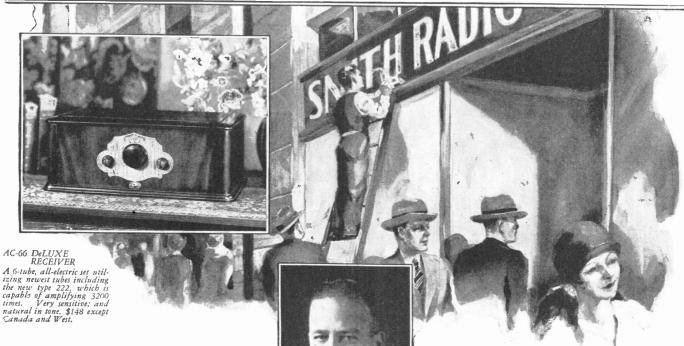
A.B.C. Tenth Avenue at 36th Street, New York City A.B.P.

The letters, "A.B.C." represent Radio Retailing's membership in the Audit Bureau of Circulations—the best guarantee to the radio manufacturer of accurate circulation statements.

Radio Retailing is the only trade magazine in the radio or phonograph fields that has been admitted to membership in the "A.B.C." and "A.B.P."—the latter initials representing Associated Business Papers, an organization of business papers associated together in the promotion of higher standards in editorial, circulation, and business practice.



By ROBT. W. BENNETT, Vice Pres. and General Sales Manager



If I were a radio dealer I would pick my line and then pin my faith to it. That line would have a history and a sound company behind it, but it would also have

to sell in blindfolded demonstration where names didn't count.

I'd want list prices beginning under seventy dollars, a low priced all-electric set and also one that was the best money could buy. Yes, and I'd know that my line had proved a money maker with dealers who'd handled it in the past and what their service costs had averaged.

Finally, I'd want a clean cut proposition with a distributor who did business in a clean cut

way, and an advertising campaign that concentrated on the people I could do business with. And I'd certainly insist on being protected by a full guarantee covering price declines, obsolescence of models and territory.

For the man

Then I'd go to it—not for glory, but for profit. That's exactly how I feel and exactly the kind of proposition we've made out of the A-C DAYTON franchise.

If your general ideas are the same, we'd like to talk to you about *permanent* connection. For 8 years A-C DAYTON dealers have made good money. Our line-up this season is easily the best in our history. Write us or clip this coupon to your letterhead and we'll send you

complete facts. You can make your own comparisons. Write today!!!!

A C	DA	Y		N
FIG (0)	RAI		0,000	

THE A.C DAYTON COMPANY, Dayton, Ohio 1
Gentlemen: Please send complete details about your dealer's franchise.
Name



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.

AC-65, at right, has same characteristics as AC-63 except that it uses 210 power amplifier in last stage, giving electrical power amplifier results. \$123, except Canada and West.



Recommended Furniture and Console Cabinets for A-C DAYTON RADIO—

See them at the R.M.A. SHOW



Console Cabinet of finest selected quarter sawed Red Gum with four-way matched Butt Walnut veneers and overlay of Birds Eye Maple on drawer front. Height 53-in.; width 32½-in.; depth 18-in.

A-C DAYTON dealers will find special interest in these new console and table designs, built specially for A-C DAYTON radio receivers and to be exhibited for the first time at the R.M.A. Show. The dealer who stocks this console and table will have the advantage of being able to install any 1929 A-C DAYTON receiver in either cabinet. The Caswell-Runyan name and workmanship assure a ready sale.

Top of 5-ply, four-way matched Butt Walnut, and Birds Eye Maple overlay on the drawer front make this table exceptionally beautiful. Finished in Walnut, rubbed to satin finish. Height 30-in.; width 32 ½-in.; depth 18-in, (Photographed with A-C63 Receiver.)



THE CASWELL-RUNYAN CO. Huntington, Indiana

8 Selections from 2 Cabinet Models

By designing one console and one table, in which any of the four new A-C DAYTON sets may be installed with equal readiness, dealers can offer eight distinct combinations of sets and furniture in addition to the standard cabinets.

To the pleasing evidences of fine furniture design are added reproducers correctly adapted to the A-C DAYTON set and assurance of that sound workmanship for which "Chillicothe" cabinets are already well known to the radio trade.

You are invited to view our display at the June show, or to write for full particulars and prices.

Visit Our Booth at the R.M.A. Show

CHILLICOTHE FURNITURE COMPANY — Chillicothe, Mo.

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HEN Beauty and Usefulness are combined there is such a decided sales appeal that it needs but little cultivation. Ideal Radio Cabinets come under that classification, as their attractive design and superior quality of workmanship and material creates a demand for them on sight.

The Universal Model will take any of the following sets:—Freed-Eisemann, Majestic, Kolster, Zenith, while the Model 18 is particularly designed for the Radiola 18, being beautifully finished to match that set. Both are beautifully finished tables and are equipped with either a Peerless or Radiola 100A Speaker.

Every electric set you sell affords an opportunity for the sale of these especially beautiful radio cabinets. Your profit column, too, will benefit with the sale of Ideal Radio Cabinets. Our discount proposition is of particular interest to the dealer who wants only a high quality product. Write for it today!

When in Chicago visit our display rooms at the Stevens and Blackstone Hotels, during week of June 11-13.

IDEAL RADIO CABINET MFG. Co., INC. 151 West 19th Street, New York, N. Y.



Interesting announcements of our new fast selling line will be found in this space. Watch for it in each issue.

*Herald*Gothic Mantel Speaker

\$25

For Electric and Battery Sets

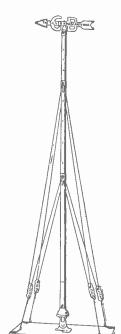


A RAPID SELLER on many counts: Handsome, compact appearance, strong volume and wonderful purity of tone, with new tone filter. Takes any power without rattling or distortion. Good profit for you in this new Herald Speaker. Send for full particulars.

MANUFACTURERS' UNITS: — Manufacturers should write to us for sample and price of our new Chassis Unit.

HERALD ELECTRIC COMPANY, INC. 29 East End Avenue, New York City

NEW!



Vertical Aerial!

Destined to Upset the ANTENNA WORLD

G-B

The Silver Mast Antenna

Highly recommended by radio engineers and experts.

Instantly adjustable to required capacity of any radio set.

Compact—Practical.

Easier to install—ornamental, very light and

FAR MORE EFFICIENT
Gustin-Bacon Mfg. Co.,
KANSAS CITY
MO.

SEE IT AT THE SHOW!

Our Research Department Is At Your Disposal

COPPER AND BRASS

are best for

Shielding Coils Condenser Plates Condenser End Plates

Condenser Shafts

Condenser Hubs

Sub-panels

Panels

Dials

Escutcheon Plates

Brackets

Sockets

Switches

Rheostats

Bolts

Binding Posts

Terminals

Transformer Windings

Name Plates

Screw Machine Parts

Nothing takes the place of Copper or its alloys

NE of the functions of this Association is to offer to manufacturers confronted with any problems pertaining to the use of Copper, Brass and Bronze the complete facilities of its technical staff. If we can be of service to you in the use of these metals in radio construction please feel free to call upon us. There is no cost or obligation on your part.

RESEARCH ASSOCIATION

25 Broadway

New York

Midwestern Office Landreth Building St. Louis, Mo.

Canadian Office 67 Yonge Street Toronto, Ont.

Pacific Coast Office Architects Building Los Angeles, Cal.

MEMBER COMPANIES **PRODUCERS**

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Anaconda Copper Mining Co. 25 Broadway, New York

Arizona Commercial Mining Co. 50 Congress St., Boston, Mass. Braden Copper Company 120 Broadway, New York

Calumet & Arizona Mining Co. Calumet, Mich. Calumet & Hecla Consol. Copper Co. 12 Ashburton Pl., Boston, Mass.

Chile Exploration Co. 25 Broadway, New York

Greene Cananea Copper Co. 25 Broadway, New York Inspiration Consolidated Copper Co. 25 Broadway, New York Isle Royale Copper Co. 12 Ashburton Pl., Boston, Mass.

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Co. 120 Broadway, New York Nevada Consolidated Copper Co. 25 Broad Street, New York New Cornelia Copper Co. Calumet, Mich.

Nichols Copper Company 25 Broad Street, New York

Old Dominion Company 99 John St., New York

oo John St., New York
Phelps Dodge Corporation
oo John St., New York
Ray Consolidated Copper Co.
25 Broad St., New York
Shattuck Denn Mining Corp.
120 Broadway, New York
United Verde Copper Co.
111 Broadway, New York
Linted Verde Fernalis

United Verde Extension Mining Co. 233 Broadway, New York

Utah Copper Company 25 Broad St., New York White Pine Copper Company
12 Ashburton Pl., Boston,
Mass.

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The American Brass Co. General Offices, Waterbury, Conn.

American Smelting & Refining Co.
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The New Jersey Wire Cloth
Company
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The Paper and Textile
Machinery Co.
Sandusky, Ohio
Rome Brass & Copper Co.
Dominick & Bouck Sts..
Rome, N. Y.
Scovill Manufacturing Co.
Waterbury, Conn.
Taunton-New Bedford
Copper Co.
207 West Water St..
Taunton, Mass.
Wolverine Tube Co.
1411 Central Ave.,
Detroit, Mich.

16 Years of Experience

For sixteen years, to be exact since 1912, the year the U. S. Government enacted regulations governing the activities of radio reception and transmission, the DeJur Products Co. has been manufacturing resistances.

We have followed the growth of the art and have grown with the art. We extended our facilities as new developments were announced . . . Our engineers have a reputable background . . . We attained the reputation of resistance specialists—our products as the basis.

Now we introduce a new DeJur line—VIT-REOUS ENAMELED POWER RESIST-ANCES . . . These resistors, specifically designed to fulfill the requirements of present day B eliminators and electric receiver equipment, are the fruits of sixteen years of research and concerted study of the resistance field.

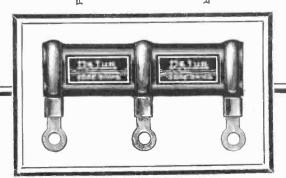
The DeJur Products Co. unreservedly guarantees its resistance products . . . DeJur dealers will receive absolute protection—utmost cooperation and are assured of sound merchandising . . . DeJur Vitreous Enameled Power Resistances will create goodwill and permanent profits.

Write for catalogue of other products.

DeJur Products Co.

199 Lafayette Street New York City

[Booth No. 37]





Mr. Manufacturer:

What are your loudspeaker problems? Can we help you? We can supply you with the most efficient and latest achievements in loudspeakers. Units and console models for manufacturers a specialty. Now is the time for you to send us your specifications.

All communications will be held in strict confidence and should be addressed to the Manufacturers'

VITALITONE RADIO CORP.

88 University Place, New York City

Have you seen and heard the new Vitalitone Dynamic?



Two Fast-Selling Summer **Assortments**

RAY-O-VAC FLASHLIGHTS

At Two Popular Retail Prices

No. 6 RAY-O-VAC Assortment

Six tubular head Ray-O-Vac Flashlights—three nickel, three black cases. Durable, dependable, well-made of quality materials. Fittings of heavy brass highly nickel plated. Packed in attractive self-selling counter display case. Retail selling price (with battery)

\$1.00 Each

Retail value of 6 Flashlights, without batteries	\$4.20									
Dealer's price of Assortment, with-										
out batteries	2.94									
Dealer's Profit	1.26									
Dealer's Additional Profit on										
batteries										
TOTAL PROFIT	\$1.95									



Assortment Two nickel focusing and two black focusing spotlights...throw a 300-foot beam ... and two miner head flashlights that give a wide spread of light for short range use. In self-selling counter display case. Retail selling price (with battery)

\$1.75 Each

Retail value of 6 Flas												
out batteries				٠		\$8.70						
Dealer's price of Assortment, with.												
out batteries						5.58						
Dealer's Profit						3.12						
Dealer's Additional Profit on												
batteries						0.69						
TOTAL P	RC	FI	T			\$3.81						

Just in time for the summer trade-motoring, camping, vacationing! Order two of each assortment from your jobber—one for your window, one for your counter.

FRENCH BATTERY COMPANY Madison, Wisconsin

Also makers of Ray-O-Vac "A", "B" and "C" Radio Batteries, Ray-O-Vac Flashlight Batteries, Ray-O-Vac Telephone Batteries and Ray-O-Vac Ignition Batteries

RAY.O.VAC BATTERIES FIT ALL FLASH-LIGHTS AND MAKE THEM BETTER



The Furniture Vogue Is Metal

Special Findlay tables for practically all makes of A.C. receivers.

Metal console tables are superior in appearance

and durability and will harmonize with every type of home furnishing.



Design for R. C. A. Models 17 and 18 A.C. sets. No 18/100-A table with 100-A speaker unit built in.

See our exhibits at Booth 60 and Rooms 519-520A. 1407 and 1408 Show, Chicago.



New table developed to accommodate latest model Kolster receiver.



models for Crosley Jewelbox, Gembox, Showbox, with or without Musicone or Dynacone sneakers.



Special table to accommodate Models 37 and 38 Atwater Kent A.C. re-

Office and Works:

R.M.A. Trade ROBERT FINDLAY MANUFACTURING Co., Inc. 242 Fifth Ave. 1027 Metropolitan Avenue, Brooklyn, N. Y.

Permanent Showroom New York, N. Y.

Attention!

Radio Dealers and Service Men

-2 books written especially for you-

Have you the most modern service equipment???

John F. Rider, an engineer of note, who has designed numerous service installations, has written a descriptive treatise on 25 modern testing and servicing units that will help you service all receivers most rapidly and economically nomically . . Every radio dealer and service man should have one . . . Price 50 cents.

Can you adapt an eliminator to various receivers?

No you understand B eliminator design?

Can you calculate resistances for various output voltage?

Millions of B eliminators are in use. Intelligent servicing requires a knowledge of their design, their characteristics, their operation... An 86 page "Laboratory Treatise on B Eliminator Design and Construction" has been written by John F. Rider... Every possible question pertaining to B eliminators is answered... 71 drawings. Price \$1.00.

-these books save you money-

RADIO TREATISE CO.

270 Madison Ave., New York City MAIL THIS COUPON

Here is my \$1.00 for the "B Eliminator Treatise". Here is my \$.50 for the "Service Unit Treatise" to be mailed postpaid to

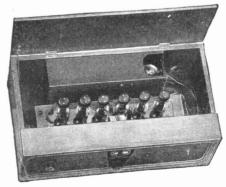
Name											 								 		٠			٠		
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City												9	31	a	ιt	e.					. ,	 	 			

Sell PREMIER Radio

under your own private brand



Light Socket Power AC



To those desiring a responsible supplier of quality receivers or chassis only— either AC or battery operated—we respect-fully extend a cordial invitation to write us.

Licensed under U. S. Navy pat-ents and Hogan Patent No. 1,014.-002.

Dept. 1024. 3800 Ravenswood Ave., Chicago, Ill. Established 1905—Radio since 1920

An Open Letter to the Trade;

The most advanced ideas in AC Tube Merchandising—

NLY the survival of the fittest can expect to do business with radio jobbers and dealers. The makers of Royal AC Tubes are firmly entrenched, financially sound and are here to stay! Their message to you tells the story.

THE NATIONAL TUBE MANUFACTURERS, INC.

> 1890 East 40th Street Cleveland, Ohio



Tubes tested

Socket Position

COMPLETE KITS for the entire set



The National Tube Manufacturers, Inc.

if we simply had another tuber to introduce at this time and pronounced a comething unusual introduce at this time.

business that we could only be in the if our tuber were not a could survive the idding a conjustion of the interior at this time.

survive the idding a conjustive were not on petition for tube

Skilled engineers have been working on this one development radio business expend the attention or addo development and scientific men in the conference.



Busy Clerks mean Busy Cash Registers

OU 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 July's issue, which will contain a complete report of the big Radio Trade Show.

Clip here

The writing on the wall means something!



The answer to the prophecy of the experts is STENOLA radio cabinets! They are made of the finest materials by craftsmen long experienced in building good phonograph cabinets. You may be sure therefore of their exceptional beauty and high quality workmanship.

With the sale of every electric set is the opportunity to sell one of these beautiful Table or Console models. They are equipped with Radiola 100A loud speakers and are furnished in colors to match the set.

If you wish to assure yourself of a good profit from a fast selling line you will order a sample of each today! We know you will come back for a real shipment because to satisfy the popular demands means to sell STENOLA radio cabinets.



Model 61 for Radiola 18 List Price \$50 Including R.C.A. 100A Speaker

SUPREME IN TORE

PIONEERS IN RADIO CABINETS

STETTNER PHONOGRAPH CORPORATION

314-322 E. 75th St., New York City

Send to discounts in the prodes

The GAVITT High Power Cords and Cables,

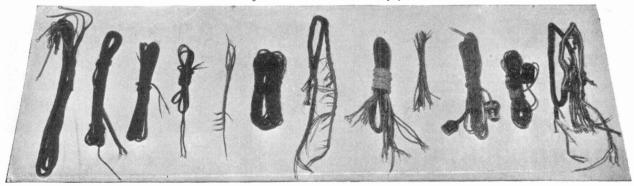
Moisture Proof, hence no loss of signal strength

Conductors are rubber covered and covered with high grade mercerized braid. Will stand rough usage.

Conductors are twisted, which does away with AC hum. Cord connector with each cord is shock proof. Cord tested for 7000 volts.

Jobbers and dealers, here is a GOOD Extension Cord. Made for high voltages to meet the new high tests. Ask us for our proposition. We want your business and will make you the right price.

We are advertising to the consumer to help you make sales.

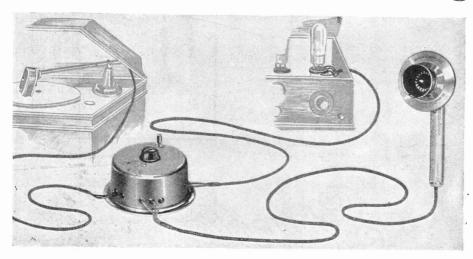


MANUFACTURERS, we not only give you quality but service. Assured deliveries thru the busy season. We are now serving most of the radio manufacturers of speakers and sets, in the East, with our cords and cables. We would like to quote you. Please write us.

GAVITT MFG. CO., Brookfield, Mass.

Radio Dealers

TALK through the Radio you are demonstrating



HERE'S a way of injecting your own sales personality into every radio demonstration.

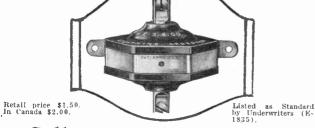
With the Wonderphone Announcer you can cut in on any radio or phonograph selection to inject your sales story—a decided advantage in capitalizing on the demonstrating effect of any set or phonograph, especially when a crowd is collected in front of your store listening attentively.

Let us send complete details of this novel device that will give a selling advantage over your competitors. A card will do.

Universal High Power Telephone Company

6401 Carleton Ave., Seattle, Wash.





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 Bake-lite and heavy brass and provides maximum protection always. It is reliable, sale 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

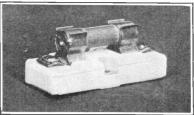


Senior Electric Compact or De Luxe Junior "7" Electric Compact or De Luxe

Franchise to reliable dealers only. Now opening up agencies for the conversion of battery sets to true A. C. electrics. Write for details.

THE LANGBEIN-KAUFMAN RADIO CO., Dept. M. 62 Franklin St., New Haven, Conn.

The BACO Voltage Reducer



The life of the AC tubes is prolonged 80% with a BACO Voltage Reducer. It reduces service calls and that means satisfied customers.

Inasmuch as the dealer does not want headaches due to breakdown on the AC tubes which are being overtaxed, neither do the jobbers who replace the tubes for the dealers want this burden on their shoulders. The BACO Voltage Reducers are made in 2 sizes. The number 1 is the size of a 30 Ampere cartridge fuse, and it is recommended for use in AC sets, where the line voltage rises to 120 volts. The number 2 is the size of a 60 Ampere cartridge fuse and should be used where the line voltage rises from 120 volts and up.

They can be placed inside or outside of sets, making a very compact job and controlling the entire bank of AC tubes with the proper size BACO Voltage Reducer. For Futher Information Call or Write to

Phone

BACO ENGINEERING COMPANY Engineering Ingersoll 1433

1341 Flatbush Avenue, BROOKLYN, N, Y.

BERGUMENTERING COMPANY Engineering 1341 Flatbush Avenue, BROOKLYN, N, Y.

NEW Designs by UDELL





NEW and unique radio cabinets bearing this famous name will be displayed in Booth 142 and Room 553, Hotel Stevens, at the R. M. A. Show, June 11-15.

H. T. Griffith and Ralph D. Morris, direct factory representatives, in constant attendance

THE UDELL WORKS, Inc.

28th STREET at BARNES AVENUE, · INDIANAPOLIS



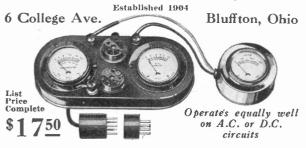
UNIVERSAL TEST SET

Tests A.C. and D.C. Circuits

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





DECATUR

NEW MODEL

Enclosed Power Speaker

Companion of the Power Tube for Clarity and Volume Reception

Reasons Why Jobbers and
Dealers will handle this
Exquisite Speaker

- 1. Most Artistic Design.
- 2. Superior Tonal Quality.
- 3. Greatest Eye and Ear Value.
- 4. Most Profitable
 Speaker to Handle
 Resulting in—
- 5. Easiest Speaker to Sell!

Prove it for yourself—See and hear the Decatur on exhibition at the Stevens Hotel, during the Chicago Radio Show.



Decatur Manufacturing Co., Inc. 45 Harman St. Brooklyn, N. Y.



SYMBOL OF ONE OF **GRAND RAPIDS'** OLDEST AND MOST **FAVORABLY KNOWN MANUFACTURERS** OF QUALITY **FURNITURE**

The addition of radio to our regular furniture line lowers our operating ex-penses and you will be agreeably impressed by our prices.

THE

GRAND RAPIDS FURNITURE CO.

OF

GRAND RAPIDS, MICHIGAN

"The Furniture Capital of America"

has seen fit to enter the Radio Furniture Field.

The novelty age in Radio is past, permanence marks the trend in present day receiving sets. Greater in first cost to be sure, but beautiful, natural toned, and purchased for years of use.

SUPERB CABINET CREATIONS

to house modern receivers; cabinets true to Period Art constructed and finished for permanent home adornment —built by craftsmen who have never learned to slight. These are our offering to the trade.

SEE THE ENTIRE LINE AT RMA TRADE SHOW. BOOTH No. 72, ROOM No. 526A, STEVENS HOTEL.



This is the product-judge its sales merits yourself:-

An adapter plug that slips into the detector tube socket of any radio set, with a long extension cord that reaches into another room or closet, where you talk into a microphone and broadcast via the loudspeaker. Get some friends together, tune in on your favorite station, ease out of the room, to the Broadcaster microphone, and at an opportune moment, simply press the switch button, automatically cutting off radio reception—and nake a station announcement from Paris or Shanghai, give a wrong time signal, make some littimate remarks about your friends—say anything! Then release the button and let the program continue. It fools everybody!

and sells in a steady stream whereever it is displayed.

The Home Broadcaster can be left permanently connected to the set as it will not interfere with radio reception. It is absolutely noiseless and will give clear and undistorted reproduction. It is small, light and compact and can be easily slipped into the pocket to be taken to a party. It is unnecessary to change any of the set wiring or make changes in the battery connections.

Type UX, for sets using 4-prong Detector Tubes.

Write for descriptive circular. List Price \$7.50 Complete

Type AC, for sets using 5-prong Detector Tubes.

BROOKLYN METAL STAMPING CORP. 728 Atlantic Ave., Brooklyn, N. Y.

See our Exhibit at Chicago Trade Show, Booth No. 146 MANAGAP SANTATAN NA TANING NA

AER-O-LAC

The only correct dope for Cloth and Cone Speakers

Waterproof—can be used for coating CASES RADIO AND SOLES preventing electrical losses. Beautiful gloss finish. This Lacquer is the STANDARD for all first class speakers.



Any size containers from ½ pints to 50 Gal. drums. Any Color Bronze. Gold, Silver, Atuminum and clear. Ready for use.

Distributors: D. X. Electrical Prod. Corp., 25 Church St., N. Y. Manufacturers:
HENRY V. WALKER CO., 17 John Street, N. Y.



Universal A.C. - D.C. Kwiktest

—checks every make and model of tube or set speedily and accurately. Anyone can operate it saving hours on all "trouble bunting" jobs. Universal Kwiktest in your shop means more money in you pocket. Let us tell you why! Descriptive Litera-ture Free,

Write America's pio-nics tester manufac-turers, KWIKTEST

Radio Laboratory 82 Alfred St., Detroit, Mich.

The MOST POWERFUL INSIDE ANTENNAE — and the most profit for you



"The Nymph"

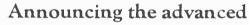
FFARSEE Antennae sell fast—their beauty attracts, their performance cinches the sale. And there's more profit to the dealer than in four or five sales of wire aerials.

The Effarsee is the most powerful inside aerial—demonstrations prove it! They're ideal for summer sales—cut down static hung as easy as a picture—or the plain Effarsee can be put under a rug or rolled up in a corner! Also unequalled for short waves. Illinois radio station reports loud speaker reception without atmospheric disturbance on 3-tube set from Buenos Aires, 32 meters; Berlin, 27 meters; London, 26 meters; day and night with small EFFARSEE.

Stock them today-watch the sales speed up and your profits mount-Effarsees are in demand everywhere-get your share of the profits. Plain panels \$2.50 and \$4.00, Art panels, \$9.50. Write or wire to day.

THE FISHWICK RADIO COMPANY

S. E. CORNER CENTRAL PARKWAY AND ELM STREET, CINCINNATI, OHIO







tubes. Add 5% West of

See it at the Chicago Show JUNE 11-15

Eighteen years of diligent manufacturing activities are back of the exceptional performance so apparent in the NEW APEX ALL-ELECTRIC NEUTRODYNE. This advanced set represents one of the greatest values in the RADIO field today—it means enormous sales and good profits for every dealer who is progressive enough to see the great possibilities of the APEX Receiver.

great possibilities of the APEX Receiver. This genuine NEUTRODYNE has self-contained and highly-perfected power-pack. Employs six tubes, plus one rectifier. Only one tuning-knob. Illuminated dial. Metal cabinet of attractive walnut finish. Greater distance and selectivity than many high-priced sets. Has a deep, mellow and natural tone. Easiest set to operate.



See the APEX at the Radio Manufacturers' Association Trade Show—Booth B-87, Grand Ball Room, Stevens Hotel, Chicago, June 11th to 15th inclusive.

Apex Electric Mfg. Co. Dept. A., 1410 W. 59th St., Chicago

Gentlemen:

Gentlemen: I am interested in an APEX franchise and would like to receive com-plete details relative to same.

NAME. STREET

CITY.

YANKEE

Tube Tester and Rejuvenator



New and Better•

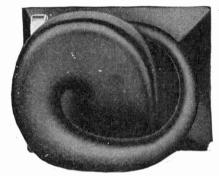
YANKEE Tube Tester and Rejuvenator No. S-550 is désigned to test practically all of the various tubes in general use . . . AC and DC. Its rejuvenating principle is simple and effective. As a combination and effective. As a combination Tester and Rejuvenator, it fills a long-felt want of the Service Man.

This instrument has been tested and is recommended by leading radio engineers. Ask your jobber for fur-ther details, or write us direct.

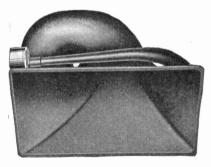
Lundquist Tool & Mfg. Company 144 Green St., Worcester, Mass.

A UTAH EXPONENTIAL HORN

for every style and size of cabinet



Series 500 (Back View) An extremely efficient Air Column Horn for Radio Furniture



Series 1000 (General View) A popular number for use in Phonograph Cabinets



Jumbo and Junior Orchestra Horn (Front View). A popular member for theatres

UTAHAIR
COLUMN HORNS
are scientifically
built to provide the
most efficient and
longest air column
in smallest space.

Pecial process and
construction protected by patents of
Kersten Radio
Equipment Co., Nos.
1,666,571, 1,666,570
1,639,656, 73,184.

Lightness and ruggedness are special Utah features. Equipped with Utah Tripod Unit they handle efficiently without vibration the output of largest power amplifiers, as well as the weakest impulse from distant stations. Over 200 sizes — special models for individual requirements.

Send for complete catalog

UTAH RADIO PRODUCTS CO.

1615 South Michigan Avenue Chicago, Illinois

DEPENDABLE COIL SERVICE for Radio Manufacturers

Battery Charger Coils
Eliminator Chokes and
Transformer Coils
Coils for Loudspeakers
Audio Transformers and
Impedance Amplifiers
Honeycomb Inductances

Send us your specifications for our quotation and shipping date. Service prompt.



UNIVERSAL WINDING CO.

PROVIDENCE, R.I.

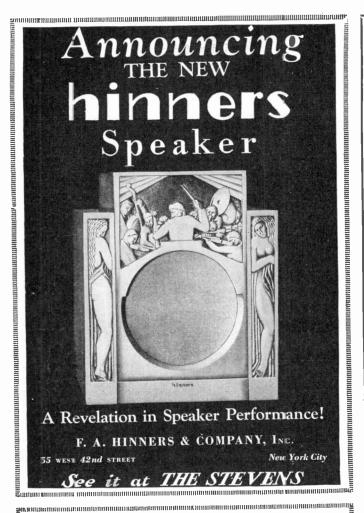
Business Wants

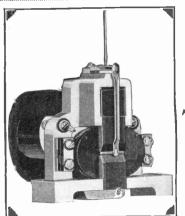
HE Searchlight Section of this paper represents a meeting place for men and concerns who have immediate business "wants" to fill—the section covers

Agencies Wanted Agents Wanted Books and Periodicals Business Opportunities Civil Service Opportunities Contracts Wanted Desk Room for Rent or Wanted Educational Employment Agencies Employment Service Foreign Business For Exchange For Rent For Sale Franchises Labor Bureaus Miscellaneous Wants

New Industries Wanted
Office Space for Rent or Wanted
Partners Wanted
Patent Attorneys
Patents for Sale
Plants for Sale
Positions Vacant
Positions Wanted
Property for Sale
Representatives Wanted
Salesmen Available
Salesmen Wanted
Spare Time Work Wanted
Sub-Contracts Wanted
Tutoring
Vacation Work Wanted
Work Wanted
Work Wanted

"SEARCHLIGHT"







TheB.B.L. MOTOR

Mfg'd Under Patent No. 1,667,531

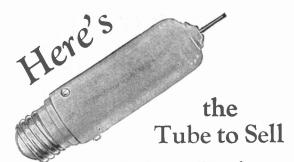
This improved type motor has been designed by engineers of B. B. Laboratories, Inc., and is widely recognized for its wonderful results in loud speaker work. The armature has a large cross section area 1/16 in. x 5/8 in., therefore it handles power without saturation. It is short to reduce moment of inertia. Its width is ten times its thickness to reduce eddy current losses. The laminated pole pieces are cast integral with the frame, assuring permanent adjustment and special testing methods insure the uniformity of the product.

Manufactured and Guaranteed by

BEST MANUFACTURING CO. 1200 GROVE STREET IRVINGTON, N. J.

See Us at Chicago Radio Show, Booth No. 14

Demonstration Room 451



Indestructible—b on e dry—long life. Can be used in all chargers for Trickle or 2 ampere service. Guaranteed for one year.

Price \$4.00
Liberal discounts

Handy Trickle Boosters

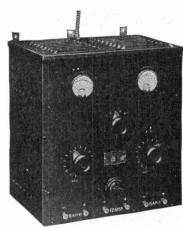
2 sizes



Both equipped with ammeters and Handy Dry Metallic Tubes.

List \$10.00 and \$14.00

Garage Type Chargers



Handy "Gang" chargers combine the advantages of the constant potential and series methods. Made in three sizes—6, 15 and 30 batteries, 6 and 12 ampere charging rates.

\$45.00, \$70.00, \$125.00

Write for discounts.

INTERSTATE ELECTRIC CO.

4339 DUNCAN AVENUE ST. LOUIS, MISSOURI

EARCHLIGHT

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:

REPRESENTATIVES WANTED

Salesmen

Manufacturer of the finest made radio batteries has opening for salesmen with following among radio jobbers and large retailers. We offer the right men a most attractive proposition and territorial protection. RW-72, Radio Retailing. Tenth Ave. at 36th St., New York.

Radio Accounts Desired by Chicago

Radio Accounts Desired by Unicago Manufacturers Agent
Calling on Jobbers and Radio Manufacturers in Chicago and surrounding territory.
Can give specialized sales effort on one or two lines of merit. Well arquainted—excellent references.

RA-71. Radio Retailing.
7 So. Dearborn St., Chicago

POSITION WANTED

RADIO ENGINEER

With broad experience in every phase of radio utility design, research and construction, desires a new connection. Graduate E. E., thoroughly seasoned; eight years' successful record in radio manufacturing. Executive ability and knowledge of market requirements. Original and practical ideas. Especially advanced in modern A. C. receivers and constituent parts. Will prove a valuable asset in design, manufacture or 'sales. Member I.R.E. A.I.E.E. Location Middle-West preferred. Splendid references and record of performance. Address

PW-73, Radio Retailing 7 So. Dearborn St., Chicago, Ill.

Dealers!!!

Send for our catalog of radio bargains.

Every item a real money-maker

AMERICAN SALES CO. 19-21 Warren St., New York City

WANTED

Unlimited Spot Cash

For All Radio Surplus Parts, Sets and Also Radio Furniture

We are also interested in Majestic Eliminators A, B or Master B. No quantity too large. We pay cash. Will wire deposit; balance sight draft. Call, write or wire-

MR. GREENBERG

Cortlandt St. Radio Dealers Ass'n

Office, 79 Cortlandt St., N. Y.

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.

NICKEL SCRAP

WE PAY CASH

Write for Our Prices

PIONEER ALLOY PRODUCTS CO., 16601 Euclid Ave., Cleveland, Ohio

TO HELP YOU

GET WHATEVER YOU NEED

"Searchlight" Advertising

An Announcement:

Radio Merchandise Bargains

The five following pages list bargains in radio merchandise—the products of many nationally known manufacturers—which the advertisers are able to offer at a tremendous reduction on the original list price because of unusual trade conditions. We are assured that, while all these We are assured that, while all these items have wonderful value at the prices quoted, the latter do not represent cuts in prices on the current products of these manufacturers. No advertising of such character will be accepted for these pages but-

Radio Retailing recognizes that bargain merchandise offers retail dealers many additional opportunities for sales and profit among some buyers and therefore hopes to have representative advertising of all the newest bargain offerings in its future issues. If you can handle these sales

WATCH the Searchlight Section of Radio Retailing for future bargain offerings.



here are real bargains (NATIONALLY ADVERTISED ITEMS) everyone a money maker!



UNI-RECTRON POWER AMPLIFIER

(Model AP-935)



As the Uni-Rectron stands it is a super power amplifier, which can be used in connection with any radio set and loud speaker. Binding posts are provided for input to the Uni-Rectron and output to a loud speaker. Requires no batteries for its operation. It obtains its power from the 110 volt. 60 cycle alternating current house lighting circuit. circuit.

Radiotron UX-210 and Rectron UX-216-B or 281 Tube are used with this Amplifier. All that is neces-sary is to insert the plug into a wall or lamp socket and the R.C.A. Uni-Rectron by means of the UX-216-B or UX-281 changes or recti-fies the current so that the correct



List Price \$88.50 each [without tubes] SPECIAL AT \$14.50 Ea. voltage will be delivered to the super-power amplifier tube, UX-210. The whole unit is enclosed in a metal cabinet which is small and compact and presents a good ap-

This super power amplifier cannot overload. From the faintest whisper to the loudest crash of sound — R.C.A. Uni-Rectron amplifies each note at its true value. High and note at its true value. High low notes are all treated alike.

Not only is its volume and quality a revelation but it lowers the cost of set operation, for when Uni-Rectron is used the drain on the batteries which operate the receiver is greatly reduced.

A. C. FILAMENT TRANSFORMER

(Model 413)

Supplies up to-six 226 tubes, one 227 tube, two 171-A tubes

This Scanlan A.C. Fliament Transformer fills a very definite existing need for an accurate and reliable Transformer. Used in conjunction with an A.C. Cable overload or heat up. Harness such as the Eby, Carter, Naald, Enterprise, Sterling, etc., which makes an ideal combination for converting battery sets No rewiring necessary. For 110-120 volts, to A.C. operation. 50-60 cycles A.C.

Green crackle finish case. Size overall 3 1/2 x 4 x 4.

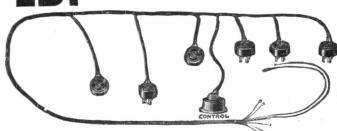
LOOK AT THESE **FEATURES!**

- Absolutely correct voltage.
 All voltages center tapped.
 "B" Eliminator Plug-In.
- Sturdy and Compact. Wire to panel switch,

List price \$9.00. SPECIAL AT



A. C. ADAPTER HARNESS with VOLUME CONTROL All Adapters have Mid-Tap resistances and can be



Two Universal Models

For 5 tube set—List \$9.00. OUR PRICE \$3.00 Ea. For 6 tube set—List \$10.00. OUR PRICE \$3.25 Ea.

used with A.C. Filament Transformers which are and are not center tapped.

The EBY A.C. Harness when used with any standard filament transformer will convert any D.C. set to A.C. operation. Designed for use with U.X. 226, U.Y. 227 and U.X. 171, or 112A, power tube.

The best Nationally Advertised Harness sold. Recommended by the following Transformer Manufacturers: Scanlan, Karas, Acme, Jefferson, Silver-Marshall, and many others.

Very simple to connect. No rewiring necessary on sets. Installation can be made in 10 minutes.

Use this in conjunction with the Scanlan A.C. Filament Transformers we are selling at a very attractive price and you will be able to convert a D.C. to A.C. set at very little cost.

Complete simple instructions packed with each Harness.

NEW **GOULD**

The New and Improved Gould Kathanode Unipower type AC-6k (6 volt). Automatic "A" Power Unit with built-in relax. Throws the charger on and off and controls a "B" battery Eliminator if one is to be used.

Eliminator if one is to be used.

Fundamentally different from any other automatic charging "A" power device on the market.

Its Kathanode construction insures longer life and is an exclusive patented feature being used by the U. S. Government in their submarine Batteries which are furnished by Gould. Its high capacity makes it especially adaptable to heavily worked or power tube sets.

Automatic Radio "A" Power



KATHANODE nıpower

Equipped with a new noiseless Balkite Charging Unit, which has four graduated charging rates and in addition one booster rate (1½ amps.), which always keeps the battery fully charged. Operates on 110-120 volt, 50-60 cycle A.C.

List Price \$39.50.

EXTRA SPECIAL \$10.25 Ea.

All units offered in this advertisement are BRAND NEW, packed in original factory sealed carton and fully guaranteed! TERMS: 20% cash with order, balance C. O. D. f.o.b., New York

AMERICAN SALES CO., 19-21 Warren St., NEW YORK CITY

"Send for our latest Bargain Catalog"

SEARCHLIGHT SECTION

TERMS: 20% Cash Must Accompany All Orders. Our terms are strictly Net Cash. Remarkable values and extreme discounts given by us make it worth while to buy that way. Where full cash remittance accompanies the order. 2% discount may be deducted, otherwise a 20% deposit is required with all orders, balance C.O.D. All goods are shipped F.O.B. New York.
RETURNING GOODS—We cannot accept goods for credit or exchange without our written authority. All goods returned must be prepaid. We will not accept returned merchandise C.O.P. Write fully reason for return and give us complete instructions regarding adjustment. Merchandise that is defective within the limits of the manufacturer's guarantee will be repaired or replaced Free of Charge. Items misused will be repaired or replaced and a reasonable charge made for such repairs.



BUTTERFLY SPEAKER

Beautifully hand colored. Gold embossed cone. Heavy duty unit. Ten feet of cord. List \$15.00.

Our Price \$4.85



SPIRIT OF ST. LOUIS SPEAKER

Satin Silver and Sea Green with Blue patchment cone. Holds up to 450 volts. Micrometer adjust-ment on unit. List \$12.50.

Our Price \$6.50



SUMMIT SPEAKER

Gold embossed cone, edged with silk braid. Heavy duty, moisture proof unit. Holds up to 400 Holds up to 400 volts. List \$12.50.

Our Price \$5.50



MELORAD SPEAKER

Cone mounted in artistic, mahogfinished frame. Metal base. Adjustable unit.

Our Price \$1.95



AMPLION CABINET
SPEAKER
Has new balanced armature
unit, the most scientific development in unit construction.
Beautiful cabinet. List \$35.
OUR PRICE \$9.50.

AMPLION LION SPEAKER List \$25.00

Our Price \$12.50



AEROPLANE SPEAKER

Includes—frame, aeroplane cloth, dope, apex, perfection unit, screws, tacks, instructions. Holds up to 600 volts.

Our Price (Kits) \$4.35



PAL-24 INCH SPEAKER

Reproduces the entire musical scale with absolute fidelity. Tilts to any angle. Can be used as wall speaker. Ornamental cone, silk edging. Pal heavy duty power unit. Also furnished mounted on 59-inch ornamental bronze pedestal.

Our Price (No Pedestal) \$7.50 Our Price (With Pedestal) \$11.25



PERFECTION UNIT

Tungsten steel magnet direct drive. Holds up to 600 volts. drive. Hold List \$6.50.

Our Price \$1.95

Amplion (All Bakelite) Adjust. Unit \$1.95

GRIMES GRADEON PICKUP \$3.50

THE TUDSON

\$100,000 worth of consoles, speakers, tubes, eliminators and mis-cellaneous parts and accessories, of-fered at prices as low as 75% off manufacturers list prices!



"PROTECTO" PLUGS

"PROTECTO" PLUGS
Prevent tube blow-outs in electric sets, from varying line voltages, by breaking circuit on voltage above 110. A wonderful device for dealers selling electric sets with 227 detector tube—eliminates lost time and money by preventing constant service calls for replacement of blown tubes. Order a dozen now—you'll soon want nore!

Our Price (per Doz.) \$14.25

VELVET CONCERT UNIT

One of the finest units on the market. Double pole magnet. Highly polished aluminum case. Six feet of cord. List \$9.00.

Our Price \$1.50

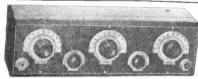




MELORAD ELECTRIC PHONOGRAPH REPRODUCER

Makes any phonograph a radio-actuated instrument. Includes - reproducer for tone arm, Melo-tector for detector socket of radio, Melo-trol for volume con-

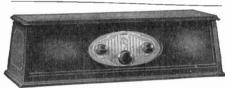
Our Price \$4.50



FRANKLIN COMPACT 5 TUBE SET

Bakelite front panel, sub-panel and knobs. UX typo sockets. Franklin transformers. Freshinjan type filament switch. Low Loss R. F. Colls. Pilot condensers. Etched metal dials. Braided wire cable. Solid mahogany cabinet.

Our Price \$13.75



VALLEYTONE 7 TUBE ELECTRIC SET

One dial. Marathon A.C. tubes, Four stages T.R.F.—selectivity, volume, distance. Operates on 110-120 volts. In original factory cartons with guarantee. As battery operated set, price \$29.50.

As Electric Set Our Price \$56.50



HUDSON TONE FILTER

Every electric set you sell should have this filter. Saves speaker from burning out. Prevents distortion and rattle, reduces drain on "B" batteries. List \$5.00.

Our Price \$1.65

YORKTOWN "B" ELIMINATOR

Delivers 45, 90, 135, 220 volts. Uses 280 Rectifier tube. Parts individually shielded. Unconditionally guar-

anteed.
Our Price (less tube)
\$12.50

Silver Beauty "A" Eliminator. List \$39.00.



HOW TO ORDER: Write plainly, sired, quantity and price. Be sure to include sufficient postage when ordering via Parcel Post otherwise shipment will be made by express, charges collect. It is not necessary to include transportation charges on express shipments as charges will be sent collect.

GUARANTEE: All Apparatus Sold by us every respect; and bear the usual factory guarantee.

Privilege of Examination can be sent collect.

guarantee.

Privilege of Examination can be requested on C.O.D. shipments and examination may be made before lifting the goods. Same must be requested in your order. C.O.D. shipments via Parcel Post are not subject to examination. Substitution of merchandise ordered will be made only with your permission if item offered is sold out.

SONATRON TUBES

Туре	Description	List	Our Price
2 amp.	Detector and Amp. Power Detector. Fower Amplifier Super Amplifier Detector and Amplifier New A.C. Amp. Tube. New A.C. Detec. Tube New Full Wave Rect. McCullough Type. Shield, Grid R.F. Amp. Raytheon Type Rect. Sonatron Rectifier Hepter Tube. Apex Rectifier Charger Buibs. Charger Buibs	\$1.50 4.00 3.00 2.25 2.50 5.00 4.50 7.50 8.00 4.50 4.50 4.00 8.00	\$0.75 2.00 1.50 1.50 1.125 2.50 2.25 3.25 4.00 2.25 3.25 3.25 1.50 2.40 4.10



Walnut finish; 43 in. high, 25 in. wide, 16 in. deep. Sliding shelf for set up to 8x21 in. Space for air column, aeroplane, or large cone speaker.

Our Price \$18.00



CONNERS CABINET

Crotch manogany: 45 in. high, 35 in. wide, 18 in. deep. Lid contains air column, built-in speaker. Thakes any set, panel to 10 in. x 31 in. Space for batteries, charger, eliminator. In original factory crates. Limited quantity.

Our Price \$16.50



ELECTRIC SET TABLE

For Atwater Kent and Crosley electric mahogany throughout. Packed in individual shipping cartons.

Our Price \$5.85



LYONS TABLE

Reautiful Burled Walnut Table. With Front Drop door, Ample room for Eliminators, batteries and accessories. Ornamental pulls. Size 17x34x30-in. high.

Our Price \$13.00



MARKO-PHONIC HORNS

Exponential types. Genuine, seamless, one piece, wood product. Scientifically designed. Type 501 (bottom) 11 in. high, 12 in. wide. 6 in. deep.

Our Price \$3.75

Type 502 (not illustrated) 13 in. hlgh, 22 in. wide, 12 in. deep.

Our Price \$5.25 Type 506 (top) $20\frac{1}{2}$ in, high, 25 in, wide, $13\frac{1}{2}$ in, deep.

Our Price \$8.75



VOLT METERS

No. 101. 0-50 volts, ea. 30c. Box of ten \$2.80.
No. 108. Volt-Ammeter, 50V-50A, ea. 62c. Box of ten \$6.00.
No. 116, Storage battery meter tester, ea. 35c. Box of ten \$3.20. No. 125, Combination A and B, ea. \$1.00. Box of ten \$9.50,



HUDSON RADIO CO., 16 Hudson St., N. Y. C.

Write for circular containing our complete line.

Phone: Whitehall 9052 or Wire at Our Expense



Make QUICK SALES with GOOD PROFIT on this up-to-date Radio Merchandise!

FEDERAL ORTHO-SONIC (Model C 30)

7-Tube - 2-Dial

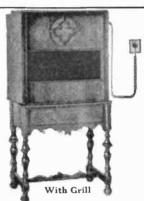


7-Tube — 2-Dial
Completely shielded chassis, a bear for distance, remarkable volume, built-in loop—some set! Can be used for battery or eliminator operation. Federal adjustable speaker built-in cabinet. The design of this speaker is such as to blend and soften the cabinet lines, producing a most harmonious result. Liberal space for sound amplification is provided, allowing the user to enjoy to the full the Ortho-sonic reception. Length, 36 inches; height, 23 inches; depth, 18 inches.

List Price \$300 **OUR PRICE ONLY \$42.50**







CHEVALIER CONSOLES

Set space takes from a 3 tube set to a Stromberg-Carlson The Chevalier is the latest design in a beautiful Burl Walnut High Boy model. Its lines are graceful and the smooth silky finish with the natural wood grains showing give it an appearance found only in the finest furniture.

Open or closed this model is a charming addition to any home. The front panel is finished to match the cabinet.

OUR PRICE \$17.50

Peerless Cone Chasis can be supplied extra



DAYROYAL CONSOLES

Reautiful genuine mahogany combination desk and radio console with built-Amplion speaker. Fits Atwater Kent, Crosley and other standard makes

List Price \$150

OUR PRICE ONLY \$17.50

KING ELECTRIC SETS (7 TUBE)



OUR PRICE ONLY \$57.50

A real 1929 electric set, built in one cabinet—(no additional power packs, no water or solution). Set uses, four 226, one 210, one 199 and one 281 tube. This is the best value you will ever be able to buy—a sample will convince you! King is an R.C.A. license.

List Price \$225

A.C. DAYTON

ALL-ELECTRIC AND BATTERY SETS! "The Ultimate Development in A.C. Operation"

Unexcelled volume and range. Full well-rounded tones. Chassis enclosed in an aluminum case. Each coll separately shielded. Entire mechanism enclosed. All models are of the same dimensions—23 % in. long by 12 in. high by 15 in. deep—in beautiful artistically designed, heavy mahogany cabinets.



List Price without tubes \$165

Model XL-50, Battery Model List Price \$89.00.

OUR PRICE \$18.50

Model XL-60 Standard fo Battery or Socket Operation Six tubes, three stages T.R.F., detector, and two stages A.F. amplification. One dial control. Provided with additional "B" and "C" battery connections for using 135 or 180 volt power tube.

List Price \$115



List Price \$177

KING **CONSOLES**

Beautiful mahogany finish. Takes any set up to 7x18 inches perfect for Crosley or Atwater Kent. Equipped with built-in

OUR PRICE \$12.00



Six tubes. One dial control. Electric socket operation with power pack. Complete set and power pack enclosed in heavy mahogany cabinet.

OUR PRICE \$39.00



OUR PRICE \$22.50

Model XL-70 Standard for Battery or Socket Operation

Dattery or Socket Operation
Seven tubes, two dial control.
Four stages of T.R.F., detector,
and two stages of A.F. amplification. A real powerful set designed for clarity and distance.
Surpasses any battery set sold
today!

OUR PRICE \$27.50



VOGUE SPEAKERS



Model 8 List Price \$19.50 **OUR PRICE** \$4.50

Model 10 List Price \$26.00 OUR PRICE \$5.00

Model 12 List Price \$30.00 OUR PRICE \$6.00

20 PER CENT CASH WITH ALL **ORDERS** BALANCE C.O.D.



RADIO CABINETS

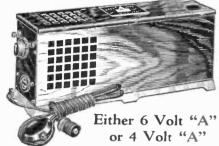
Imitation mahogany and walnut finishes. Fit any size

OUR PRICE \$9.75



BUY RIGHT AND YOU CAN SELL RIGHT

The items shown here are all standard, high grade merchandise. You know these products, but did you ever meet such prices. These bargains are only a sample of the values we can give you. Let's get acquainted. We can save you money and increase your profits.



LIST PRICE \$39.50 OUR PRICE

\$11.90

4 Volt Unit is specially adapted for use in all Radiola Cabinets.

"SILVER BEAUTY" "A" POWER

Replaces "A" Batteries and Chargers

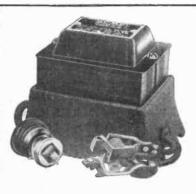
Has full wave "dry" rectification. Maintains required voltage in uniform constant flow. Operates automatically by moving a switch. Economical—uses minimum amount of current (about 1/10 cost of using electric iron). Operates only when set is in use rheostat control for additional refinement in voltage and reception. Gives maximum power to radio tubes, and lengthens their life. No acids to test or spill. Satisfactory results guaranteed. The 110 volts Alternating Current is scientifically reduced with the famous "Silver Beauty" transformer coil to deliver the proper voltage to an especially developed dry, noiseless rectifier, which transforms the electricity to direct current. This current, of exact voltage, is then transmitted through a patented special filter which clarifies the current, eliminating all foreign noises caused by rectifier or generator. The filtered output is a perfect, silent Direct Current 6 volt or 4 volt capacity with proper ampere strength. Has receptable for attaching the Silver Beauty "B" eliminators. The Silver Beauty "A" power unit is considered by experts to be the supreme achievement in "A eliminators



ACME E-4 180 Volt "B" ELIMINATOR

Our Price

List Price. \$14.90

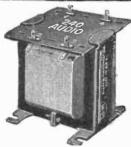


ACME

21 or 5 Ampere CHARGER

Can be used with Elkon Rectifier. Price, each

\$1.00



SILVER **MARSHALL AUDIO**

\$7.25 No. 241 List \$5.00

\$2.70 No. 240 List \$6.00

Push Pull Transformer Per Pair \$6.30



ACME K3 **CONE SPEAKER**

List \$14.50 \$4.90

ACME AUDIO TRANSFORMERS

List, \$3.00

\$1.10

STROMBERG-CARLSON **AUDIO TRANSFORMERS**

List \$4.50 Our Price

\$1.50

STROMBERG-CARLSON PHONOGRAPH AND LOUD SPEAKER REPRODUCING UNIT

\$3.29 List \$7.50 Our Price

"B" BLOCKS FOR **THORDARSON** 171 COMPACT

List \$15.00 \$3.60 Our Price

Write for many other bargains too numerous to mention in this limited advertisement. A 20% deposit must accompany all orders.

BELDEN FUSED **BATTERY CABLES** 5 AND 7 WIRE

25° Each List \$1.65 \$23.00 PER HUNDRED

RAWNER RADIO & TELEVISION CO.

Surplus Radio and Television Supplies

142 Liberty Street, NEW YORK CITY

Special Removal Sale

RADIO CIRCULAR COMPANY'S

BARGAIN BULLETIN

225 VARICK ST., NEW YORK CITY

Vol. 4, No. 5

JUNE, 1928

TO DEALERS ONLY

Extra 10% Discount on All Merchandise During Month of June!

Every Radio Dealer in the country should avail himself of this unusual opportunity to purchase standard radio merchandise on which quick turnover with good profits can be made. We are offering our entire stock at an extra 10% discount during the month of June ONLY, to commemorate our removal to larger quarters at 225 Varick Street, New York City. This advertisement lists only a few of the hundreds of nationally known items we offer during this special sale at prices of 60% to 80% off list,—don't fail to send for our June Bargain Bulletin containing all the radio merchandise we offer, with complete descriptions, illustrations and SACRIFICE PRICES! Write for it now—send your order—get first choice of these bargains!



SOME REPRESENTATIVE ITEMS OFFERED IN THIS SPECIAL SALE

Sets-

From \$12.50 each up

Kolster 7-A Kolster 7-B Kolster 8-A Kolster 8-B Kolster 8-C Murdock Neutrodyne, Splitdorf Abbey

Federal B-20 and B-30 Freed Eisemann FE-10

Speakers—

Freed Eisemann Cone Brandeis Cone Brandeis Type H Vogue 8, 10, 12 Music Master

Miscellaneous—

A Power.
B Eliminators
Phonograph Units
Trickle Chargers
Tubes
Radio Furniture
Consoles

10% Special Extra discount during June.

Radio Circular Company, Inc.

225 Varick St., New York City, N. Y.

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