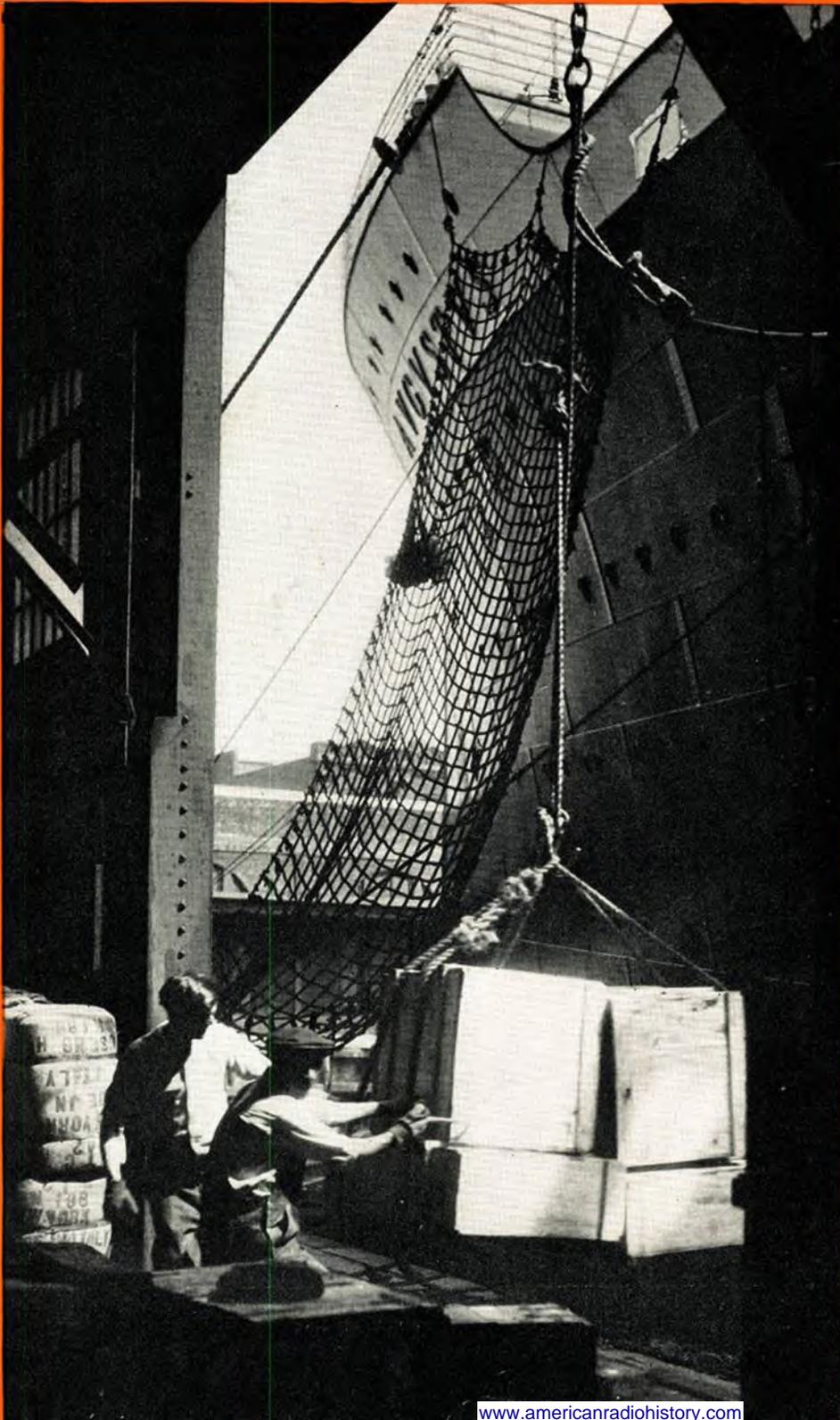


RADIO RETAILING

HOME ENTERTAINMENT MERCHANDISING



**RADIO
In Export
Markets and
In the U.S.A.**



THESE MEN...

STEER THEIR OWN SHIP

THE major portion of the stock of the Hygrade Sylvania Corporation is owned by the same men who manage and control the business.

These men have skillfully steered their own ship during some of the most difficult years ever known in the radio industry. They have kept on their course in spite of storms.

To-day the Hygrade Sylvania Corporation makes more tubes for original set equipment than any other manufacturer.

The company has shown constantly increasing financial and dealer strength during 1930, 1931, and 1932. Its credit rating is AAA. Its three large factories have a capacity of over 100,000 tubes a day.

Hygrade Sylvania engineers have pioneered in the technical field. They stand ready to help the set manufacturer solve his selling and production problems.

Hygrade Sylvania has advertised consistently over the air. The popular Frank Luther musical program brings thousands of requests for Sylvania's educational booklet. Dealers who carry Sylvania Tubes get full support, both from this national selling pressure and from the fine quality of Sylvania Tubes themselves. To them "management-owned" is more than a phrase. It is a guarantee of full cooperation . . . fair policies . . . at every point! . . . The Hygrade Sylvania Corporation, Sylvania Division, Emporium, Penna.

Sylvania

(Reg. U. S. Pat. Off.)

THE SET-TESTED  RADIO TUBE

Radio Retailing. December, 1932. Vol. 16, No. 6. Published monthly. McGraw-Hill Publishing Company, Inc., 330 West Forty-second Street, New York, N. Y. \$2 per year. 25 cents per copy. Central and South American countries, \$3. Foreign, \$3, U. S. Currency, or 15 shillings. Canada (including Canadian duty), \$2.50. Entered as second-class matter April 10, 1925, at the Post Office at New York, N. Y., under the Act of March 3, 1879. Printed in U. S. A.

THE NEW *Emerson* UNIVERSAL COMPACT RADIO IS GETTING A "BIG HAND" *from Important Radio Merchandisers!*

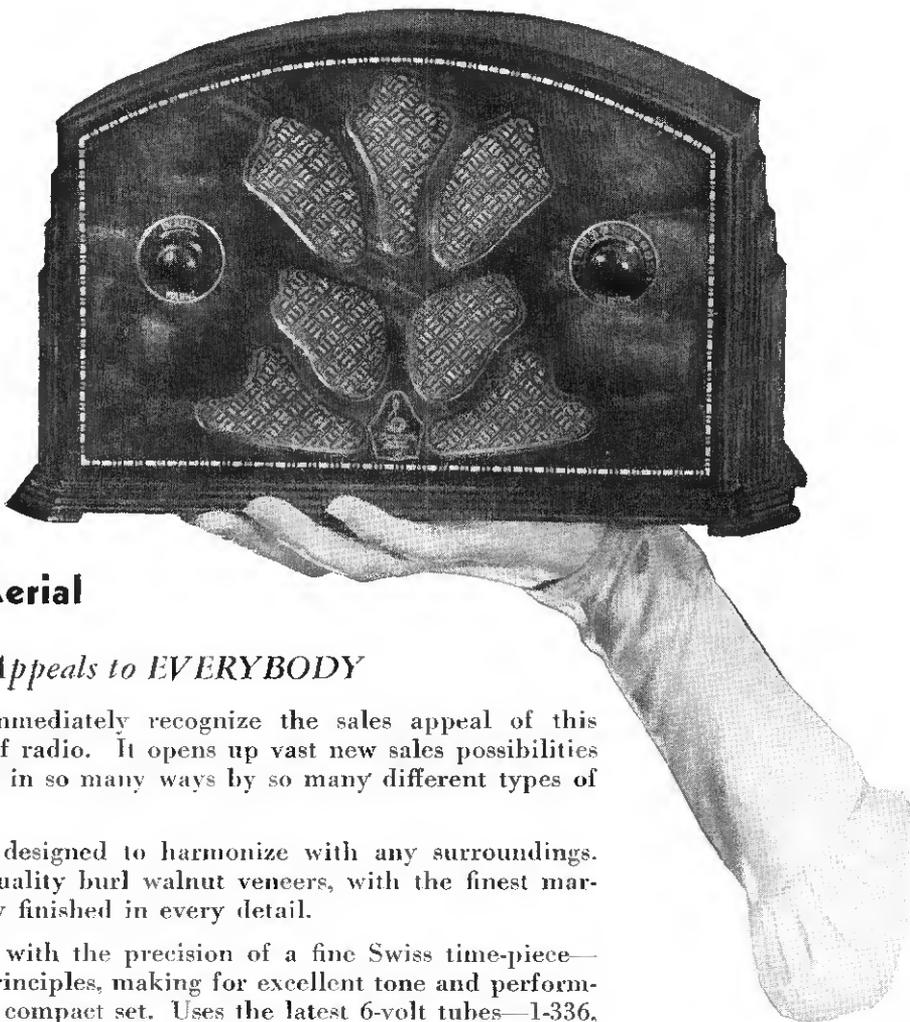
Operates from Any
Lamp Socket - -

Uses **EITHER**
AC. or D.C. Current

110 Volts — 25 to 60 Cycles

SIZE: 10" wide, 6½" high, 4½" deep

Weighs only 6 pounds.



\$25 Retail Price—
COMPLETE
with Cunn-
ham Tubes and Built-in Aerial

Can be used ANYWHERE — Appeals to EVERYBODY

Keen radio buyers immediately recognize the sales appeal of this sensational new type of radio. It opens up vast new sales possibilities because it can be used in so many ways by so many different types of people.

The exquisite case is designed to harmonize with any surroundings. Built of the highest quality burl walnut veneers, with the finest marquetry inlay—perfectly finished in every detail.

The chassis—designed with the precision of a fine Swiss time-piece—utilizes entirely new principles, making for excellent tone and performance in this amazingly compact set. Uses the latest 6-volt tubes—1-336, 1-337, 1-338, 1-339.



REMEMBER—on this Set . . . as well as on all Emerson merchandise . . . you as a dealer are assured of a **SUBSTANTIAL PROFIT MARGIN**. This is no "come-on". It is a real value, carrying full discount.

DEALERS and JOBBERS—rush your order—deliveries begin at once. TAKE ADVANTAGE OF THE TREMENDOUS HOLIDAY BUSINESS THAT IS POSSIBLE WITH THE EMERSON UNIVERSAL COMPACT.

EMERSON presents the most complete LOW PRICED, HIGH QUALITY, FULL PROFIT Line of Midget Radio Sets and Chassis—consisting of Four, Five, Seven and Ten-Tube Models . . . A.C. and D.C. . . . TRF and Superheterodyne Circuits . . . and Models embodying such outstanding features as "Class B" Amplification—Shadowgraph Tuning—Automatic

Volume Control—Noise Suppressor—Twin Speakers . . . embracing a variety of styles and designs in Cabinets—Compact, Gothic, Radio-Chest type.

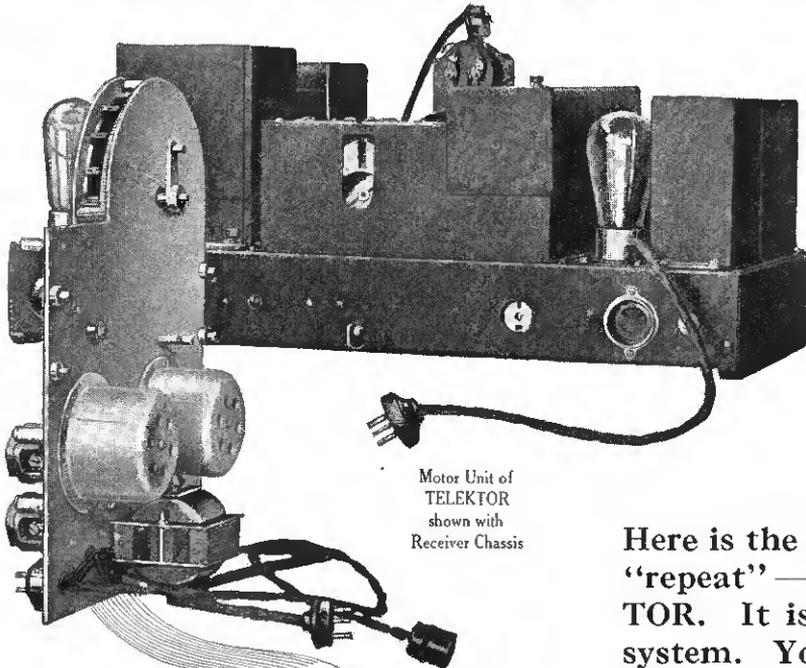
Other EMERSON MODELS ranging in list price from
\$16⁷⁵ to \$39⁵⁰
All Models complete with Cunningham Tubes—
R.C.A. Licensed.

For the Export Trade—Special Models designed to operate
on Wave Lengths from 75 to 550 Meters and 200 to 2,000
Meters.

Write for our Catalog and full particulars

EMERSON RADIO & PHONOGRAPH CORPORATION
641 SIXTH AVENUE (Telephone: WAtkins 9-2264) NEW YORK, N. Y.

THIS HAS WHAT RADIO LACKS— "REPEAT" SALES



Motor Unit of
TELEKTOR
shown with
Receiver Chassis

EVERY dealer has felt the lack of "repeat" business in radio. Tubes and repair work help, but not enough.

Here is the only thing in radio with *real* "repeat" — Stromberg-Carlson TELEKTOR. It is a complete audio program system. You start a customer by selling him a TELEKTOR Radio; then he becomes an immediate prospect for the Motor Unit and Control Box—this gives him the beginning of a TELEKTOR system and he gradually extends the system to various rooms in his house through the purchase of additional Reproducers and Control Boxes.

And TELEKTOR is so fascinating . . . its lure is so great . . . that it becomes the most powerful help a salesman can have to raise his prospect up not only to one profitable sale, but a series of profitable sales.



Control Box
of
TELEKTOR



"There is nothing finer than
a Stromberg-Carlson"

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



1894

Stromberg-Carlson

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



1932

Blå AZZURRO Modry 藍
 AZZURRO Modry 藍
 Kuavoūv AZUL
 BLEU Kék blau
 藍 Albastru
 藍

**78 NATIONS ASK
 and only ONE Answer . .**

Blaa 藍
 Azul 藍
 藍
 藍



"How can we identify the BEST tube made"...asked the people of the earth. And in their score of different tongues, seventy-eight Nations unanimously answered . . . BLUE . . . the BLUE tube . . . ARCTURUS BLUE.

Indisputable PROOF of the outstanding superiority of Arcturus Blues lies, not alone in this POPULAR acclaim, but also in the fact that they are Standard Equipment with more set manufacturers than ANY OTHER tube.

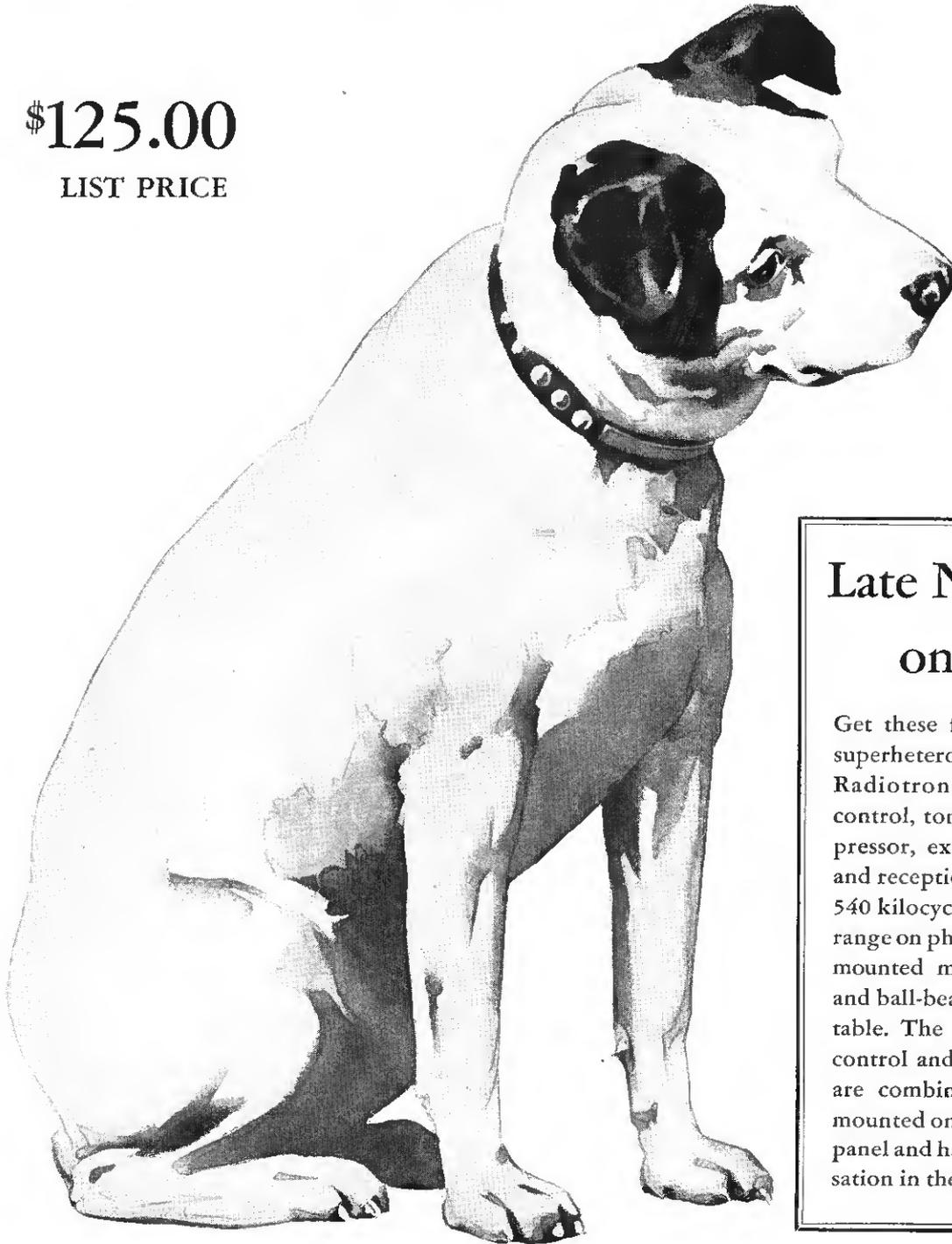
ARCTURUS BLUE

ARCTURUS RADIO TUBE CO. NEWARK, N. J.

Listen to this New

\$125.00

LIST PRICE



Late News Flash on RE-80

Get these features...8-tube full superheterodyne, with new type Radiotrons, automatic volume control, tone control, noise suppressor, extended tuning range and reception of signals down to 540 kilocycles, increased musical range on phonograph side, spring mounted metallic motor board and ball-bearing two-speed turntable. The phonograph volume control and radio record switch are combined in a single unit mounted on the radio instrument panel and has automatic compensation in the phonograph circuit.



RCA Victor

Combination Set!

everything in music...better tone than ever...*and at an unbelievably low price...* that's the short, sweet story on this new RCA Victor RE-80 Radio-Phonograph

We announce a new addition to the family...

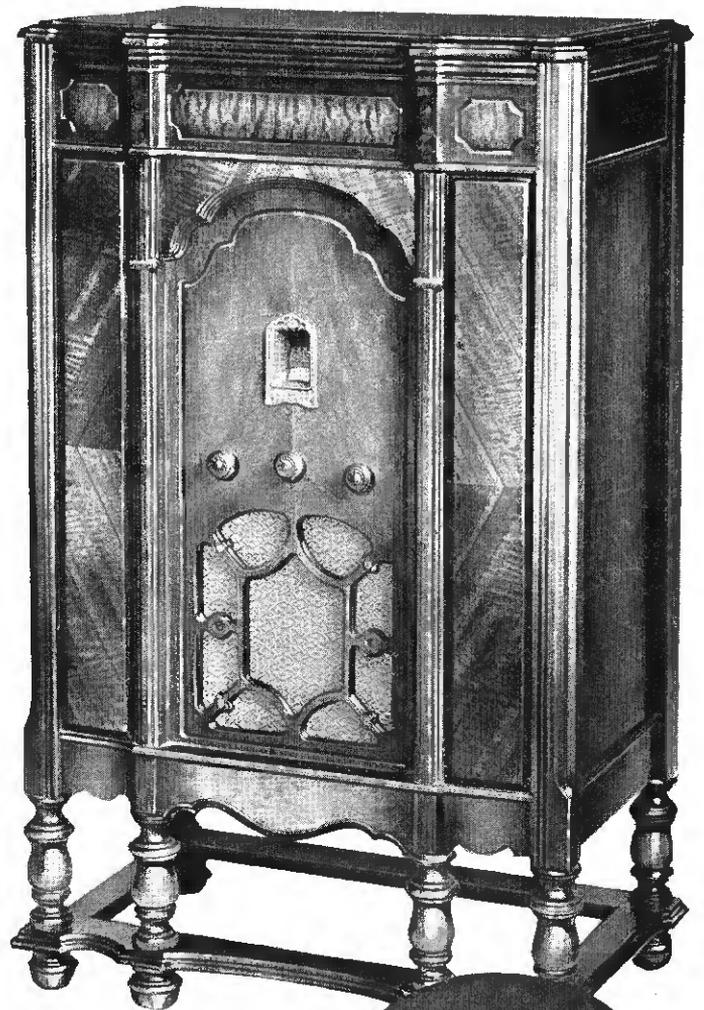
RE-80 Radio-Phonograph!

It's got everything the high priced sets have...tone, power, range and cabinet beauty!

It offers either radio or record music! It's got every other radio—in or out of its price class—*stopped!* Yet is listed at only \$125.00!

See and hear this new RE-80 at your distributor's right away. It's exactly the kind of a set your trade wants for holiday sales.

RCA Victor Co., INC.
"Radio Headquarters"
CAMDEN, NEW JERSEY, U. S. A.



Radio

Radios
Phonograph Combinations
Victor Records





THE PRIZE WINNERS IN THE EVEREADY RAYTHEON WINDOW-DISPLAY CONTEST

\$ 250.00
SECOND PRIZE WINNER

EARL MARKS
427 Union Avenue, N.
Portland, Oregon

\$ 500.00

FIRST PRIZE WINNER

CENTRAL ELECTRIC CO.
510 Locust Street
Des Moines, Iowa

\$ 150.00
THIRD PRIZE WINNER

ROY'S BROADWAY AUTO
SERVICE
1244 Broadway, Rockford, Illinois

THERE were exactly two hundred and thirty-five other prizes, ranging from \$50 to \$10, the winners of which have been notified of their good fortune.

Judges were: Maurice Clements, Manager, *Radio Retailing*; Carl L. Bixby, Editor, *Advertising Displays*; Frederick L. Wertz, President, Window Advertising, Inc.

The National Carbon Company, Inc., manufacturers of Eveready Four-pillar Tubes, congratulate all who took part in the contest, and thank every entrant for the lively interest shown.

There are prizes *in profits* to be won every day in the year by the dealer who handles Eveready Four-pillar Tubes. The four-pillar principle is exclusive with Eveready Raytheons, and is the difference between sure and insecure accuracy in the vital elements of a radio tube.

NATIONAL CARBON COMPANY, INC.

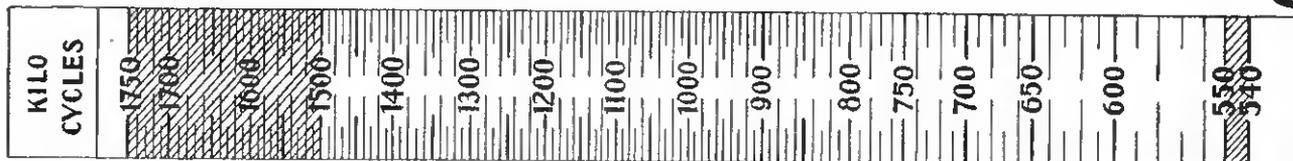
General Offices: New York, N. Y.

Branches: Chicago New York San Francisco

Unit of  and Carbon Corporation

EVEREADY RAYTHEON
4-PILLAR RADIO TUBES

Anticipating + + + Future Broadcasting



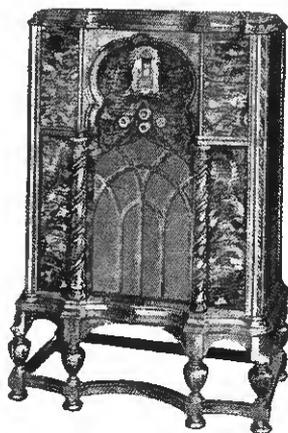
THE LENGTHENED WAVE BAND OF THE NEW ZENITH PERMITS TUNING 121 CHANNELS INSTEAD of the ORDINARY 95

NOT only everything that your customers expect in a modern radio today . . . but improvements

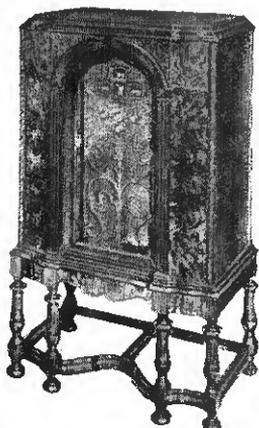
that anticipate tomorrow's developments! That's what the new 1933 Zenith offers.

For example, the lengthened wave band that runs from 540 to 1750 kilocycles rather than from the ordinary 550 to 1500 kilocycles. Gives access to 121 broadcast channels rather than the usual 95.

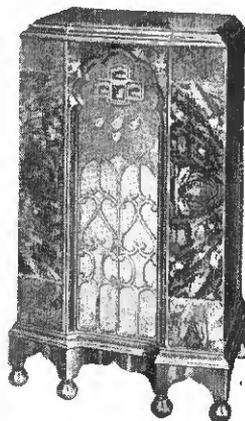
NEW MODELS . . . \$49.95 to \$184 Complete . . . Tax Paid



MODEL 245 . . . Lowest price ever for Zenith automatic tuning. Only \$102.50 (Complete with Zenith quality tubes . . . tax paid)



MODEL 430 . . . Never before have you been offered a radio equal to this new Zenith . . . Only \$166 (with Zenith quality tubes . . . tax paid)



MODEL 410 . . . New 7-Prong Tubes, every modern improvement . . . and only \$105 (tax paid . . . complete with Zenith quality tubes)

Right now, at the top of the dial, the new Zenith gets the Canadian station at Windsor; and at the bottom of the dial, the police signals.

It is said the Federal Radio Commission is seeking means of widening the broadcast band in the United States. When that happens, the Zenith that you sell today will get the new stations.

In view of what is coming, no radio buyer today should consider a set unless it covers radio frequencies from 540 to 1750 kilocycles. Sell *your* customers a set that does. Sell them the easy selling new Zenith. Get in touch with your Zenith distributor immediately.

ONLY IN THE NEW ALL-STAR ZENITH LINE CAN YOU GET ALL THESE FEATURES

- ★ New 7-Prong Power Tubes
- ★ Automatic Tuning . . . just press a button—there's your station
- ★ Longer Wave Band . . . police calls—new Canadian station
- ★ Shadowgraph Tuning
- ★ Visual Treble Tone Adjuster
- ★ Visual Volume Control
- ★ Catenary Tone-Volume Equalizer
- ★ Twin Dynamic Speakers
- ★ Auto Dash Type Escutcheon
- ★ Full Circle 8-Inch Logging Dial
- ★ Automatic Between-Station Noise Suppressor
- ★ Advanced Superheterodyne Circuit
- ★ Chassis floating in live rubber
- ★ Tone for a musical car, not a "radio car"
- ★ Dominant beauty in cabinets



A CHALLENGE . . . We challenge anyone to name a single demonstrable improvement in radio which is not found in the new Zenith 1933 line; and we further challenge anyone to name another radio line which contains all the improvements found in the new Zenith 1933 line

Export Dep't 3620 Iron Street, Chicago

U.S.A. Cable Address—"ZENITHRAD"

SOUND MERCHANDISING OR TEMPORARY STUNTS?

Every tube merchant today is faced with a choice between two methods of doing business. One leads to steady, legitimate profit—the other to continuous confusion.

WHERE DO YOU STAND?

Radio tubes represent an important **repeat** business. This business **should** be profitable. It has not been—due solely to the chaotic condition of prices and price cutting which has characterized the tube industry for the past few years.

To correct this situation—insofar as one important factor in the industry could do so—Tung-Sol put into effect its Consignment Plan of radio tube merchandising. This particular plan was adopted because it is the only plan which gives the manufacturer full control over his product until it reaches the consumer's hands.

Today there are 7,500 Tung-Sol agents operating under this plan throughout the country. Applications for several thousand more agencies are now under consideration.

In every case the Tung-Sol agent has registered complete satisfaction. As was expected, the plan has operated to stabilize retail prices, maintain legitimate profit, create consumer confidence in the price structure, and most important of all, to encourage merchandising on **sound principles** and to distract attention from all sorts of temporary stunts, designed to produce momentary volume at the expense of ultimate profit.

Tung-Sol invites you to consider your tube business in the light of the successful experience of 7,500 Tung-Sol agents, whose books will show a **good profit** on tube sales this year. Will yours show a profit that will satisfy **you**? If not, now is the time to turn to sound merchandising and forget "expediency merchandising"!

After all, it's the **profit** you make—not the volume of cut price business you transact (at little or no profit) that counts!



Atlanta
Baltimore
Boston
Charlotte
Chicago
Cleveland
Dallas
Detroit
Kansas City
Los Angeles
New York
St. Paul

TUNG-SOL RADIO TUBES, INC.
NEWARK, NEW JERSEY

RADIO RETAILING

HOME ENTERTAINMENT MERCHANDISING

O. H. CALDWELL, *Editor*

RAY V. SUTLIFFE, *Managing Editor*
W. W. MACDONALD, *Technical Editor*
T. H. PURINTON, *Assistant Editor*

M. E. HERRING, *Publishing Director*
HARRY PHILLIPS, *Art Director*
P. WOOTON, *Washington*

Consent Decree

Should Benefit ALL

OUT of the mists of the legal verbiage of the "consent decree," handed down in the R.C.A. case, there is coming a realization that the radio industry as a whole will be the gainer under the new conditions the decree sets up. Indeed, the court's action already has had the effect of clearing the atmosphere, and should eventually clean up trade practices which have held back radio prosperity.

Under the decree uncertainty is immediately ended and the operating status of the Radio Corporation is legally defined as little different from before, except in its ownership aspects. Applicants for licenses under radio patents may now apply either to R.C.A. or to the individual owners of the patents. No obligation attaches to any of the owners to grant the use of patents except to licensees deemed desirable.

But owners of radio patents will now be free to proceed against infringers, and to bring them to terms. Action along these lines may be expected to get underway shortly, and will have a salutary effect on unlicensed manufacturers who have been pulling down both quality and price levels to unprecedented lows. These irresponsibles have long been the thorns in the sides of responsible manufacturers doing a legitimate business and the blight of their unauthorized production has been felt throughout the whole radio trade. Now such conditions can be cleaned up.

MEANWHILE through its licensees' clearing-house the patent owning group has an opportunity to advise its licensees not only on technical matters but for mutual development of sound business principles. Too often radio manufacturers have planned their new lines without profit—and have expected the same principle to apply to the distribution of their products—with the disastrous results known to all.

Stabilization for the radio business is the great net gain that should come out of the consent decree. And the new set-up should free radio executives on all sides from legal worries and defensive complexes, leaving them to build constructively along technical and business lines toward radio's brighter future.



Hand in

Boss Harold Smith supervises set sales in the store at 18th and Columbia Road, N. W.

RADIO

PUBLIC ADDRESS kept me in business last year." This statement by the president of the Radio Merchant's Association, of Washington, D. C.—a man whose radio sales grossed \$396,000 in 1928; who has installed and serviced sets for such international figures as Wilson, Coolidge, Hoover, Davis, Mellon and Dawes—is indeed startling. For while Harold S. Smith's is not the largest store in the Capitol city it has been one of the most active since 1923, is happily managed, and more firmly entrenched than many.

Let's see what happened: Despite increased effort, volume downed sharply in 1929 from the preceding peak year in which new, electrified sets bloated the market. In 1930 sales receded still further and then, in 1931, the operation experienced its first actual loss when it optimistically budgeted for \$150,000 gross and fell \$35,000 short. This, following a two-year siege of lean pickings, would have been a serious blow had it not been for a clear \$6,000 profit realized on \$16,000 worth of public address business booked during the same period.

The danger has now passed. For Smith has trimmed his operating costs to a low level which insures a profit on the \$100,000 radio and public address business he will do this year. He has learned that elephantine volume does not always mean profit; nor modest volume, loss. And he is properly grateful to P.A. for aid rendered when it was sorely needed. It came through with unlooked-for gross, unsuspected net. And so, in the concern's handling of this commodity, there is a story.

By W. MacDonald

*Smith's \$115,000 radio year... But his public ad-
\$16,000, netted \$6,000,*

Four years ago a friend opened the then new Hoover Airport, asked if Smith could supply a radio with a powerful public address amplifier. Smith could, and did, buying Samson equipment (in which he has since specialized) especially for this rental. The amplifier was subsequently used around town in connection with other affairs but was looked upon at the time as a relatively unimportant sideline.

Then Smith had an idea. There were, he realized, many annual

fairs
festivals
pageants
carnivals and
race meets

out in the rural districts of Maryland, the Virginias and Carolinas, their permanent secretaries usually being hard put to it to provide sustaining entertainment at reasonable cost. Why, he thought, was it not practicable to specialize in the rental of complete entertainment equipment to these community functions? Action followed.

In the spring of the year this man succeeded in closing contracts with 28 out-of-town organizations to supply

PUBLIC ADDRESS

Employee Hugh Clayton sells sound equipment, even in the shadow of the nation's capitol

Hand

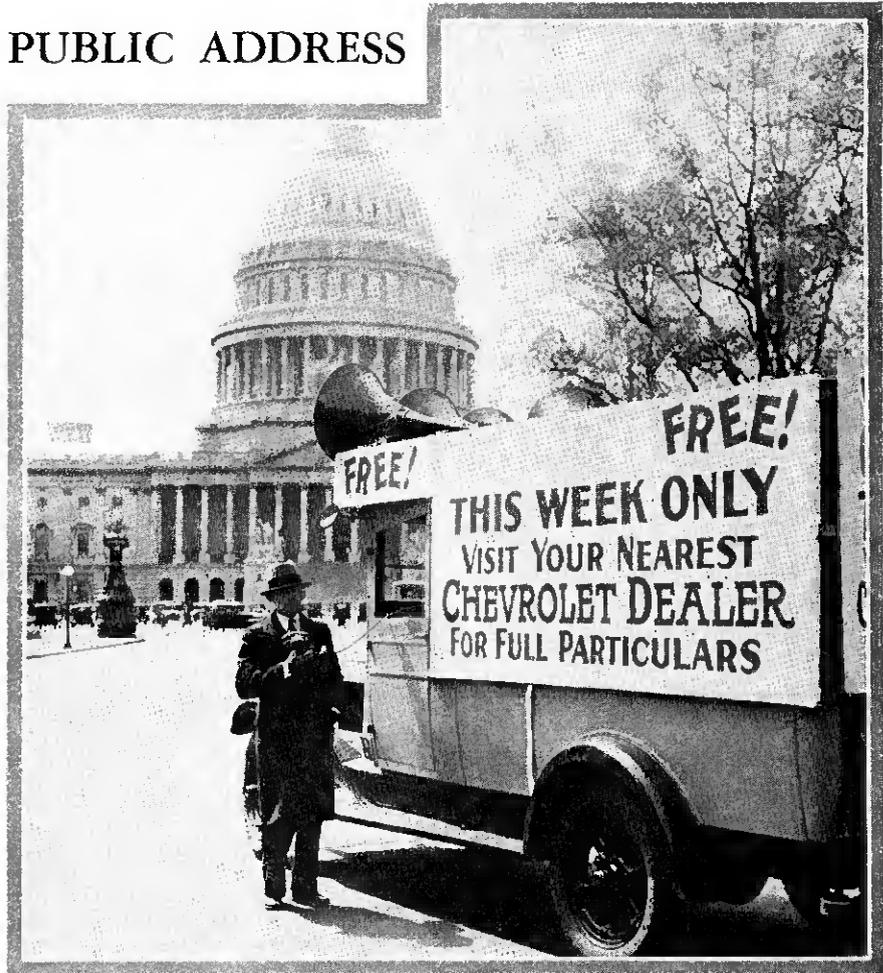
business went "sour" last dress department grossed preventing serious loss

equipment at from \$300 to \$500 per four-day stand, the fee depending upon the nature of service required.

A public address department was formed, incorporated as "National Public Address Systems, Inc.," with headquarters in the radio store at 18th and Columbia Roads, N.W. \$12,000 was invested in two trucks equipped with portable amplifiers, speakers, movie projectors, radio tuners and even floodlights. Nothing was permanently fastened to the trucks, which were merely intended for use as transportation. On August 15 Hugh Clayton, with a helper, took one truck south while Norris, another serviceman, who assigned a helper, drove the other west. Following a pre-arranged schedule the two went from fair to fair fulfilling contracts, without any intermediate breaks. It was: One day to set up, four to operate, one to take down and one to travel. Clayton and Norris remained in the field, reporting to the office only by mail, until November 5, when they returned to Washington.

They had successfully concluded their first "Fair Route."

No attempt was made to commit fair secretaries to return engagements while actually on the ground, although



this would obviously have been cheaper, as it was felt that business conditions might necessitate different prices, schedules.

Upon returning to the city the two helpers were put on radio service, swelling the staff to 7, while Clayton went about selling permanent P.A. jobs and rentals throughout the city and Norris tackled radio sales. Next spring Clayton again made the rounds of the secretaries and was delighted to find that almost without exception they re-engaged the equipment. There were, in fact, additional requests for service which could not be met. Again, in 1931 the Fair Route was resumed, the service being re-sold in the spring and the trucks have just returned from a 1932 swing which was particularly successful.

Permanent job sales in and around Washington resulted from constant winter pounding so that today the concern boasts not only Fair Route rentals but also such major, permanent installations as those in the new Central High School, Congressional Country Club, Gallinger Hospital, Glen Echo Park, Mayflower Hotel, Rialto Theatre, International Hall and the Hibbs Memorial, billings running as high as \$2,500. Many smaller sales have been made as well and one, in particular, stands out in Smith's mind as proof that these should not be neglected. He sold a corn-plaster salesman a \$250 portable unit and the man reported a 30 per cent sales increase on the first day of use in a drugstore window.

Sales and rentals now approximately split the total P.A. volume.

Because many fairs occur on the same dates the concern early considered buying an additional truck but

this was voted down, however, as investigation proved that it would not be possible to secure the unbroken train of engagements for the third unit that had made the first two so extremely profitable to operate. Knowing

\$3,000 to invest in a suitable truck and really good reproducing equipment.

"To get something out of this business you must put something into it," is a phrase well worth repetition.

DOES A QUALITY RADIO BUSINESS

Smith Says:

If you are thinking of selling P.A. . . .

Don't try it if you are broke . . . this is no business to start on a shoestring.

Don't expect it to work wonders . . . unless you are really willing to work.

Departmentalize the activity . . . it is a major sales job, not a sideline.

Don't save money on equipment . . . one poor job will ruin your chances.

An outline of the company's radio business is essentially a part of this picture. Briefly, the store handles Sparton and Bosch receivers, now has 3 full-time servicemen (exclusive of the two P.A. truck helpers) and attributes 70 per cent of its sales directly to the activity of these men. The remaining volume is split between floor sales and business resulting from the outside work of Norris. Leads from old customers are considered particularly important.

The store does a quality business in an above-average residential district.

Sunbeam mixers, Hammond electric clocks, Westinghouse minor appliances and Leonard refrigerators help store traffic. The company never turns up its nose at a service job, claiming many to be more profitable than cheap set sales. It has cut overhead to 26 per cent and, curiously, has never sold a new set for less than \$39.50, moving trade-ins at a profit to people who want "buys."

Smith feels that he has had the "breaks" in his public address endeavor; that what has proven to be his "meat" might well be another's "poison." Washington, he comments, is a politically-minded city in which there is a greater need for sound amplifying equipment than in most other centers. This is counterbalanced, however, by a local ordinance which prohibits the operation of advertising trucks in the city streets and, in addition, by the fact that the nucleus of this business is obviously its out-of-town Fair contracts.

HAND IN HAND

"Public address kept me in business last year," Smith repeats. "But today I look upon radio and public address as a together-we-stand, divided-we-fall proposition. I would not care to specialize in either line in 1933. Neither, in my estimation, will support a large setup. Diversion of effort and a profit on every transaction is the only salvation.

"Radios costing more than \$100 must be sold in the home. Trade-ins must be purchased cheaply and resold at a profit. A profitable repair job is better than a new 'toy' at \$18 sold \$1 down and \$1 per week.

"God help the dealer who hasn't tightened his belt; learned how to work nights."

when to refrain from expanding is, the management sagely remarks, equally as important as knowing when to expand.

Now, in order to correct any impression that the public address business is all milk and honey, let it be said that Smith's business does not by any means come in of its own accord, although the concern has evidently discovered a rental market which was not adequately covered by local concerns. Clayton continuously pounds, devoting his entire time to the business. And, Smith believes, complete departmentalization is essential to volume, which accounts for his breaking the activity away from radio even to the extent of incorporating it under another name.

There are, furthermore, already too many dealers in the field on a "shoestring," he contends, pointing out that the use of inferior equipment by such dealers does much to hold back the growth of the business; that one unsatisfactory job kills a new man's chances. High-standard competition will be welcomed, is actually helpful in promoting this relatively young business, but no dealer should attempt to enter it, Smith warns, with less than

Two Half Loaves Better Than None

"IN THESE times, owners of radio sets will pay \$3 for service twice at intervals of say three months, more readily than they will pay \$6 for service once," declares Seth M. Wright, proprietor of the Radio Repair Shop, located in the sunny town of San Bernardino, California.

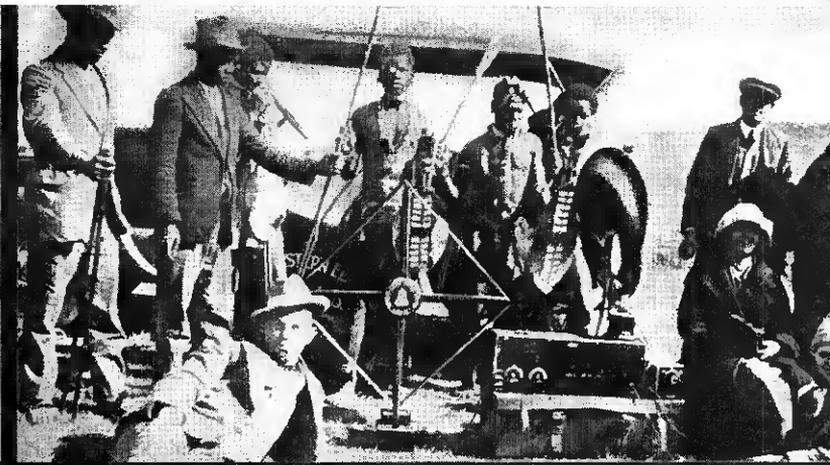
"My business is prosperous because I recognize that two half loaf sales are better than no loaf at all. There are many instances where I am called to check a set and find that one or two tubes must be replaced immediately and one or two must be replaced within a few weeks or months. Theoretically I should replace all tubes and present a bill for a large amount. But, if I were to tell the customer that the nearly defective tubes

should be replaced and the cost would be so much—mentioning a figure that might be not less than \$10—the customer may hesitate to have the work done, because he can't afford it at the time. He might declare that he'd get along without his radio until he could afford the job, so I would be out of a job entirely. However, if I can get him by on less expense, he will tell me to proceed with it. I then explain that certain other work will be required at a later date, and state when it will be required.

"Thus I get two small jobs whereas I might not get a job at all under the old system. A carefully maintained follow-up file, consulted every morning, is essential to the success of this plan."



ANDES Patiently these dumb creatures toil across the Andes of South America so that radio sets may fill the night with bed time stories



AFRICA Africa speaks . . . through the radio. Since this picture was taken, thousands of modern sets have gone to the dark continent



CHINA Chinese radio sales have increased as a result of the fighting between Chinese "bandits" and Japanese "peasants"

From the Radio Industry of America to Its Foreign Friends

Greetings

The Radio Manufacturers Association, of the United States, through its Export Committee, extends its hearty greetings to users of American radio products abroad.

The purpose of this committee is not only to facilitate the export activities of the membership of the Radio Manufacturers Association but to cooperate with export houses in this country and in foreign lands in solving the many problems which stand in the way of the ready interchange of radio goods and of credits. I refer specifically to such matters as set and tube quotas, foreign exchange rulings, the proper design of sets to meet reception conditions in Europe, South America, South Africa and other favorable markets, patent laws, credit information, advertising and selling methods, the securing of proper representatives, and preparation of goods for foreign transport.

Commercial attachés, importers and exporters, manufacturers and manufacturers' agents are invited to avail themselves of the facilities at the disposal of this committee. Inquiries are welcome. They should be addressed to the undersigned.

Cordially,
ARTHUR MOSS,
 Chairman, Export Committee, RMA,
 175 Varick Street, New York, N. Y.



JAPAN "Hush," commands this dainty Japanese miss. "They're broadcasting a new recipe for Apfelstrudel!"

WHEREVER THERE IS RADIO THERE ARE RADIO SHOWS

In BELGIUM

In BRAZIL

and

In SUNNY ITALY



Radio and Radio Selling

ABROAD and in the

IN ENGLAND they are "valves," in America . . . "tubes." Two English-speaking nations have different names for the same radio equipment. This simple illustration indicates the need of radio distributors in all countries for more information on how radio is being designed, produced, sold and serviced in other lands. For no one people have a monopoly of brains or ability. Therefore, let us briefly review American radio equipment and its distribution, pointing out wherein American practices differ from those of other nations.

First, American radio receivers themselves. The average new, 1932-1933 home radio receiver made in the United States is a superheterodyne, designed to give faithful reproduction of voice and instrumental music. Like all products designed for Uncle Sam's children, the American radio set features convenience and ease of operation—one knob control, automatic volume control, tuning meter or light, and often that further refinement, twin, matched speakers.

Like the American automobile, the American radio set is available in many different styles or models. Cabinets range from the small treasure chest or gothic midget types, up through consolettes and consoles, to the double purpose furniture models—combination radio sets and tables, secretaries, bars, bookcases, etc. American lines may have not only a dozen cabinet styles but also as many as four different chasses.

Radio receivers made in Europe and Asia differ from the American product in appearance and in construction. Chief constructional differences are in the tubes, or valves (the new tubes that American radio engineers have developed permit greater sensitivity, selectivity and better tone). Another advantage which American radio sets enjoy is manufacture under U. S. mass production methods which make for uniformity and unusually low costs. The United States logically should lead in radio equipment development since competition is keener there than elsewhere—in America there are over 145 manufacturers of radio sets and a score of tube makers.

British radio sets, and to a degree many of the European radio sets, just now show a strong modernistic influence in their cabinets. Italian radio sets more closely resemble American receivers in cabinet design at least. Radio sets from Germany and Spain show thermometer-type tuning scales employing the names of station locations as well as their kilocycles—an interesting feature.

THE AMERICAN RADIO INDUSTRY

Compared with the United States' colossal radio industry—employing over 100,000 people with an annual payroll of \$200,000,000 and representing a capital investment of \$200,000,000—the radio industries of other nations seem delightfully simple. For the American radio industry has its drawbacks, as might be expected. These problems bear inspection by the radio fraternities of other lands, so that they may be avoided elsewhere.

The chief flaw in Uncle Sam's radio industry has been over-production of radio sets and accessories, which occurs with uncomfortable regularity, year in and year out. Over-production causes "dumping," the distribution process by which large quantities of obsolete radio equipment are sold to volume retailers in the larger cities. Bought by retailers at most advantageous prices, the "dumped" merchandise is passed on to the public at deeply-cut prices by the philanthropic merchant. As a result of radio "dumping" orgies by manufacturers, markets for radio merchandise have been demoralized. Retailers who cut prices on obsolete radio sets are apt to get in the price-cutting habit. Frequently local radio merchants indulge in price-cutting wars. To the American radio manufacturer whose products are price-cut in such internecine warfare, the following advertisement from *The Wireless and Gramophone Trader*, of England, issue of October 22, 1932, must sound like something out of "Alice in Wonderland" or the Fairytales of the Brothers Grimm:



In Arlon, BELGIUM, this huge "midget" radio set is used for sound amplification purposes



SPANISH sunlight streams upon this Barcelona street scene, with its radio billboard

U. S. A.

By

Arthur P. Hirosé

Manager, Market Analysis Dept.,
Radio Retailing

APOLOGIES TO AMPLION (1932), LTD. for Price Cutting—

We, Smith & Jones, hereby apologize to you for having sold your P.M. speaker M.C. 22 at prices which constitute an infringement of the limited license attached to the same, and in consequence an infringement of the patents. In consideration of your taking no further steps against us on this account we undertake never again to sell any of your goods, whether the subject of a limited license or not, at less than the prices from time to time authorized by you.

As a mark of sincerity we agree to pay a suitable sum toward the damage and expenses to which you have been put, and also agree to pay your solicitor's costs.

We also admit your right to publish this document or any extract therefrom or reference thereto.

SMITH & JONES

To spare further chagrin to the radio merchant mentioned in the above advertisement, a fictitious name has been used.

Happy is the nation whose radio manufacturers have learned the difficult lesson of properly scheduling production and so avoiding surplus, obsolete merchandise. Fortunately, American radio manufacturers do not try to "dump" their surplus radio production upon the export market in other countries. Before he tries to dispose of overstocked merchandise either at home or abroad, the radio manufacturer or distributor might well consider the spirit of the following letter sent to an American firm by the American Consul General at Rio de Janeiro, Brazil:

AMERICAN CONSULAR SERVICE

Blank & Company,
Hartdale, Connecticut, U. S. A.

I have your letter of July 25, 1932, in which you say that you are overstocked with victrolas and that you would like to be put in touch with somebody in this city who would be interested in purchasing them in lots of 25 or 50 and would take them as they run at a price.

Many years of experience in fostering American commerce abroad has convinced consular officers that transactions of the type you propose are not in the best interests of American trade

in general as they put instruments into the hands of unauthorized dealers at a cost which permits them to dislodge the established price level, cause confusion in the mind of the public and much embarrassment to the authorized distributor who has spent much effort and money in putting the make in question before the public. Furthermore, dealers who obtain merchandise under those circumstances usually have no interest in future business and tend to make claims for it not borne out by performance. The general result is unfavorable.

SAMUEL T. LEE, *American Consul General.*

How do American radio dealers sell? How were they able in a single year to sell to their public over 4,000,000 radio receivers? Perhaps the story of American retail radio selling is of greater interest to radio men abroad than any other phase of American radio history.

American radio dealers do both store selling and outside or home selling. In the store itself the American radio dealer relies upon the following sales helps: his show windows, sidewalk demonstrations, store displays, store demonstrations. In outside selling the radio dealer makes either unarranged door-to-door canvasses, seeking interviews and arranging for demonstrations; or he is helped in his outside selling by leads or "tips" secured from telephone canvasses, contests, direct-mail advertising, newspaper advertising, fairs or exhibitions, satisfied customers, etc. Chiefly ingenious these days in America, when pure low price alone has lost its appeal, are the ways by which American radio dealers are getting interviews and staging demonstrations to show that the new radio sets are actually far superior to the product of other years.

Impartial observers commend, among retail radio methods abroad, the novel advertising means used, particularly in Europe. Illustrated is a Belgian radio distributor's traveling demonstrator—a huge replica of a radio set, out of which sounds are amplified. Effective use of billboards in advertising radio sets in congested areas is illustrated by the accompanying photo from Barcelona, Spain.

Generally speaking, American radio dealers have been



This thrifty, FRENCH, radio dealer in Havre uses every bit of window space for displaying his wares



The lobby and cafe of this hotel in SWITZERLAND have a public address system. Yodelling is barred

more successful in the dressing of sales-promoting window displays than dealers abroad. Standardized American window trims lack the individuality shown in the accompanying photo of a Havre, France, radio dealer's window, but probably are more effective from a sales viewpoint.

RADIO REPAIR SERVICE VITALLY IMPORTANT

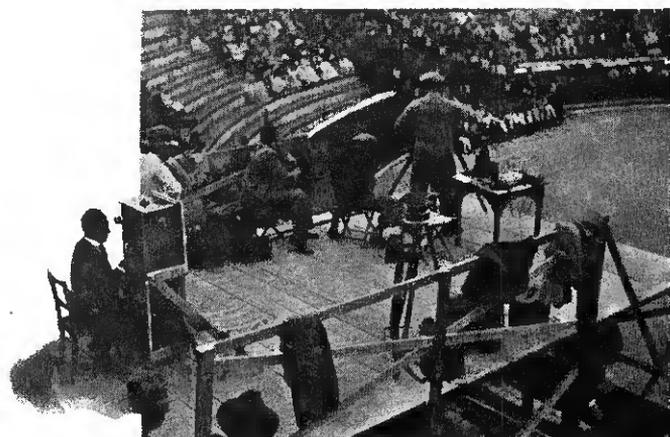
Ingenious sales methods are monopolized by the radio industry of no one country. It is pointed out, however, that it is in the United States that methods for the installation and servicing or repair of radio equipment have reached their full flowering. Paradoxically it is the American, living in the land of machinery, who best anticipates the accidents that can happen to his creation and makes provision for giving service. The average American radio dealer has one or two men whose full-time job it is to answer calls emanating from radio set owners for service and repairs. Not only has a system been perfected by which repair calls are made in an incredibly short time after the complaint is received, but service kits are taken along by the radio service man to insure speedy repairs. Set analyzers, tube analyzers, meters, etc. are common to all American radio service men's kits. This equipment enables trouble to be analyzed quickly, and permits a fair fee to be collected for service calls on the same principle that the doctor who uses a fluoroscope can charge more than the doctor who depresses your tongue with the handle of a kitchen spoon.

The value of efficient radio repair service given by the dealers of the United States was plainly evidenced in the present depression. Many families felt they could not afford to buy new radio receivers this year, last year, or the year before. By his ability to take old radio sets now in the possession of these families and put the receivers in operation again, the American radio dealer has kept interest in radio alive. Also he has insured his own business existence. The sale of replacement parts and the time used in radio service work has gone far to make up for profit lost on declining sales of new radio sets.

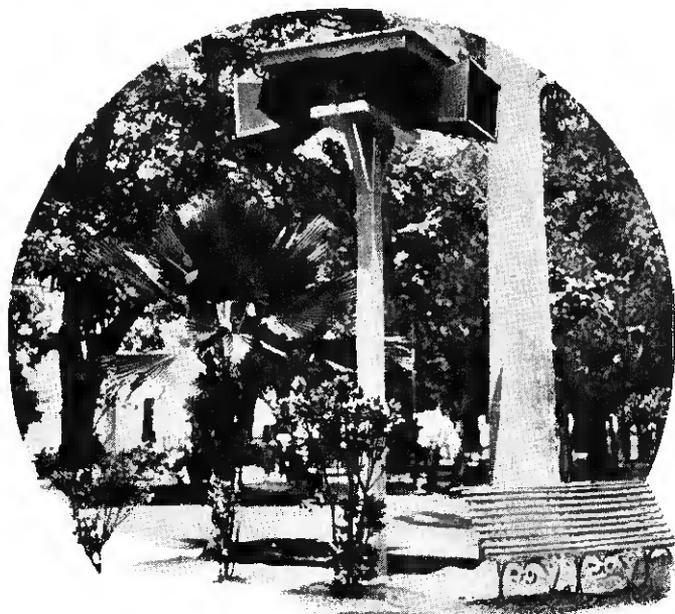
ADDITIONAL LINES SOLD BY RADIO MERCHANTS

Not only has the American radio dealer developed his repair, or service, department to an important and profitable basis, in addition he has been developing additional lines of merchandise to sell. Along with radio sets, tubes, accessories and parts, the United States radio merchant has found that he can sell at a profit:

- (a) Automobile radio receivers
- (b) Sound systems
 - Public address equipment
 - Centralized radio installations
- (c) Automatic phonographs
 - Two-speed turntables
 - Pick-ups and records



Filming a PORTUGUESE bull fight. The director bellows his orders over a sound amplifier



The lounge in this Colombia, SOUTH AMERICA, park is lulled by sweet music from the loudspeaker overhead

- (d) Electrical appliances—refrigerators, heating devices and motor-driven devices such as washing machines, vacuum cleaners, ironers, food mixers, air conditioners and fans.
- (e) Home entertainment equipment—such as motion picture projectors and cameras, games, sporting goods.

How American radio retailers are successfully selling these allied lines has been the subject of many articles in *Radio Retailing*. Many more articles of similar nature will appear in future issues.

American radio dealers will be especially interested in some of the public address installations that have been made abroad. Already American public address equipment has been installed in such a wide variety of places as the Eiffel Tower restaurant in Paris, the castle-residence of ex-King Manoel of Portugal, and the Hotel Waldheim in the Swiss Alps. Pictured on these pages are other typical public address systems abroad.

NEW TENDENCIES

In point of age the American radio industry leads the rest of the world. Certain tendencies in the United States that are now apparent may be of interest to radio merchants abroad. Some day they may have to face these same conditions.

Favorable tendencies include a cessation in the increase in the number of radio manufacturers, a strengthening of radio distribution channels, a weeding out of the weaker retailers and a greater appreciation of good business methods by those surviving.

Unfavorable factors in the American radio industry include the wide prevalence of price cutting, the inability of the manufacturer or jobber to control or sustain profitable price levels and the too frequent introduction of new models of sets, new types of tubes and new scales of retail prices.

But, it is felt, these destructive practices are being successfully combated. Leading this battle for sounder merchandising methods is the recently reorganized Radio Manufacturers Association—comprising in its membership all the substantial makers of radio products in the United States. Under the leadership of this organization, and of the radio trade magazines, a revitalized industry, operating, in the near future, on a sound and profitable basis, is the confident expectation of the radio leaders of this country.

The "Dancing" Skeleton



How to build this animated display for your store or window

prove that this adjustment has removed noise without materially affecting the music return, finally, to the original station, which should be received about as before.

Relay, on-off sign and auxiliary switch on the receiver volume control may, of course, be dispensed with if the skeleton is intended for use only as an animated window display. In this case only the lower, square shadow-box is required. Used in conjunction with sound, the device will attract and hold attention.

Paralleled voice-coils will be found to have only a slight effect on tone quality. It may be necessary, however, to fasten a piece of cloth across the back of the box and to place the entire assembly on soft, rubber legs to subdue mechanical noise.

A "DANCING skeleton" display which may be used simply to attract attention in a window or to visually demonstrate the efficacy of the new "noise-suppressor" circuits can be constructed from parts available to most dealers. T. Carse, of General Electric's radio division, is responsible for the idea.

Build an open-ended box, 14 inches square and 11 deep, closing one end with a piece of ground glass. Construct two compartments on top of the box, equipping these with suitable signs lettered on colored paper (one green and the other red) sufficiently thin to let light from the illuminating 25-watt lamps show through.

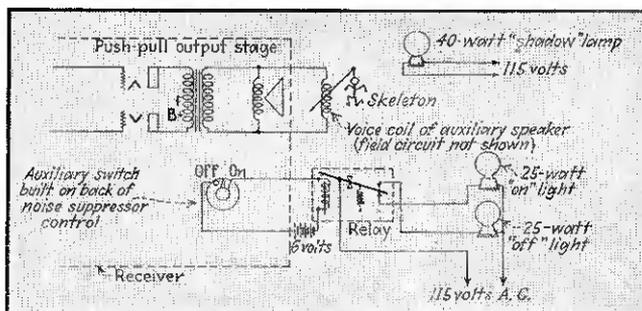
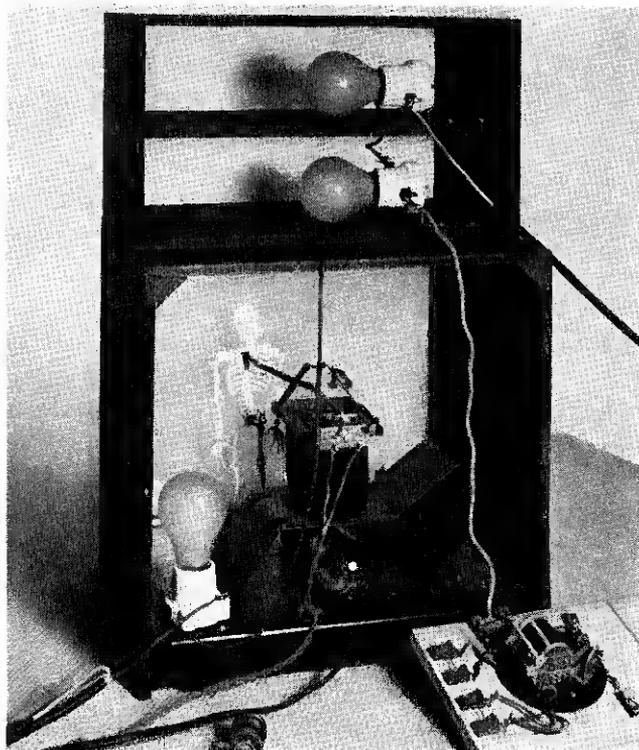
In back of the glass, as shown in the photo, mount a dynamic speaker complete with field-current rectifier but with its paper cone removed. Pivot a light metal arm, from which a cardboard-cutout skeleton (novelty stationery stores have them) hinged at the arm and leg joints, is suspended in such a manner that it rests across the voice-coil. Place a 40-watt lamp at the back of the box in such a position that it will throw a sharp shadow of the skeleton on the ground glass.

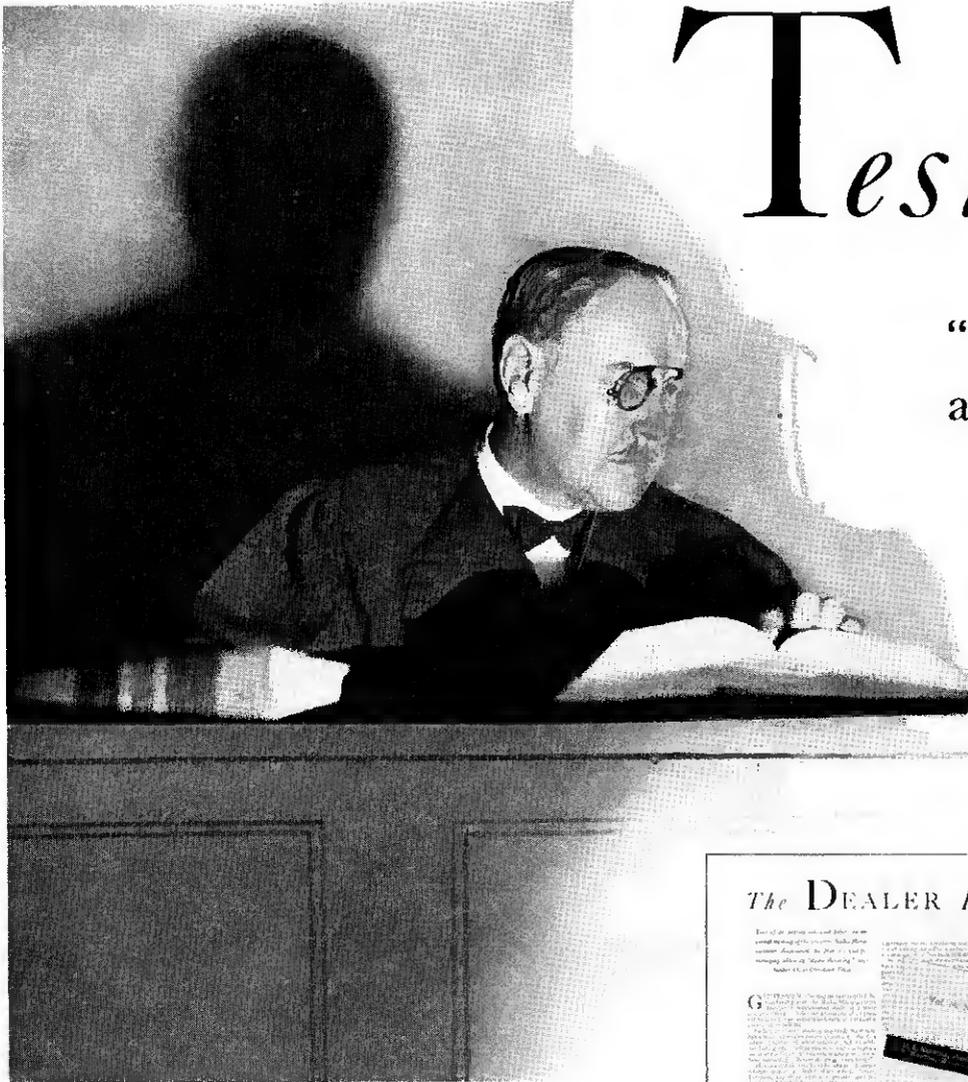
IN ACTION

Now, on a board, fasten a single-pole, double-throw d.c. relay of the type once used to automatically charge storage batteries. Then, to back of the noise-suppressor control of a set equipped with such a modern circuit fasten an auxiliary switch or set of contacts and complete the display circuit as indicated in the diagram. (Speaker field circuits are not shown.)

When demonstrating, tune the receiver to a station with the noise-suppressor control in the "Off" position, (the "Off" sign should light) and watch the skeleton dance to music as the voice-coil jounces the supporting arm around. Now tune between stations and call attention to the fact that the skeleton *still* jigs to static crashes which are also plainly audible.

Turn the noise-suppressor control until the static entirely disappears. (The "On" sign should light). To





Testimony

“We want to meet
are correct but hard

“Your ‘Five Point
needed. We back

R*RADIO RETAILING* is advocating that the radio industry subscribe openly to five simple and basically sound merchandising principles. These principles, which affect so vitally the business health of every radio dealer, jobber and manufacturer in the country, were laid before the directors of the Radio Manufacturers Association, at Cleveland, Ohio, on August 23, by Ray V. Sutcliffe, the managing editor of this magazine. The October issue of *Radio Retailing* printed this address by Mr. Sutcliffe under the title: “The Dealer Has His Day in Court.” And our last month’s issue further sustained this theme in its leading editorial: “S. S. RADIO . . . LIFE PRESERVER”

Tear sheets of the October article were mailed to every set manufacturer of national importance in the industry and to hundreds of representative dealers and jobbers. Comment, endorsement or disapproval was requested. The following briefs from the many replies received may, therefore, be taken as reflecting the true temper of the trade:



PHILCO

We do not find any difficulty in subscribing about 99 per cent to the program you outline. We always have been extremely careful not to obsolete existing models in dealers and jobbers stocks in bringing out new models. We have been very careful about advertising “revolutionary changes” in bringing out new models because we feel that if the public thinks Philco is going to bring out revolutionary models every year it will begin to wait until after the last revolution before buying. Further, we have never been guilty of demanding modification in tube design, except insofar as

for the *PLAINTIFF*

any just demands. Your ideas to enforce," . . . SET MAKERS

Plan' is sound and urgently it 100%," DEALERS

this modification would permit of substantially improved performance or substantial lowering of cost.

In regard to territorial protection. It had always been our policy to let the dealer alone if he was doing a good job in his particular section. Of course, some dealers think they are going a good job and the records prove otherwise. We are heartily in favor of territorial protection whenever the dealer earns it.

Whether or not you can get all radio manufacturers to subscribe to these policies at this time I do not know but I feel sure that any radio manufacturer who departs a great deal from them is automatically going to eliminate himself from the business in the course of time.

PHILCO RADIO & TELEVISION CORP.
James M. Skinner, President.

ZENITH

When it is considered that the present merchandising trend of many well known, widely advertised lines spells almost certain disaster for large numbers of dealers, it is to my mind amazing that a stronger and more concerted action against such practices has not been made by these same dealers whose very existence is being placed in jeopardy.

The only explanation that seems reasonable to me is that these dealers know of no alternative. If this be true then the fault must be laid on the shoulders of the manufacturers who have failed to equip their dealers and jobbers with a plan which affords them a reasonably sure method of converting interest in unprofitable merchandise into sales of profitable merchandise. Certainly manufacturers interested in maintaining the present form of retail outlets must do something constructive, vigorous and immediate along the lines you suggest.

This matter recently has had our almost constant attention. Zenith's sales efforts are directed almost exclusively toward the exploitation of specific plans and ideas directly pointed toward increasing the unit sales price.

ZENITH RADIO CORPORATION
E. A. Tracey, General Sales Manager.

ATWATER KENT

"It is difficult to conceive of any manufacturer who does not recognize the destructive effect to the radio business as a whole of too frequent changes of models and prices. It certainly seems to me that

a recognition of that fact must of necessity include a recognition of Point No. 2; but where is the manufacturer who will refuse to get the jump on a competitor, particularly since he knows the consequences of permitting competition to get the jump on him, especially competition that has not been too prone to recognize adherence to business fundamentals in the conduct of business?

We are all victims of a vicious circle. Uneconomic practices are not confined to the manufacturer; they are inherent in the distributor and also in the dealer as well. Nobody seems willing to battle out this game along lines of business principles and economic fundamentals. Your dealer, because of having to divide a small radio business with innumerable fellows, makes exorbitant demands upon the distributor. The distributor, to the best of his ability, accedes to those demands, even while in his heart he knows that it is leading the industry to disaster; but he does it because competition



MANAGING EDITOR RAY SUTLIFFE
PRESENTS THE CASE OF THE DEALER

will if he won't. In this he is supported by the manufacturer who goes to untold lengths to support such uneconomic demands on the part of both distributor and dealer; therefore, the percentage of profit is of necessity small, and to keep it from being utterly disastrous it has to be compensated for by large volume of sales—hence artificially inflated production, exacting commitments from distributors, and again the vicious circle of consignment, exorbitant allowances, and what-not practices on the dealers' floors.

Somewhere this thing ought to stop, but there is either too much selfishness inherent in this industry or not enough vision, or some of both.

ATWATER KENT MANUFACTURING CO.

F. E. Basler.

STROMBERG-CARLSON

Undoubtedly manufacturers would welcome fewer models. However there is the marketing price-range requirements that governs the number of models and it is difficult for an industry to agree on the number of models each manufacturer should have. On your principle that fewer models should be developed, I think all would concur.

It would be difficult to get manufacturers to agree to announce a radical change in models more than once a year because a manufacturer may have to do this thing for actual survival.

We concur fully with point No. 2. (*Stop demanding modifications in tube design.*)

With regard to point No. 3, we, in effect, do restrict dealers' territory. However, I don't know how you can work out a contractual restricted territory for a dealer. It is about the last thing we would want to do.

We concur with point No. 4 and will always do everything we can to help the dealer solve his sales problem.

STROMBERG-CARLSON TELEPHONE MFG. CO.

George A. Scoville, Vice-President.

BOSCH

I don't know that I have anything to add to the thoughts expressed at that meeting. What you have in mind is certainly highly desirable for the industry. But how soon the complete cooperation on the part of manufacturers can be made a reality, so that most of the suggestions you have in mind can be carried out, frankly, I do not know.

We are certainly working toward the end of stabilization as rapidly as we can. You may rest assured that so far as I am concerned we would be very appreciative of anything that your good paper can do to be of assistance in this effort.

UNITED AMERICAN BOSCH CORP.

A. T. Murray, President.

CLARION

With regard to your points one to four—my firm believes in these policies and already has adopted them. For example, after the first of the year we propose only a *refinement* of models—which have not been radically changed since the June Trade Show—and without marked revision in prices.

Such editorials and articles on this subject as you have been producing are to be commended and are bound to bring to the light of day those manufacturers who have not already adopted the policies outlined therein.

TRANSFORMER CORP. OF AMERICA, CHICAGO

Ross D. Siragusa, President.

FADA

On November 16, the Fada Radio and Electric Corporation announced an increase in the list price of several of its leading models. This action speaks louder than words as regards where we stand with respect to your commendable

campaign to put the dealer in a position where he will be in business for profit as well as for pleasure.

In addition to cutting "give-away" prices out of our line, Point Two of your suggestions, Fada subscribes also to *Radio Retailing's* declaration for stabilization by orderly and not too frequent changes in models and other selling policies. From now on, as in the past, my concern will exert every effort to play ball with the dealer.

The last three of your "Five Points" are particularly pertinent and Fada will strive to "keep out of the markets current merchandise offered at less than suggested lists and to ascertain the needs and desires of the dealer before formulating its sales policies."

FADA RADIO AND ELECTRIC CORP.

R. M. Klein, General Manager.

Comment from DEALERS and JOBBERS

Some Day They'll Wake Up

Regarding "The Dealer Has His Day in Court," I heartily agree with you in every respect. I, too, sincerely hope that some day the manufacturers will wake up and realize that if it weren't for the dealers they would never sell a set and hope that they will give up their idea that the dealer is just some poor slob who is a necessary evil.

I have seen both sides of this picture. I would have to beg to get some particular line, have the distributor ritz me and then finally condescend to sell me. On the other hand, I have received unusually good cooperation. And it is the one from whom we receive cooperation whose line we push and incidentally sell.

RADIO INSPECTION SERVICE CO.

Hartford, Conn.

R. G. Sceli

Trade Association Passes Vote of Appreciation

Your article, "The Dealer Has His Day in Court," was presented at our meeting last night and met with the hearty approval of all present. It was the unanimous recommendation that I be instructed to convey to you the sincere appreciation of this association for your daring stand in the face of a bewildered industry.

UTICA AND MOHAWK VALLEY RADIO ASSN., INC.

Utica, N. Y.

Should Continue Presenting Facts

Your article agrees with my opinion of the radio situation in every respect. It is a constructive, truthful and practical summary of the situation. It should accomplish much good. And I hope that you will present additional facts in behalf of the radio dealers to the manufacturers from time to time.

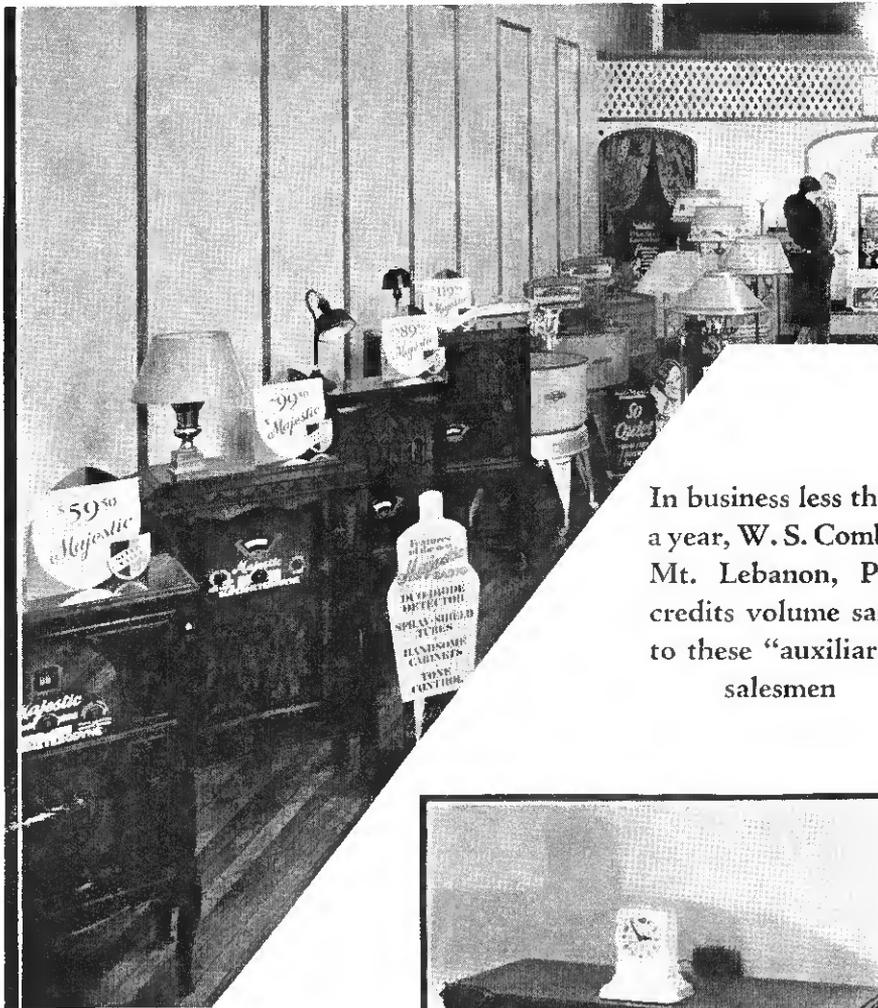
MINER BATTERY COMPANY

Batavia, N. Y.

I Do Honestly Believe—

I do honestly believe that the sales managers of today have finally come to the conclusion that there really is a falling market for their merchandise and that they no longer blame their salesmen who are unable to "load up" the few—if you will pardon the presumption—intelligent dealers that remain. Possibly the radio set makers will do something about it; possibly they will go blundering on trying to find

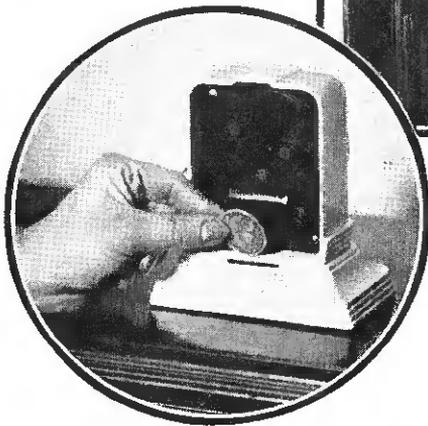
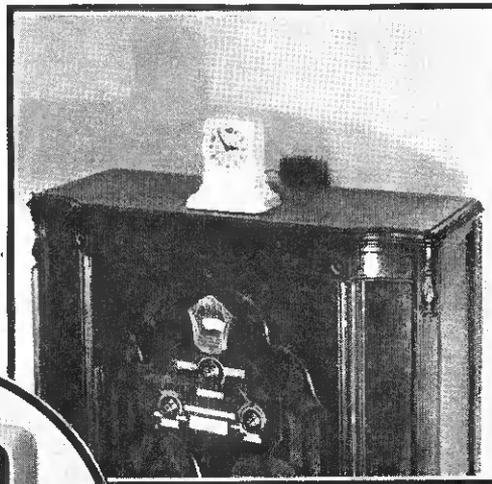
(Please turn to page 40)



In business less than a year, W. S. Combs, Mt. Lebanon, Pa., credits volume sales to these "auxiliary" salesmen

Come

Combs to meet

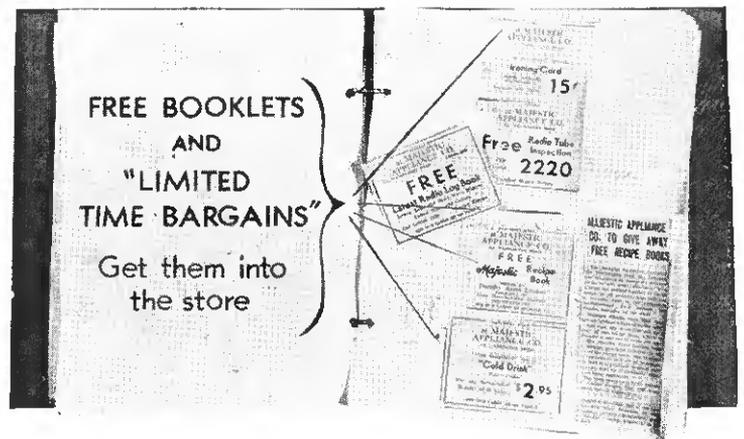


"CAN'T AFFORD IT."—To meet this objection Combs loans the customer this inexpensive electric bank clock (cost \$2)

"Drop a quarter in it now and then. It's easy to meet your payments this way. And, furthermore, the clock is yours when you give me the name of a live prospect"

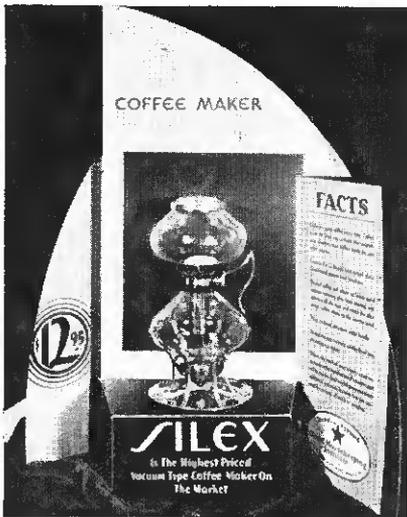
ADS THAT LURE—Small space pays: if there's a "come on" in the copy. Combs calls these his "get acquainted" advertisements

"MAY I COME IN?"—A door chime, novel and attention compelling, serves as the "entering wedge." When the salesman gains admittance he ultimately switches the conversation to radio. The chime sells for \$5.95. Three canvassers sold 42 in 70 days



O n s

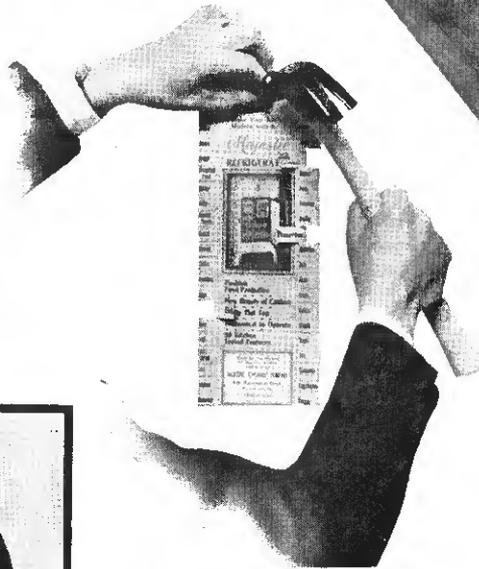
has a sales help every emergency



QUALITY PREMIUMS—It's money well spent if they're used for these purposes: (a) In lieu of a trade-in allowance—on sets over \$100; (b) For the names of two prospects—who buy; (c) As a final closer—on the higher-priced receivers



"WHAT'S THE ADDRESS, PLEASE?"—This beautiful reproduction, in full color, of "The Isle of Capri" costs 35 cents per print. When a new store prospect, who seems to mean business, hesitates to leave her name, the promise of one of these beautiful pictures "which will be mailed to your home tomorrow," does the trick



A VISIT REMINDER—Left with the compliments of the salesman, this "kitchen reminder" also reminds the prospect to "Call Combs for Radio"

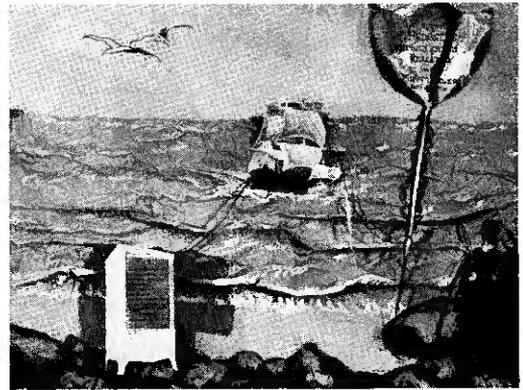


LEAD GETTER—An impressive "Owner's Profit Sharing Bond," with ten coupons attached, provides a convenient means for "using the user." This dealer pays \$5 for the name of each prospect who buys a set or refrigerator

CONTEST

KEEP the public guessing. This sales gag, the efficacy of which our bewhiskered, store-keeping forebears fully recognized, has apparently been rediscovered . . . with the result that how-long-will-the-milk-keep-sweet contests, and others closely akin, are to be found almost wherever one turns. And, curiously, when embellished with just a little modern icing, guessing contests appear to be quite as potent today as ever they were in the gay nineties.

Consider, for example, a how-many-ice-cubes-will-it-freeze "guess-ie" conducted during September by Bob Frayser for Howell ("Richmond's Pioneer Radio Store") Brothers Hardware.



Your Last Chance Is Wednesday

To Enter and Win

**ABSOLUTELY
FREE**

This Beautiful New

MAYFLOWER

Take Your Pencil—
Solve This Problem

Costs Nothing to Enter



IT IS EASY AND IT IS FUN AND YOU MAY BE THE
WINNER OF ONE OF THESE VALUABLE PRIZES

First Prize	Mayflower Electric Refrigerator
Second Prize	Phico, Midget Radi
Third Prize	\$40.00 Purchase Certificates
Fourth Prize	\$35.00 Purchase Certificates
Fifth Prize	\$30.00 Purchase Certificates
Sixth Prize	\$25.00 Purchase Certificates
Seventh Prize	\$20.00 Purchase Certificates
Eighth Prize	\$15.00 Purchase Certificates
Ninth Prize	\$10.00 Purchase Certificates

One purchase certificate will be accepted at the face value toward the purchase of a new model Mayflower Electric Refrigerator. We will give absolutely free a new MAYFLOWER electric refrigerator, Model F-24, as first prize to the person solving the MAYFLOWER ice cube problem. This refrigerator is not only one of the oldest but is accepted as one of the finest constructed refrigerators in America today.

Imagine Yourself on the Mayflower Boat;

NOW—Go Ahead With the Problem

HOW MANY ICE CUBES COULD BE MADE.

The Mayflower Boat took 67 days and 2 hours to cross the Atlantic. If the Mayflower had been electrified and could have had a Model F-24 Mayflower Electric Refrigerator operating continuously—and the Model F-24 Mayflower refrigerator makes 84 ice cubes in 90 minutes—how many ice cubes could have been made during the time the Mayflower crossed the Atlantic? Add two minutes to each freezing for emptying and refilling the trays with water. Answer must be given in figures. This is a simple arithmetic problem without a "catch."

RULES:

Any one may enter this contest. In event of a tie, neatness, appearance, legibility and originality will be considered and some duplicate purchase checks may be awarded. Employees of our store and their families are not eligible. Three well known judges will be announced later. Write your name and address plainly on a separate sheet of paper and pin it to your solution or include it in your solution. Entries must be delivered or post-marked on or before 5:30 P. M., Wednesday, Sept. 21, 1932. Mailer bring your solution to

HOWELL BROS.
602 EAST BROAD STREET

The "Ad"

On September 12 Howell ran a 4x9 ad (reproduced) in the *Times-Dispatch*, following up in the same paper on the 14th, 19th, 20th and 22nd and published identical copy on the four alternate days in the *News-Leader*.

Attention was directed to a prize contest in which contestants were invited to guess the number of ice cubes a refrigerator could freeze, operating continuously, in 67 days and 2 hours (The time the good ship "Mayflower" required for its historic crossing). It was pointed out that the appliance made 84 ice cubes in 90 minutes, that two minutes be added per freezing to take care of emptying and refilling time, thus reducing the answer to a relatively simple mathematical problem.

First prize, judged for correctness, originality and neatness, was to be an electric refrigerator; second, a midget radio. Third to ninth prizes were to be merchandise credit checks good at full face value against the purchase of a refrigerator or good at half face value against the purchase of a console radio listing above \$69.

All ads were essentially the same as the original except that the heading was changed to read: "Only Blank More Days to Enter and Win," on the follow-up insertions. The space bill, amounting to \$270, was paid half by the distributor and half by the dealer. According to Frayser, about half as much would have been spent by his store on straight institutional copy in this period ordinarily.

The 1st Prize

One thousand nine hundred entries were received from people in Richmond and suburbs as well as from distant points in North Carolina, West Virginia and Maryland. These were divided into two groups: correct, (88,200 cubes) totaling 1,700.

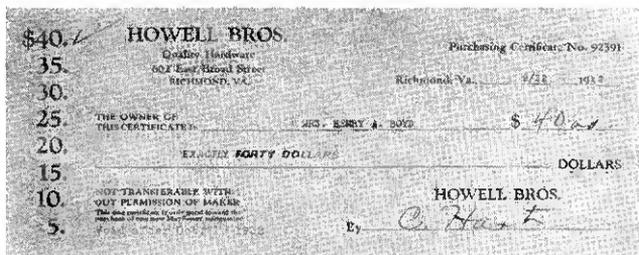
A majority of replies were written on plain paper, with the problem worked out. Many were ingenious pictorial presentations, these including works of art such as an illuminated charter of the Mayflower, handsomely

PLACE.....Richmond, Virginia
 TIME.....September 12-22
 SPONSOR.....Howell Brothers
 SALES.....Sixty-two

illustrated maps showing the route over which the Pilgrims sailed. First prize (entry pictured) was awarded to a Richmond contestant who submitted a relief portrait of the crossing made of papier-maché and magazine cutouts. Second went to a resident of a nearby suburb and the specified refrigerator and radio were promptly delivered, following a newspaper announcement of the award.

The "Runner-Ups"

Purchasing certificates were printed to closely resemble checks, made out with a check-writing machine to further enhance this impression. These were then mailed as follows: \$40 purchase certificates to the first hundred correct contestants, judged on the basis of



artistic originality. \$25 purchase certificates to the entire remaining list of contestants, irrespective of their answers. *Every contestant, not just the nine which might be inferred from the ad, received a merchandise credit check. This was the heart of the plan.*

The checks were accompanied by a letter, reading as follows:

"We are pleased to advise that you have been awarded a purchase check given in our big refrigerator contest which closed last night at 6:00 P.M.

"In order that you may prove to yourself the exact value of this purchase check, come into our store and price the refrigerators before telling the salesmen that you are the winner of a check. Mayflower refrigerators are priced the same throughout the United States.

"We have the new model refrigerators with new improved features, which are selling for less than ever before—with three-year factory guarantee—priced complete—installed—and on easy payments. Your check will be honored for the highest marginal amount designated on the end of the check on any Mayflower refrigerator in our stock.

"The extensive publicity we receive by calling attention to the new refrigerators at their new low prices with new features, is really a small cost to us for such an advertising plan, and enables us to give this actual discount to you.

"Your purchase check has no cash value—but will be accepted the same as cash—FULL FACE VALUE—toward any new Mayflower electric refrigerator in our store—or half the face value toward any console radio (not a midget) in our store."

The Results

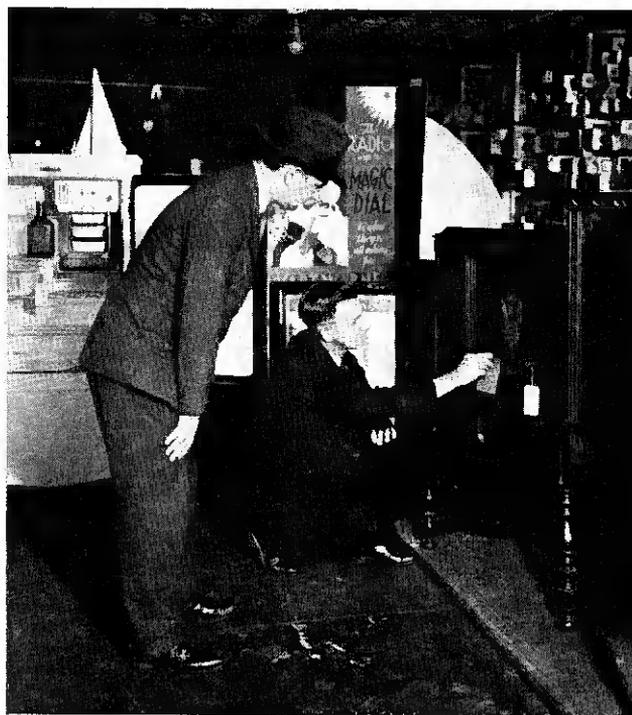
Five-hundred people came to Howell's upon receipt of their merchandise credit checks. (The certificates, originally stamped "Void after October 1," were extended one week.) Twenty-eight \$40 and \$25 certificate holders bought refrigerators averaging \$199.50, necessitating the placing of an order with the distributor for 20 boxes, in a hurry. Thirty-four certificate holders bought console radios averaging \$73, applying their certificates at half the face value. Seven of the sets sold were comparatively old stock, had failed to move through ordinary sales activity.

Most refrigerators were sold for \$14.50 cash plus a \$40 merchandise credit as the down-payment, balance in 10, 18 or 24 months, depending upon the size of the box. The radios brought \$5 cash plus credit slip as down-payment, balance in 12 months. Two went for cash.

Three special salesmen, hired for the campaign, were kept busy in the store for nearly two weeks. They received 2½ per cent commission on inexpensive unit sales, 3 per cent on the higher priced equipment. A 14-piece fruit set, vegetable container or water bottle kit was offered to purchasers of refrigerators listing above \$183 to further encourage selling-up.

Radios and refrigerators were broken up into small display groups in the basement showroom, permitting salesmen to handle merchandise credit accounts without these customers discovering that prizes had been dispensed with a rather lavish hand. Only two prospects inquired why a neighbor had won "a \$40 prize too" and it was satisfactorily explained that there had been a tie.

Profit, we are assured by Frayser, was "satisfactory," and he further points out that the sale could probably have been conducted nearly as profitably if the amount of the merchandise credits had been less.



Bob Frayser (kneeling, in the basement display room) demonstrates and sells a radio to a credit-check holder during the campaign

RCA Suit Settlement

December, 1932

Other News of the Month,

CONSENT DECREE CLEARS WAY FOR CONSTRUCTIVE USE OF PATENT POWERS, SAY RADIO LEADERS

*Decision Creates Opportunity for Genuine
Merchandising Cooperation and Stabilization*

By Ray V. Sutcliffe

COMPLETE separation of the Radio Corporation of America from the General Electric Company and the Westinghouse Electric and Manufacturing Company was agreed upon Nov. 21 by these parties and the United States Department of Justice before the Federal District Court at Wilmington, Delaware. Suits against the other defendants, General Motors Corporation, American Telephone and Telegraph and Western Electric, were dismissed. The consent decree directs the dissolution of the exclusive cross-licensing agreement which involves over 4,000 patents and ends two and a half years of continuous litigation.

The details of the terms of settlement of this famous case have been featured in the public press throughout the country. Elsewhere on this page is a resume of the outstanding terms of the agreement. Of equal and immediate importance to those within radio's ranks is the ultimate effect of this new dispensation on the industry as a whole.

Should Strengthen Patent Position

Inasmuch as patent control and the exercise of patent rights were the leading generating causes accountable for the organizational structure of the Radio Corporation of America as it existed before its dissolution last month, and as the manner in which its patent rights were enforced lead largely to the institution of the Government's suit, speculation as to the ultimate effects of Judge John Nield's decree naturally centers upon this subject.

A large majority of the set manufacturers, licensed under RCA patents, contend that the Radio Corporation is now in a position, as it now holds a clean bill of health from the U. S. Department of Justice, to proceed at once to protect said licensees by instituting suits against all infringers. It will be recalled, see last month's issue of *Radio Retailing*, that the Radio Manufacturers Association has formally called upon Radio Corp. actively to discharge this obligation.

Leading executives, interviewed by the writer, point out that, for the first time, the way is now clear for the exercise of a constructive type of cooperation—and of leadership, if necessary—between the holder of so many of the industry's key patents and all other well meaning and potentially powerful "friendly" competitors. The need for the future maintenance of a tremendous legal staff, for "self-protection" purposes—with the expenses and distractions which necessarily accompany such a set-up—now no longer should exist. Would it not be "the human thing to do," these authorities point out, for RCA to

divert some of its executive and financial facilities, formerly needed for legal requirements, to the pressing problems of putting the merchandising structure of the radio industry on a sound and stable basis?

One gentleman went so far as to suggest the establishment of an RCA "Merchan-

Terms of Settlement

The following summarizes the chief articles of agreement subscribed to in the recent settlement of the noteworthy suit of the U. S. Department of Justice versus the Radio Corporation of America, its five subsidiaries and eight associated companies:

General Electric and Westinghouse combined holdings of 51.4 per cent of Radio Corporation stock with current market value of \$48,190,230 will be distributed to their stockholders on ratable basis.

Payment of \$17,938,733 owed by RCA to electric companies will be effected by turning over to General Electric the RCA building in New York City and by issuing \$4,255,000 of RCA ten-year debentures.

Two and a half years is allowed RCA to adjust business to new independent status, during which time the electric companies are denied the right to manufacture radio devices under newly acquired privileges.

RCA will receive additional patent rights and retain present licensing privileges, but will not have to purchase radio transmitters and tubes from the electric companies.

RCA will continue to be the sole organization empowered to grant licenses to others under the patents of all the companies with which it was associated.

dising Bureau" whose function it would be to direct sales cooperation activities with the licensees of this corporation. This to be an added feature, supplementing its present patent protection and engineering services.

Certainly, conditions are now favorable, it would appear, for the speedy solution of the patent situation on a basis mutually agreeable to all responsible and fairminded set and tube makers.

The desires of the Department of Justice were completely met by the terms of the settlement contained in the consent decree, which takes ownership of RCA from the two largest electric companies in the country and eventually distributes it among 235,000 stockholders of these companies, in addition to 100,000 other stockholders of RCA.

The modifications of the Radio City leases in the amount of space to be occupied and the rentals to be paid, are being adjusted through the issuance to Rockefeller Center of 100,000 shares of "A" Preferred Stock of the Radio Corporation of the par value of \$50 per share. While this is a substantial block of stock, its character and amount does not place the Rockefeller interests in a dictatorial position.

Broadcasters Discuss Copyright Costs, Elect McCosker

Copyright costs under the conditions imposed by the American Society of Composers, Authors and Publishers, constituted the principal topic of discussion before the National Association of Broadcasters during its convention at St. Louis, Mo., Nov. 14 to 16. The copyright owners under the present contract receive 3 per cent of the stations' gross revenues, and this will be increased to 4 per cent in 1933, and to 5 per cent in 1934. To combat this requirement the broadcasters have given power to negotiate to Oswald F. Schuette, who, as secretary of the Radio Protective Association, has been active in instigating recent anti-trust suits in the radio field.

Harold A. Lafount, acting chairman of the Federal Radio Commission, discussed regulation problems now before the broadcasting industry and predicted that the system of clear channels, by which radio programs now reach every home in the United States, is doomed by political pressure requiring the doubling up of stations on channels, at least upon opposite coasts.

Alfred J. McCosker, director of WOR, Newark, N. J., and head of the Bamberger Broadcasting Company, was elected president of the Association.

New sales headquarters and show rooms have been established by the Colonial Radio Corporation at Suite 2412, Graybar Building, 420 Lexington Avenue, New York City.

Should Benefit Industry

Arranged for the Busy Reader

New York, N. Y.

Differing Opinions of the Principals

"Stabilizes Position of Radio Corporation of America"

David Sarnoff

President of the Radio Corporation of America

"RCA, General Electric and the Westinghouse companies assert that they have not violated the anti-trust laws of the United States in fact or intent, but desire to avoid the economic waste and business disorganization necessarily involved in continuing this litigation . . .

"The adjustment stabilizes the position of the Corporation as a complete, self-contained unit in the radio field; extinguishes a large part of its floating debt and funds the remainder; relieves it of the burdens of litigation and enables its personnel to devote all their time to upbuilding the business of the Corporation. . . . The new arrangements prevent the disruption of the existing licensing situation and avoid the necessity of other radio manufacturers negotiating separate license agreements with General Electric, Westinghouse, and the American Telephone & Telegraph Company. All licenses heretofore granted by the Radio Corporation to other manufacturers will remain in full force and effect and the consequent technical advantages to the radio industry arising from such licensing will be preserved. The Radio Corporation will be in position to license others under the patents on new inventions of all of the companies mentioned."

"Means Establishment of Fair Competitive Conditions"

B. J. Grigsby

President, Grigsby-Grunow Co.

"This company took the initiative and practically single-handed has fought the Radio Corporation since beginning the manufacture of radio sets in 1928, to secure for the radio industry fair terms and conditions to do business under patents owned by a group headed by Radio Corporation.

Del Dunning Advanced

R. Del Dunning, formerly in charge of radio advertising for the General Electric Company, Bridgeport, Conn., has been advanced to the post of supervisor of distributor sales activities and field sales promotion. He will report directly to Benjamin C. Bowe, radio sales manager. Mr. Dunning joined GE in 1920 and has had a rapid rise through the ranks.

The appointment of Lee Wichelns to the

Our company carried the fight to Congress, and that resulted in suit by the Department of Justice. The consent decree required by the government discloses this monopoly and means the establishment of fair competitive conditions for the industry. This successful conclusion by the Government of our fight has given relief to the radio industry on practically all of the points for which we have fought.

"It further clarifies the situation in the radio industry today so that manufacturers may now proceed to give their fullest attention to the continued commercial development of radio apparatus without being hampered and harassed by litigation. The officials of the Radio Corporation have assured us of their desire to cooperate wholeheartedly with the industry and their licensees."

"Victory for Court of Public Opinion and Independents"

Oswald Schuette

Executive-Sect., Radio Protective Association

"The dissolution of the \$7,000,000,000 radio trust is the greatest victory ever won in the Court of Public Opinion; just as it is the largest combination that has ever been dissolved by the Government of the United States . . .

"It must not be forgotten that ten years ago Harry M. Daugherty, then the Attorney General of the United States, gave this combination a 'letter of immunity' against governmental attack and that it was not until Senator James Couzens, of Michigan, had secured an investigation of the radio trust, by the Senate Interstate Commerce Committee, that the Department of Justice filed the suit to dissolve the combination. . . .

"The main effect of the present decree will be to make it possible for independent manufacturers to obtain radio patent licenses either as a group from the Radio Corporation or separately from the former constituents of the combination."

sales promotion staff, in charge of radio and vacuum cleaner advertising, also is announced.

Mallory-Yaxley's New Catalog

P. R. Mallory & Co., Indianapolis, Ind., have just issued a new catalog of Mallory-Yaxley radio and electrical replacement and general parts. It is a most complete treatise of the parts business and contains much usable data for the serviceman.

FADA INCREASES RETAIL PRICES

The Fada Radio and Electric Corporation, Long Island City, N. Y., announced, on November 16, an increase of the list prices of several of its leading models, this increase to become effective at once.

General Manager, R. M. Klein, in making this announcement, itemized seventeen reasons for raising prices at this particular time. Some of the more important of these, briefed, are as follows: because the pendulum has swung too far in the direction of low prices; because continually reducing prices has ceased to stimulate business; because, even at the advanced prices, every set represents exceptional value; because no business can endure without a fair return to every participant in it; because we aim to pay a living wage to our help; because higher prices will improve general business conditions quicker than any one other thing.

Hendrickson Merch. Mgr. for RCA Victor Company

E. J. Hendrickson has resigned as president of the New York Talking Machine Company, operating in Buffalo-Rochester, to assume duties as merchandise manager, reporting to the manager of the Radio and Phonograph Division of the RCA Victor Company. Gerald Nelson has been appointed assistant to the vice-president in charge of sales. Mr. Hendrickson went to Buffalo four years ago as manager of the Midland Radio Corporation.

Arcturus Export Sales 70% Ahead of Last Year

An indication of the popularity of American-made radio tubes is evidenced in figures recently released by the Arcturus Radio Tube Co., Newark, N. J.

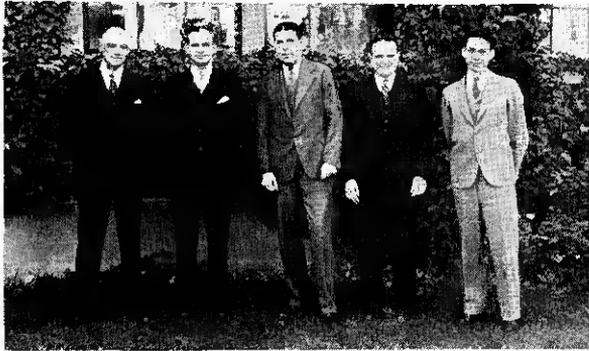
"For the first six months of this year," says Walter Coogan, export manager, "our export sales have increased over 70 per cent in comparison to the first six months of 1931. This is gratifying when it is considered that our export sales for 1931 showed an 87 per cent increase over the year of 1930.

U. S. Radio Tax Not Applicable to Exports

The Commissioner of Internal Revenue has ruled that the sales tax imposed on radio products sold in the United States does not apply to those sets, tubes and accessories directly exported or sold to an exporter for shipment abroad.

Just Before the Battle Mother

Line-up of the new "Pep-tomists" who have just joined forces with Howard, South Haven, Mich. Reading from bald to bushy head: John H. Parnham, vice-pres. and gen. mgr.; Howard W. Sams, gen. sales mgr.; John L. Barron, plant manager; Howard C. Briggs, asistant sales mgr. and Burton Browne, advertising and sales promotion mgr. Sams, Briggs and Browne were formerly with Silver-Marshall.



About a New Title—and Television

"We have given our store a new title," states Fred Dean, of Prest-Dean Radio Company, Long Beach, Calif. "Hereafter it will be known as 'The Home Entertainment Store.' In line with this idea we have discontinued our electrical appliance business and will specialize in nothing but radio—and its closely related products."

This decision of Dean's was made after analysis showed that radio and home entertainment items showed the best profit.

Dean handled the television problem in this effective manner: A television outfit was installed in the rear of the store. Thousands of the curious filed in to see it demonstrated. Dean professed to be highly enthusiastic over it—"when it is perfected." Result . . . Radio set prospects "got the point" and made their own decision not to wait for television but to buy that receiver NOW.

Metcalf Heads New Essex Radio Corp.

The Essex Radio Corporation has been organized in Springfield, Mass., with Morris Metcalf as its president. The new corporation is already in production and

shipments are being made on its new line of moderately priced Essex sets.

Mr. Metcalf, former president of the Radio Manufacturers' Association, states: "We have organized the Essex Radio Corporation to provide a line of radio receivers which are of recognized good quality, with an appeal to a known market of people who want excellent radio performance without purely luxury features. We will concentrate our attention entirely upon engineering and production. We have completed arrangements with the United American Bosch Corporation to take over the merchandising of our Essex products. This is an ideal set-up as it enables us to concentrate our efforts upon manufacturing, which is certain to result in many satisfactory economies."

Technical Service Available

Edward Chinitz and Samuel Rappaport have recently established the firm of Edward Chinitz & Company, at 172 Allen St., New York, where they are engaged in technical service to the trade. Mr. Chinitz is well known in the New York radio technical circles. His new organization is designed to function as an adjunct to the regular dealers' service department in cases of specialized work.

Chinitz was formerly service manager for the European Phonograph Company, a large retail organization.

Honolulu Dealers Find Broadcasting Best Publicity Bet

When the cooks agree the broth must be good. Honolulu's three leading radio merchants unite in praise of the worth of advertising over Hawaii's two good radio stations, KGU and KGMB.

Thayer Piano Company goes the limit—runs a morning program over one station and an afternoon program over the other . . . supplies these stations with selected records which it sells. "American 'hillbilly' recordings are very popular here," states Mr. Thayer, thus scouting the theory that Hawaiians subsist entirely on plaintive native melodies.

The Electric Shop also uses both stations to advertise its complete line of electrical devices. Then there's Jack Chung, a college educated native and owner of the Radio and Technical Laboratory. Mr. Chung specializes in parts, servicing and public address systems.

"I find radio programs my best publicity bet," declares this up-to-date radio fellow tradesman in the far Pacific. "If business continues at its present rate will have to double my floor space."

First Convention, IRSM, In January

Plans for the first intersectional convention of the Institute of Radio Service Men are well along. The meetings will be open to both members and non-members throughout the entire midwestern section of the country. This affair will be held at the Hotel Sherman, Chicago, Jan. 9-11. The program will be devoted strictly to the problems of the service profession.

This gathering, it is claimed, will be the first in the exclusive interest of the serviceman. In addition to the technical discussions, trips to laboratories will be made.

The service engineering department of Continental Carbon, Inc., 13900 Lorain Ave., Cleveland, Ohio, has just completed a new book of resistor replacement data for over 900 popular receivers.

Publicity on Wheels

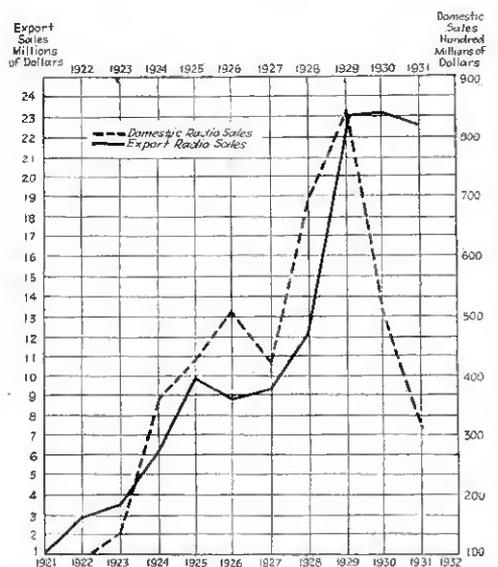


Getting the maximum amount of advertising from one's motorcycle delivery service has been well done by "Crandalls," Springfield, Mass.

RADIO EXPORT SALES

Foreign and Domestic

Note that export sales volume has been sustained during the past three years while, for this same period, domestic demand has fallen off sharply.



Phonograph NEWS

Columbia Out With "Royal Blue" New Records . . . Victor Show Hits Register . . . Audak Two-Speed Turntable Fits Any Motor . . . Brunswick Offerings

COLUMBIA announces the perfection and manufacture of a new material for making records, carrying the famous "Magic Notes" trademark. The new records are Royal Blue in color and display all the qualities claimed for them; a still more silent surface, giving scarcely any needle scratch, a more resonant reproduction of music, a greater definition of tone, increased volume, longer life and, last but not least, outstanding eye appeal.

New Artists Signed Up

To give the new records a wallop of a send off, Columbia has signed up an imposing array of popular and radio featured artists including Eddie Cantor and Roger Wolf Kahn and His Orchestra. Eddie does two infectious hit numbers from the picture in which he is the star, "The Kid from Spain." The comedian's attractive personality is projected on both sides of disc No. 2723D (a number to stock heavily) even to the peculiar lip sound that you may have heard him make over the radio. *Look What You've Done* and *What a Perfect Combination* absolutely have what it takes to make a perfect combination. You would think Cantor himself in the room with you, so vividly real is this new recording and a peppy and equally apparent accompanying orchestra doesn't do any harm. Eddie's greeting, "Here I Am," and what follows will glide Columbia record interest skyscraper high.

The Roger Wolf Kahn disc, *A Shine on Your Shoes* (introducing *Louisiana Hay Ride*) from "Flying Colors" and *It Don't Mean a Thing* (No. 2722D) are made for dancing; the new volume will keep a hallful of dancers prancing. Royal Blue pressings also present Rudy Vallee and His Connecticut Yankees in *How Deep is the Ocean*, aptly chosen from Irving Berlin's recent cycle of hits, and *Please* (the Bing Crosby knockout) from "The Big Broadcast" (No. 2724).

Quick service to dealers is an important factor in Columbia's new plan. For some months this concern has been preparing the way for the appearance of the Royal Blue records. The factories at Bridgeport, Connecticut, and Hollywood, California, are to be in direct contact with dealers and distributors throughout the country. Releases of popular hits are to occur every two weeks. There is a new liberal return plan which Columbia will be only too glad to disclose upon inquiry. The improvements in recording and record material are made possible at no extra cost. In the case of the classic series the prices have actually been reduced; all twelve-inch classical and semi-classical music recordings, whether recorded here or abroad, pressed on the new material, now sell for \$1.00 each instead of \$1.50 or \$2.00.

Victor Offers Show Hits with a Broadway Flavor

We dropped into the local Victor recording studios the other day and found Leo Reisman hard at work making some more show hit numbers. This well known musician is now in charge of all Broadway show hit recording; he is putting additional appeal in these recordings by having



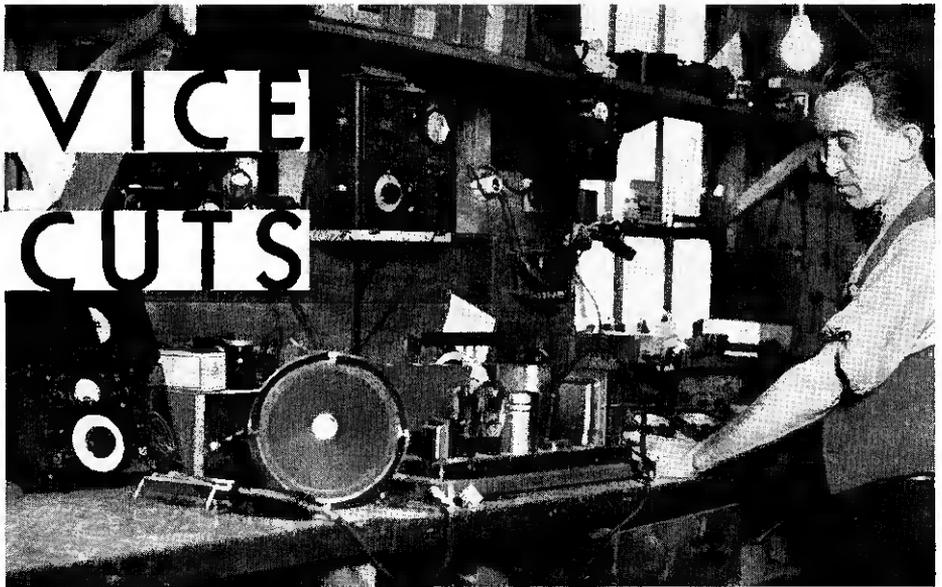
New Columbia Royal Blue Disc Features Eddie Cantor Singing Two Songs from His United Artists Picture, "The Kid from Spain"

the featured performers in the shows offer their authentic bit before the new velocity microphones. Fred Astaire was on hand assisting in the making of two future hits from "The Gay Divorcee," which will have opened in New York by the time you read this. *I've Got You On My Mind* and *Night and Day* are the titles of the Cole Porter pieces, played by Reisman and his band with Astaire vocalizing just as he does in the show. Bits from "Music in the Air" had microphonic treatment during the same session; Jerome Kern's *And Love was Born* and *We Belong Together*, which everyone is humming now. Naturally, we don't know the numbers yet but you'll hear from these records, never fear. Feature Reisman show hit recordings for a unit sale. He has done *A Rainy Day* (Clifton Webb, the star of "Flying Colors," vocalizing) and *Louisiana Hay Ride* (with the chorus from the show just mentioned adding to the hilarity), No. 24157, and *Whistling for a Kiss* and *Brother Can You Spare a Dime* from "Americana," No. 24156. These are already best sellers, plug them.

Victor has a nice little sale, especially appealing for the youngster's Christmas, in a small three-pocket album of seven-inch records containing the whimsical and engaging songs of *Winnie-the-Pooh* and *Christopher Robin*. These

(Please turn to page 40)

SERVICE SHORTCUTS

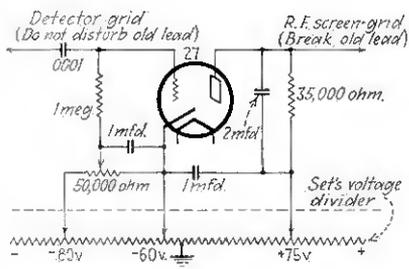


A. V. C. Accessory for Screen-Grid Sets

By Joseph E. Soos

A simple automatic volume control arrangement which works well with most sets using screen-grid type 24's in r.f. stages is shown in the diagram. All models in which I have installed this system perform excellently.

A 27 tube is connected in such a manner that the voltage applied to the r.f. grids is automatically varied in relation to signal input. Wired on a small panel, the 27 unit is connected to the receiver by simply breaking the screen-grid lead to the r.f. tubes and connecting the plate lead of the 27 to this point instead, and by tapping the grid lead of the 27 into the detector grid circuit (second detector in the case of a



super) without breaking the original grid lead.

In order to control volume properly the screen-grid potential must be made variable over a considerable range. This is achieved by adjusting the bias of the volume control tube with a 50,000 ohm potentiometer. The plate current passing through the 35,000 ohm resistor provides the necessary drop to vary the voltage over the required automatic range for control of r.f. amplification. A signal applied to the grid of the 27 control tube reduces its bias and consequently increases plate current, providing an automatic decrease in gain.

The constants of the circuit must be so proportioned as to function rapidly, while electrical inertia must still be great enough to avoid any possibility of swamping out low-frequency modulation as this is actually slow changing of signal input.

Since the volume control tube must have its plate at the same potential as the screens of the r.f. amplifier it is necessary in order to obtain the correct voltage on the 27 to take off voltage taps at minus 60 and minus 80 (with respect to ground) on

the voltage divider of the receiver's power supply unit. This puts a potential of approximately 135 volts on the plate with respect to the cathode.

Ground all r.f. tube cathodes.

Noise Suppression Suggestions

By M. G. Goldberg

One of the main sources of trouble, when suppressing ignition noise in auto-radio installation work, appears to be where gas line loops run near high tension leads. At the outside point of each such loop solder a piece of half or three-quarter inch copper braid and ground these braids to the nearest point of the frame. Do not anchor to the engine block or kickboard.

Another trouble spot is where the low-tension lead from coil to distributor runs through the same metal tube with high-tension leads from the distributor back to the plugs. Remove the low tension lead from the tube and shield it, grounding the shield at several points.

Replace rotors when these have been used for 10,000 miles or more. They are cheap and worn ones can cause much trouble.

Suppressors should be put on the plugs so that they run parallel with the engine block and not vertically away from it.

Some Buick cars, because their ignition wiring is covered by a metal plate, require no spark-plug suppressors. Distributor suppression alone is satisfactory.

On Plymouth, Dodge, DeSoto and Chrysler cars, where the engine is rubber-suspended, it is usually necessary to bond the engine to the frame using heavy copper-braid at about six points. These points are usually: from horn to car frame; gas line at carburetor to car frame; two rear bolts on engine head to kickboard and two front engine head bolts to car frame.

If a condenser across the generator does not stop all the "whine" connect one from each side of the relay to ground.

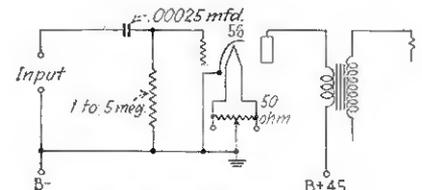
Ground the instrument panel, at each end, to the door frames. In most new cars the only panel ground is through the dash controls and this is rarely sufficient.

Curing Hum With the 56

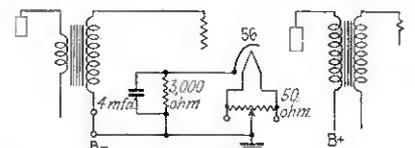
By Boris S. Naimark

Many of the older sets using 27 detectors and 26 first a.f. stages have an annoyingly high hum-level. The trouble arises in the audio stage and the remedy is to substitute a heater type tube for the 26. A 27 could be used for this purpose were it not for the fact that the 2.5 volt transformer winding could probably not supply filament current for two 27's without serious overload.

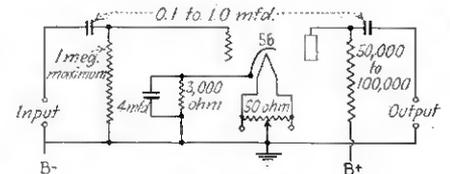
The answer is the 56. Substitute 56's for both detector and first a.f. tubes, running their heaters from the 27 transformer



"Grid Leak" Detector



Transformer-Coupled A.F.



Resistance-Coupled A.F.

winding. This places only 1/2 amp. overload on the winding, which it will probably stand without danger.

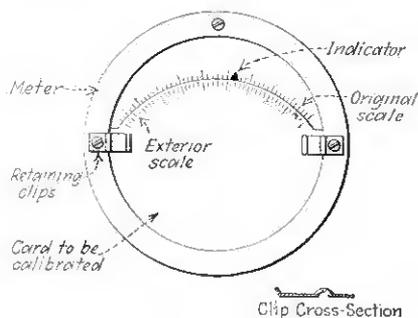
The 56 is installed as a detector in the

same manner as the original 27 with the single exception that the cathode is connected to the center-tap of a 50 ohm resistor placed across the heater winding as shown in the accompanying diagram. Use wafer sockets for the substitution and it will be found that the smaller height of the 56 will permit tubes and wafer socket to fit in the average set with room to spare.

External Meter Scales

By John R. Flynn

Meters may be fitted with external, easily removable scales by bolting small spring clips to two mounting holes as



shown, in such a manner that their ends press firmly on the glass. The external scales, which may be cut from celluloid or white cardboard, should permit the tip of the indicator to be seen.

Place the scale in position and draw a zero and mid-scale line, then proceed to calibrate in accordance with your needs. The scale may be removed to make way for others and yet when placed back in the clips, zero and center lined up, will hold its calibration.

Clocks, Converters

By Edgar M. Carnes

In attaching shortwave converters of the type taking plate voltage from the broadcast receiver I find part of a panel from an old B-eliminator useful. The binding posts and variable resistors can be used to obtain proper supply voltage adjustments.

An electric clock that was built into a set caused considerable trouble by humming. I relieved it by tightening up the bolts that clamp the laminations in the induction coils.

Substituting 47's for 45's

By J. P. Kennedy

Adapters which permit substitution of 47's for 45's do not ordinarily change the value of the C bias and consequently do not permit maximum results from the

pentodes. This can be corrected in two ways: The first is to substitute a 420 ohm resistor, in the case of a single power tube, for the 1,500 ohm C bias resistor used with the 45, or a 210 ohm resistor for the 750 ohm unit in a push-pull or double power-tube arrangement. This means opening the chassis, an awkward thing to do, especially when trying to sell a customer the changeover idea.

The second method consists of bridging a 20 ohm center-tapped resistor across the filament circuit of one power tube by means of an external adapter and shunting a 600 ohm (584 is the exact value) one-watt resistor from the center-tap to the chassis or ground post. Inasmuch as the two bias resistors—the original and the new—are now connected in parallel this gives a net value of 428 ohms, which is close enough to the recommended 420 to work satisfactorily. When two power tubes are used, half the resistance (300 ohms) with a two-watt power rating will bias the 47's properly.

As a further improvement, for the sake of tone quality, a 10 mfd., 25-volt electrolytic condenser across the external C bias resistor will effectively by-pass the lower audio frequencies. As the above changes can be made quickly without opening the chassis it should be easy to sell an adapter, consisting of resistors and by-pass condenser, plus new tubes by actual demonstration.

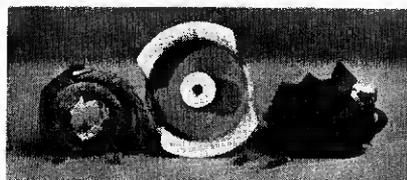
Anchoring Electrolytic Condensers

By Frank Johnson

A chunk of tar left over from a street-paving job can be used to stick pasteboard electrolytic condensers to metal chassis by heating it with a soldering iron or blow-torch and using like glue. A tiny bit of tar worked soft with the fingers will also keep insulation from fraying off wire ends.

Gypped!

Earley Radio of Salem, Mass., sent a defective field coil to a distant jobber, asked for a price on its repair. The quotation proved high and so

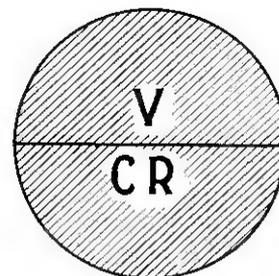


the dealer requested that the unit be returned.

... it was. But first the jobber, disgruntled at his failure to secure the order, deliberately tore out the winding, substituted rope and fixed resistance just to make diagnosis of the trouble difficult for the next man.

This type of "gyp" should be driven from the industry.

Ohm's Law, Simplified



V stands for voltage, C for current and R for resistance. Conceal the constant desired and the formula for finding it is exposed. V is found, for example, by multiplying C and R while C is determined by dividing R into V

I. F. Alignment Kink

By Lloyd H. Harder

The i.f. stages of a superheterodyne may be readjusted to the proper frequency without a special oscillator if another super using the same intermediate frequency and an ordinary broadcast-band oscillator are available.

Connect the ground posts of the two sets together. Then fasten a wire between the grid of the standard receiver's second detector and the grid of the repair's first detector. Connect the r.f. oscillator to the standard set in the normal manner and tune both oscillator and standard to 1,400 kc.

Connected in this manner the output of the standard receiver's i.f. amplifier, a signal of the desired intermediate frequency, feeds into the i.f. amplifier of the set under test in precisely the same manner as would a special i.f. oscillator. Thus the repair job may be balanced in the usual fashion, its i.f. stage trimmers being adjusted for maximum output.

It may be necessary to cut out the oscillator of the repair by grounding the cathode tap of its oscillator coil, particularly if a combination first detector and oscillator are employed. It may also be necessary to disconnect the permanent grid lead to the set's first detector.

Rectifier Type Output Meter

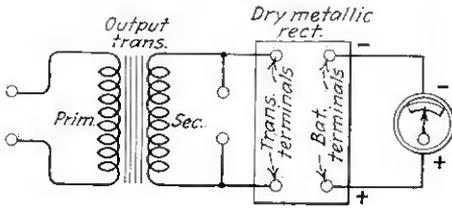
By Charles T. Kirk

I constructed an output meter, using a d.c. milliammeter and a rectifier, about a year ago and it has given satisfactory service ever since. Its details may be of interest to other servicemen.

The essential parts are a 0-2 d.c. milliammeter, an ordinary output transformer and a Kuprox or similar dry metallic disc rectifier, such as was used some time ago to replace the jars of electrolytic trickle chargers. The more popular 0-1 milliammeter might have been used but such a range is a little too low when the output meter is used in conjunction

with a good oscillator. Four binding posts or pin jacks are provided on the panel. Two connect to the primary of the transformer, and the other two are connected directly to the transformer or input terminals of the rectifier.

As a rule it is difficult to connect to the voice coils of a dynamic speaker. By using a Crosley "Dynacone" socket adaptor, widely obtainable, the output meter is connected in the plate circuit of the last



audio tube quite easily. In this adaptor all leads are carried through except the plate. The plate of the tube and of the socket are connected to two pin jacks mounted on the side of adaptor and it is to these two jacks that the input terminals of the output meter may be connected. A similar adaptor may be made of odd parts in the shop.

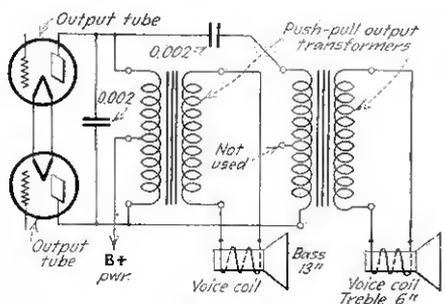
When the radio being serviced has a speaker jack or binding posts it is sometimes easier to connect to these than to use the adaptor. If the set has an output transformer, the transformer of the meter is not used when connecting to the speaker posts but the rectifier unit is hooked directly to the radio speaker terminals. If the radio has no output transformer the speaker posts are connected to the transformer of the output meter in the same manner as when the adaptor is used.

The output transformer was purchased from a mail-order house for 30 cents, the Kuprox unit was obtained from a discarded trickle charger and the cabinet originally housed a Radiola WD-11 amplifier. The panel was cut from scrap so that the only expensive instrument was the milliammeter. A rectifier which has about outlived its usefulness for ordinary purposes will operate okeh in the meter.

Twin Speaker Installation

By W. T. Golson

Two dynamic speakers may be connected in a twin arrangement, one reproducing treble notes best and the other bass, by utilizing two output transformers and two .002 mfd. condensers. Select a large cone for the bass and mount it on a large baffle. (In consoles the built-in unit is usually



suitable.) Obtain a small cone for the treble and mount this on a small baffle, or in the bottom of the console cabinet facing the floor. Connect the output transformers and condensers as shown in the diagram.

The condenser, in series with the primary of the transformer feeding the treble speaker will pass high frequencies better than low to this unit while the condenser shunting the primary of the transformer, feeding the bass speaker short circuits high frequencies out of this cone. In one satisfactory installation I used a 13 in. cone for bass and a 6 in. unit for treble, both being dynamics.

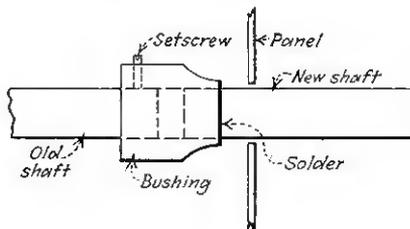
Parallel Resistor Calculator

The combined value of two or more paralleled resistors is quickly determined without mathematical calculation by consulting an ingeniously worked-out chart offered by the Ohmite Manufacturing Company, 636 North Albany Ave., Chicago. SHORTCUT readers: write for the calculator, mentioning this magazine. It's free.

Simple Shaft Extension

By S. J. Parker

Replacement volume controls having short shafts may be used in repairing receivers requiring controls with especially



long shafts by equipping the replacement units with suitable shaft extensions

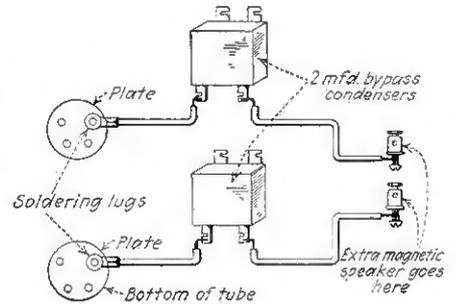
Remove the inner brass bushing from an old wooden knob. This will be found to be about 1/2 in. long, having a 1/4-in. bore and a setscrew near one end. Now secure a length of 1/4-in. shaft having the necessary length for the extension from an old rheostat or similar part and pass this into the bushing for a short distance on the end away from the setscrew. Solder it securely in place.

The open end of the bushing, equipped with the setscrew, may now be passed over the shaft to be extended and the screw tightened.

Adding Extra Magnetics

By F. W. Seaton

Quite often the serviceman is asked "can another speaker be added to my radio?" When you explain to the customer that it can be, but that it is necessary to change some of the wiring the deal usually falls through. Most people hesitate to



authorize changes of wiring in their sets.

A hook-up such as is shown in the diagram, mounted in a small box or on a board, does the trick. It is only necessary to remove the two push-pull tubes and to place the soldering lugs on the plate prongs, connecting the new magnetic to the two binding posts.

I sold twelve installations of this type in ten days.

110 a. c. Dynamics in Cars

By Jack Bonelli

Dynamic speakers designed to operate on 110 volts a.c., employing a step-down transformer and dry disk rectifier may be energized from a 6-volt storage battery when used in an automobile.

Clip the supply leads from the field coil to the rectifier and bring the field leads out to external terminals. These go to the battery. The disks may be used for emergency charging.

The field coils of speakers of this type are usually wound for 7 volts d.c. at 1 1/2 amperes and operate well on 6 volts. By using a double-throw switch the speaker can be switched off the battery to the rectifier for a.c. operation when 110 volts is available.

Curing Critical Volume Controls

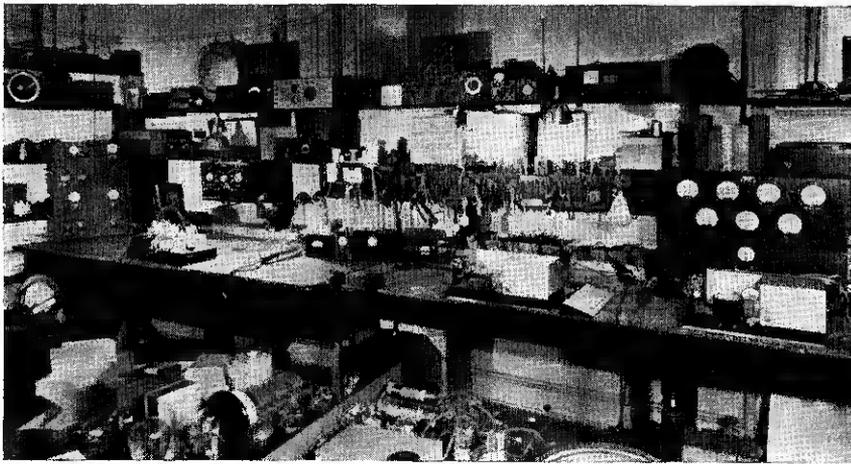
Many supers that use 51's and 35's in their i.f. stages employ a 10,000 ohm volume control to simultaneously vary

How Do YOU Do It?

RADIO RETAILING pays regular space rates for acceptable letters from experienced servicemen describing original repairing methods or equipment.

Items appearing on this page are good examples of the type of material desired. Schematic diagrams and drawings need not be artistic, merely clear.

Mail SHORTCUTS to W. MacDonald, Technical Editor, RADIO RETAILING, 330 West 42nd Street, New York City.

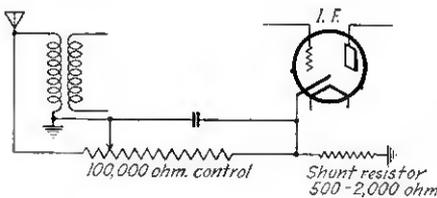


Willing To Be Judged By Its Tools

The Radio Inspection Service Co., Hartford, Conn., another one of our regular readers, sends in this photo of its shop. An enviable array of apparatus.

cathode bias and also to shunt the antenna circuit. A characteristic of such sets is a rather critical point between minimum and maximum volumes. This is often so critical that the user cannot control the volume of dx signals.

Observe the position of the volume control arm at the critical point and with an ohmmeter measure the resistance from cathode to ground. Wire a fixed resistance having approximately twice the observed



value from the cathode of tube to ground. The control will then work smoothly over its entire range.

Bike-Spoke Test Prods

By J. A. Mayr

In making test prods for the bench I have used motorcycle spokes and nipples. They are very neat in appearance and have the added advantage of making it possible to use any number of interchangeable tip lengths.

Take two spokes. Cut them to any desired length and grind the points to whatever shape is preferred—blunt, pin-point or screwdriver. Then take two pieces of hollow red fibre tubing, 7 inches long is about right, for the handles. Remove the nipples from the spokes and solder them

with the point of a sharp knife to prevent them from turning and then into their open ends solder the ends of conveniently long pieces of flexible lamp cord. Thread the lamp cord through the fibre tube.

A short piece of coil spring cemented into the opposite end of the handle prevents the cord from breaking. Lacquer one of the prods red and the other black, screw in the tip desired. Extra tips can be made in any length and being of good steel will withstand all sorts of abuse.

Testing Pentodes With the 245A

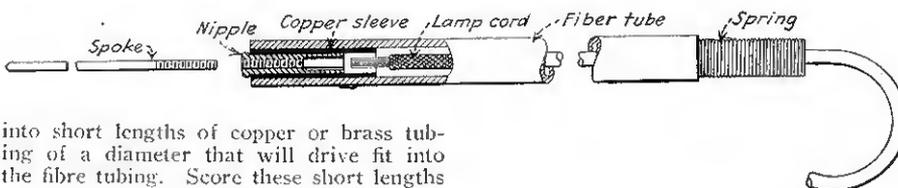
By George K. Beard

To test pentodes with the Readrite 245A analyzer, place 5-prong plug in set pentode socket and tube in analyzer 5-prong socket. Read filament voltage on 0-10 a.c. scale, plate mls. on the 0-100 ma. scale.

Now, to read plate voltage connect a "jumper" from the "B jack" to the "plus jack" and another from the "300 jack" to the "plus ma. jack," reading on the 0-300 d.c. voltmeter scale.

To read control-grid volts place a jumper from the "60 jack" to "plus jack" and another from "B jack" to "grid jack." The jumpers can be made of short lengths of flexible, insulated wire equipped with phone tips.

Warning: Don't remove tubes from sets using mercury-vapor rectifiers while the power is on!



into short lengths of copper or brass tubing of a diameter that will drive fit into the fibre tubing. Score these short lengths

PILOT LIGHTS

STROMBERG 29. On-off switch and tone control unit is electrically and mechanically identical to the phonograph and pickup switch and volume control unit. When on-off switch contacts are discovered to be burned out, and the set is not equipped with a pickup, interchange the two units, making sure that the "jumper" across the pickup input is in place. This saves \$1.95 until the customer wants to use a pickup.

PHILCO 70, 90. If airport beacons operating on 260 kc. cause interference, readjust the i.f. compensating condensers and the oscillator compensating condenser to either 250 or 270 kc.

RCA M30. Lack of complete manual volume control is usually an indication of trouble in the a.v.c. circuit.

RCA R34, R35, R39, RE57. 90 per cent of the trouble experienced with these receivers may be traced to the 70,000 ohm red and green resistor in the plate circuit of the first audio stage, the 1½ meg. red and white resistor in the detector control grid circuit and the 1½ meg. blue and green resistor located under the resistance board.

CROSLLEY. Certain Mershon condenser models hum and may be repaired by drilling a ¼ inch hole in the bakelite top of the electrolytic unit, being careful not to damage the "innards," filling with distilled water to a point about ¼ inch from the top and closing up the hole again with sealing wax. Discharge the condenser before drilling.

AK. Volume controls which become noisy need not always be replaced. Remove them from the chassis, swab the winding with a cloth saturated with alcohol, bend the slider arm so that it makes firmer contact with the winding and also tighten it against the tension spring.

FADA. Some of the older models use special knobs equipped with tension springs which fit in a notch cut into the shaft. To hold these in place while replacing knobs first put a little soft pitch or candle tallow in the notch.

COLONIAL 32. Loss of volume accompanied by poor tone is usually due to an open first audio bias resistor. These are of the flexible type and breaks generally occur near either end. Unwind a few turns of resistance wire to cut out the break and resolder.

SPARTON 410. Type 45 power tubes may be substituted for the 183's by rewiring the output stage filaments in series, including a half-ohm resistor in the circuit.

NEW MERCHANDISE



RCA Victor "Intravario" Sets

A new line of "intravario" short and standard wave radios for export can now be obtained from the RCA Victor Co., Inc., Camden, N. J. There are three ten-tube superheterodyne models—one a regular midget, one a 2-volt battery-operated midget, and the other a radio phonograph combination with two-speed turntable.

A 12-tube model is also a combination with improved home recording two-speed turntable, B amplification.

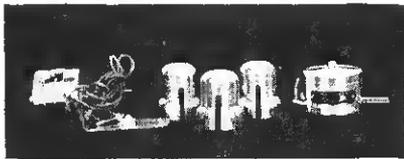
Two 14-tube models are available, one a straight radio and the other an automatic record changing combination with home recording. These sets have a single dial control for short and standard wavelengths; plus a five position switch which permits swift and easy wave-band selection. —*Radio Retailing*, December, 1932.

A-K Antenna Kit

Apparatus for eliminating man-made electrical disturbances, consisting of two special transformer units and three tube shields is being made by the Atwater Kent Mfg. Co., Philadelphia, Pa.

One transformer is mounted at and connected to the antenna, and the other connects to the antenna and ground binding posts of the set. Tube shields are placed over the R.F., First Detector, and First I.F. tubes.

This unit is known as Model E-2 and lists for \$7.50 complete, except for a length of waterproof, two-conductor shielded lead-in. —*Radio Retailing*, December, 1932.



Solder

Rosin core and acid core solders in what is known as the "Neatpak" can are being manufactured by the Federated Metals Corp., 75 Folsom St., San Francisco, Calif. The Neatpak has a hole in the top, covered with cellophane which is broken and as much solder as required pulled out.

They are packed in one and five pound cans as well as in small sizes. —*Radio Retailing*, December, 1932.

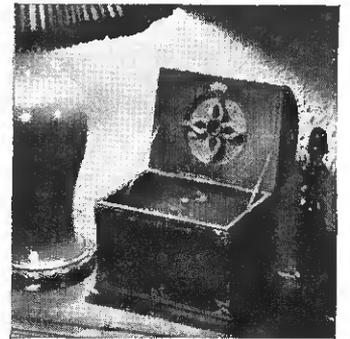
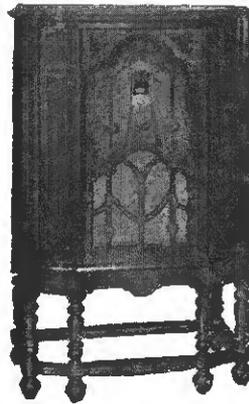
General Electric Line

Model J-87 of the General Electric Company, Bridgeport, Conn., is an 8-tube superheterodyne in a full size six-legged cabinet of Eighteenth Century English design. It has pentode push-pull output stage and uses the new type tubes. The tuning range has been expanded to 540 kilocycles. \$79.50 with tubes and tax.

Model J-83 is an adaptation of an Eighteenth Century English mantel clock design, and is equipped with a carrying handle. The circuit is essentially the same as the J-87. \$59.50.

Model J-72 is the lowest priced set in the line. Its small size and light weight make it easily portable. It is a 7-tube midget model listing at \$47.50.

Model A-60 is an all-electric auto radio using the new type tubes. It has improved a.v.c. and the electro dynamic speaker is equipped with special tone equalizers. The price including dynamotor, tubes and tax but less installation is \$69.50, for "B" battery operation \$49.95. —*Radio Retailing*, December, 1932.



Majestic "Pirate Chest"

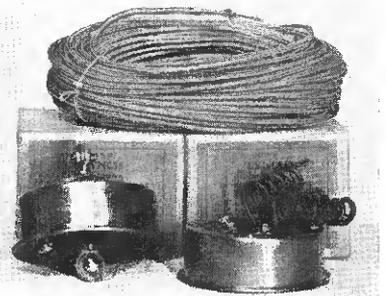
Grigsby-Grunow of Chicago has announced a "Pirate Chest" model receiver, a four-tube, t.r.f. receiver using the new type tubes including the G-57 and 58 AS. It is constructed of white oak, sand-blasted for antique, weathered effect and trimmings are dull-gold in finish.

A dynamic speaker is incorporated in the top, the set measuring 10 1/4 in. long, 8 wide and 9 1/2 high. Priced at \$18.45 complete with tubes and including tax, slightly higher on West Coast. —*Radio Retailing*, December, 1932.

Lynch "No-Stat" Antenna

A noise-reducing antenna kit is being marketed by the Lynch Manufacturing Co. of 1775 Broadway, New York City. It comprises two impedance-matching transformers—one to be attached where the lead-in joins the aerial and adequately weatherproofed, the other to be mounted within or near the receiver—and 50 ft. of shielded transmission cable.

The matching-transformers are equipped with taps so that either a high or a low-impedance line may be used to suit conditions. Designed primarily for operation at broadcast frequencies the No-Stat system may be used in conjunction with "Poly-coupler" units where the operation of more than one receiver from a single antenna is desired. Price, \$5 for the kit. Units obtainable singly. —*Radio Retailing*, December, 1932.



United Motors Auto Radio

United Motors Service, Inc., 3044 West Grand Boulevard, Detroit, Mich., is making a six-tube superheterodyne auto radio using the new 85 duplex diode triode and 89 triple grid pentodes. The set has a.v.c., tone selector, quiet tuning, and may be had either with B-batteries or vibratory-type B-eliminator.

The installed price with B batteries if car is aerial-equipped, \$66. \$3.50 extra for installing aerial. With B-eliminator, \$78 with aerial-equipped car; and \$81.50 if aerial must be installed. Complete but not installed, less B power supply or batteries, \$49.50.

The set is also available with a dynamotor type eliminator, same price.

Installed price means installed by any United Motors Service Station. —*Radio Retailing*, December, 1932.

Cordless Electric Iron

To avoid the nuisance of a dragging cord, the automatic cordless electric iron of the Lifetime Electric Company, 1740 West Austin Ave., Chicago, uses a contacting device on the stand to which the cord is attached, enabling the user to draw current when needed as the iron is at rest. A thermostat cuts off automatically at scorching heat. A "chromolax" element is contained in the sole of the iron proper. —*Radio Retailing*, December, 1932.

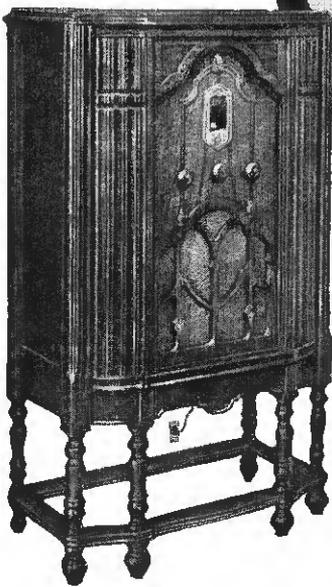
Ohmite "Red Devil" Resistors

Fifteen new high resistance values have been added to the forty-two values which now comprise the "Red Devil" resistor line of the Ohmite Mfg. Co. 636 North Albany Ave., Chicago. The new units are also of the wire-wound type and with the new values make it possible to obtain these resistors in values from 1 to 100,000 ohms. —*Radio Retailing*, December, 1932.

(New Merchandise Continued on page 36)

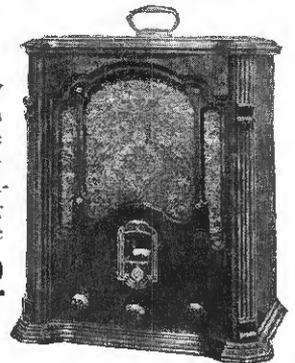
GENERAL ELECTRIC ANNOUNCES

3 astonishing new radio values



G-E's LATEST TRIUMPH!—the new J-87 console. An 8-tube superheterodyne using new type tubes. 18th Century English cabinet. And note its size—41 $\frac{1}{2}$ inches high, 23 $\frac{1}{2}$ inches wide, 12 $\frac{3}{8}$ inches deep. Full-size electro-dynamic speaker. Push-pull output. New type automatic volume control. Extended tuning range. And the new Noise Suppression Device. **\$79⁵⁰**
 Price with tubes . . . only

ANOTHER SURPRISE IN PRICE—and a set that will surprise you in performance, too!—the new J-72 table model. A 7-tube superheterodyne, using new type tubes. Full-size electro-dynamic speaker. Pentode output. **\$47⁵⁰**
 Price with tubes . . .



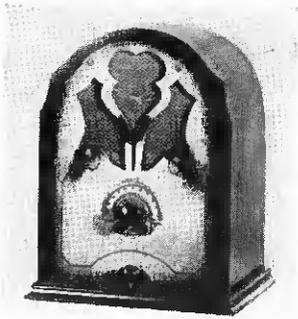
AND HERE'S THE NEW J-83—Big-set performance in a table-model size. An 8-tube superheterodyne. Full-size electro-dynamic speaker. Push-pull output. Extended tuning range and new type automatic volume control. **\$59⁵⁰**
 Price with new type tubes. . .

Here are three new sets worthy in every way to wear the famous G-E quality monogram, and priced to help you start 1933 with a wallop!

These three new instruments have *everything* you want. Outstanding beauty in design. Cabinet work superb. Prices which are right. And the same true-to-life tone that has won tone-tests all over this country. . . Yes, Mr. Dealer, these are three more reasons why the G-E Franchise will make real money for you. Address Section R6812, Merchandise Department, General Electric Co., Bridgeport, Conn.

● The G-E Circle—a program of special interest to women—is on the air every weekday (except Tuesday) at 6:45 P. M., Eastern Standard Time.

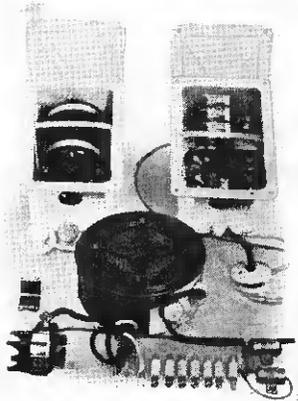
GENERAL ELECTRIC RADIO



Autocrat Line

The Autocrat Radio Co. of 3855 N. Hamilton Ave., Chicago, Ill., has announced a line of midget receivers and an auto-radio model. Model 24-BG (illustrated) uses two 24's, a 47 and an 80, lists at \$18.75 complete. Model 24-OT uses the same chassis but has a more decorative cabinet, complete for \$19.75. Model 25-KS has three 24's, a 47 and an 80, lists at \$21.50 complete. Model 30 uses three 57's, a 47 and an 80, comes in a 25-KS cabinet at \$23.50 complete. Model 57 uses a 58, 57, 47 and 80 and comes in a 24-OT cabinet at \$20.50.

A \$34.90 t.r.f. auto-radio has two 39's, 36, 37 and two 38's, tuning from 175 to 550 meters (police calls if desired). Comes complete with tubes, illuminated dial, lock-switch, remote control and 30 inches of flexible shaft, but less B-batteries.—*Radio Retailing*, December, 1932.



All-Electric "Motor Majestic"

The all-electric motor radio of Grigsby-Grunow Company, 5801 Dickens Ave., Chicago, is a six-tube superheterodyne with full automatic volume control. It has a newly developed "squelcher" circuit eliminating interference between stations. The receiver uses the following tubes: Two 38's, three 39's and one 85, the latter providing the a.v.c. action. The source of "B" current is a dynamotor. The chassis and "B" eliminator are contained in heavy metal cases, mounted out of sight and operated from a chromium plated remote control unit clamped to the steering column. The speaker is a 7-inch electro-dynamic.

A simple inexpensive auto-radio test set has been designed by Majestic. It is plugged into the receiver and will test each component individually, as well as test each tube.—*Radio Retailing*, December, 1932.

Fishwick "Picture" Antenna

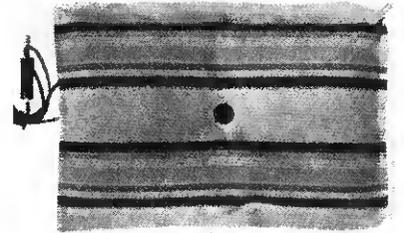
A multiple coil wire antenna enclosed in the back of a framed picture, 10x12 in., can be obtained from the Fishwick Radio Co., 226 East 8th St., Cincinnati, Ohio. There are six regular designs including copies of old Master paintings. A five foot connecting wire attaches to the antenna post of the set, no ground being necessary. \$1.10.

Fishwick is also making an under-rug antenna measuring 18 in. x 4 ft. and selling at 95c.—*Radio Retailing*, December, 1932.

Auto Radio B Eliminator

Completely automatic in operation the vibrator-type B-eliminator of the Electronic Laboratories, Inc., 122 West New York St., Indianapolis, Indiana, has an "Automatic Load Delay" circuit giving full protection to the mercury-vapor rectifier tube as well as the interrupter, insuring long life. The steel container is cadmium plated and small in size, measuring 7 3/8" long, 6" deep and 2 5/8" high.

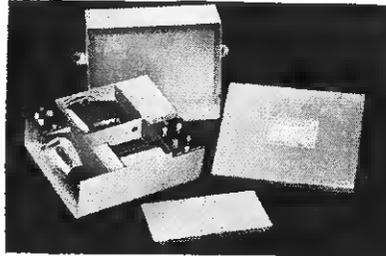
Shipped "knocked down" for \$13.25. An experienced serviceman can assemble in an hour. The unit completely assembled at the factory is priced at \$17.70.—*Radio Retailing*, December, 1932.



Powerizer "Pillow" Speaker

The Powerizer Pillow Speaker of the Radio Receptor Co., Inc., 106 Seventh Ave., New York, N. Y., is a light-weight air cushion made of rubber cloth, attractively covered in a striped material. A receiver or speaker unit butts into a pocket on the under side in such a manner that when the pillow is inflated, nothing hard can touch the user. It can be easily sterilized or washed and does not require any special pillow case.

This speaker can also be used when one wishes to listen to the radio in a roomful of people where quiet is wanted. It can be rested on the back of a chair so that the user can hear the program and still not disturb the others. The price complete with speaker unit, radio plug and bulb inflator is \$8.75.—*Radio Retailing*, December, 1932.

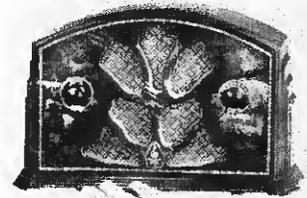


Music Box, Jr.

One of the smallest receivers known is the "Music Box, Jr.," model 61, made by the American Radio and Television Co., 4917 South Western Ave., Los Angeles, Calif.

The dimensions are 7x7x7 in. and the cabinet is a replica of a Spanish jewel chest. It has a solid walnut top and walnut veneer sides. This set has four tubes, one each of the 57, 58, 47 and 32 types. The speaker is in the bottom and the wave range is 175 to 550 meters. The net price to the trade is \$9.75, suggested list price \$14.95.

Model 62, same as above except with wave changing switch tuning 60 to 175 meters and 175 to 550 meters, has a trade net price of \$10.75, tax paid, a suggested list of \$17.50.—*Radio Retailing*, December, 1932.



Emerson AC-DC Midget

A universal a.c.-d.c. midget (25 to 60 cycles) which weighs only 6 lbs. has just been introduced by the Emerson Radio & Phonograph Corp., 641 Sixth Ave., New York City. Retailing at \$25 list complete with Cunningham tubes, the model uses a type 36, 37, 38 and 39—four tubes in all.

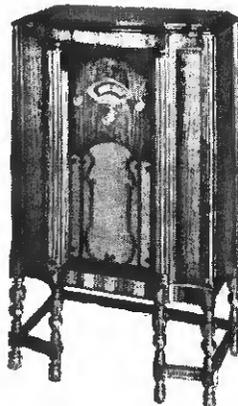
It is 10 in. wide, by 6 1/2 high, by 4 1/2 deep, and has an attached 20-ft. antenna. The cabinet is of burl walnut veneer with marquetry inlay. A carrying case is available for \$2.50 extra. *Radio Retailing*, December, 1932.

Electrolytic Condensers

The addition of a complete line of dry electrolytic condensers rated at 500 volts d.c. peak in the inverted, upright and card-board containers, are announced by A. M. Flechtelm & Co., Inc., 136 Liberty St., New York City.—*Radio Retailing*, December, 1932.

Colonial 6-Legged Console

The Colonial Radio Corporation of 444 Madison Ave., New York (distribution exclusively by "Graybar") announces a new 6-legged console of burnt walnut plus imported zebra wood. The model, a superhet, is equipped with 6 tubes, including super-control types, and has tone control. It is known as number 399 and retails for \$39.90 complete with tubes.—*Radio Retailing*, December, 1932.



Walden Worcester Electric Refrigerators

Stevens Walden, Inc., Worcester, Mass., makers of the well-known "Walden Worcester" wrenches and "Stevens" speed-up tools, are now in the electric refrigeration business and announce a line of four domestic models.

Model 44 is 23 1/2 in. wide by 53 in. high. Gross food capacity 4.4 cu.ft.; shelf area 6 1/2 sq.ft.; two trays making 56 cubes. It has a cold tray for crisping salads, etc.

Model 54 is two in. wider and five in. higher; food capacity is 5.4 cu.ft. and shelf area 9 sq.ft.; same number of ice cubes.

Model 65 is the same height but 28 in. wide; 6.4 cu.ft. gross food capacity; 11.7 sq.ft. shelf area. Cube capacity same.

Model 80 is 32 in. wide by 58 in. high and has a gross food capacity of 8 cu.ft. and a shelf area of 13.6 sq.ft. It has an additional ice tray and makes 84 cubes.

Refrigerant is methyl chloride and each box has a type F "Ranco" Thermostat.

Stevens Walden also makes a water-cooler in both the bottle and direct connector type as well as a line of large commercial refrigerators, especially adapted for hotels, etc.

It is understood that this company is also working on air-conditioning and may have something in this field at a later date.—*Radio Retailing*, December, 1932.

(New Merchandise continued on page 38)

U. S. Radio's Greater Values;
 ten models in a price range from
\$17.95 to \$150.00

U.S.
Radio

GLORITONE

Model 24

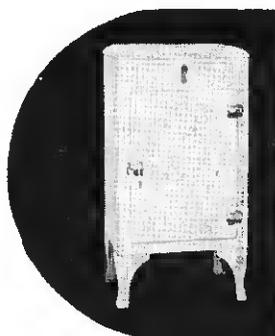
\$ **17** **95**



A GENUINE superheterodyne . . . using new "Triple-Grid" tubes . . . with latest engineering features . . . dynamic speaker . . . Gothic style cabinet with center-matched, half-round walnut panel and fluted pilaster effect . . . precision built to quality standards . . . Model "24" is the smashing new value with which U. S. Radio has amazed the industry.

With splendid tone and ample volume, actually out-performing many a larger set, U. S. Model "24" has leaped to leadership in the field of "package" radio. Built to be worthy of the trade mark of U. S. Radio's line of *greater values*— a model for every purse and purpose— from \$17.95 to \$150.00. Write or wire now for complete information.

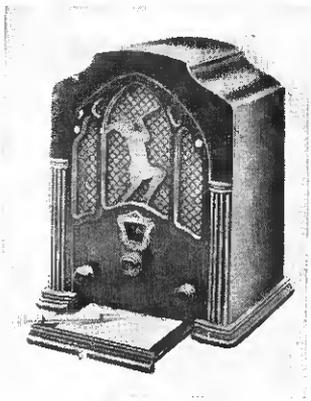
United States Radio and Television Corporation • *Marion, Ind.*



U. S. HERMETIC REFRIGERATOR

With exclusive Roto-Pulse Sealed Unit covered by three-year guarantee. Three sizes, five models in a price range starting at

99 **95**
 f. o. b. factory



Jackson Bell Sets

Such features as a built-in drawer for log card and a handy compartment for cigarettes make the 1933 sets of the Jackson Bell Co., Ltd., 6500 McKinley Ave., Los Angeles, Calif., especially attractive.

Model 25AV, shown, stands no higher than a telephone. It is a 5-tube superheterodyne. A log card pulls out from beneath the dial. \$31.95.

Model 28-AV-SB is an 8-tube all-wave superhet midget, covering 20 to 550 meters. \$57.95.

Model 26, 6-tube super midget, is \$39.95 as a short and long wave set. Long wave only, \$37.95.

Model 27AV 7-tube superhet midget is \$46.95. In a console cabinet, \$62.50.

Model 212 (12-tube superheterodyne) is a 6-legged highboy with meter tuning, twin speakers and "quiet between stations" control. \$98.50.

Pandora model, 5-tube superheterodyne, is unique in design. It is of the chest style and contains a log card and compartment for cigarettes. \$34.95. This set plays with the cover closed as the speaker is in one end.

Automobile radio, model 205 AV is a five tube superheterodyne with a.v.c. Price, less batteries, \$39.95.

All sets are priced with tubes and tax included. All have automatic volume control and use the new series tubes.—*Radio Retailing*, December, 1932.



Balkeit Receivers

Four midget type sets and a console make up the 1933 line of the Balkeit Radio Co., North Chicago, Ill.

Balkeit Jr. Model 42E, illustrated, is a four tube set using a 57, 58, 47 and 80. \$24.50. In a Gothic cabinet, \$27.50.

Model 55 superhet utilizes two 57's, a 58, a 47, and an 80. \$34.50.

Model 52, also a 5 tube set (two 58's, a 55, a 47 and an 80), with built-in antenna is \$29.50.

Console Model 742 has the following tube line-up: three 58's, three 56's, a 55, two 45's and an 82. It has a.v.c. \$94.75. Twin speakers optional at slight additional price.

Balkeit also supplies the chassis only, chassis and single speaker or chassis and twin speakers.—*Radio Retailing*, December, 1932.

Roots Auto Radio

Three auto radios are being manufactured by the Roots Auto Radio Mfg. Corp., 2800 South Parkway, Chicago, Ill.

Model 79 (8 tubes—three 41's, two 37's, and either two 38's, or two 41's) has a built-in B eliminator (vibrator type) using 1 BR half wave gaseous rectifier. The intended retail price, including tubes, accessories and built-in eliminator, is \$79.50.

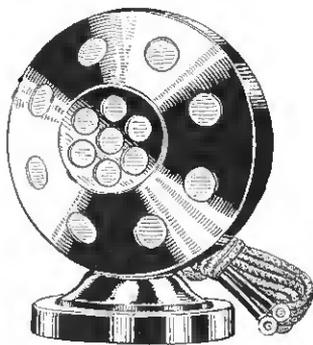
Model 69 is a battery d.c. set using the same tubes. \$69.50.

Model 49, with three 24's, two 37's, and two 38's, is \$49.50.

All sets have remote steering column tuning control.—*Radio Retailing*, December, 1932.

B.M.S. Midget-Mike

A midget-microphone suitable for connection to a radio through a wafer-type adaptor slipping under a tube is offered to the "home-broadcast" enthusiast by Brooklyn Metal Stamping Co., 716 Atlantic Ave., Brooklyn, N. Y. The mike is small, neatly encased in metal and is equipped with a built-in switch which permits the radio to work as usual until the user desires to cut in on the program. Price, \$1 list.—*Radio Retailing*, December, 1932.



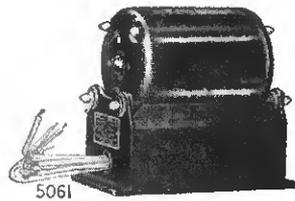
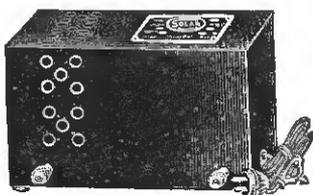
Scott Custom Made Consoles

E. H. Scott Radio Labs., 4450 Ravenswood Ave., Chicago, are making an allwave deluxe receiver with a range of from 15 to 550 meters. It is a superheterodyne with 12 tubes and has a single dial tuning on all wave bands. Technical details include pre-selector stage, three stages of i.f. amplification with 4 tuned circuits, each stage completely shielded and isolated from the other and employing a new system of i.f. amplification, three stages of audio amplification, a combination of resistance and impedance coupling, the last stage being push-pull. Twin matched speakers are included. This set may be had in a variety of custom made consoles including one with a drawer which can be equipped with either the regular single record phonograph or an automatic ten record changer.—*Radio Retailing*, December, 1932.

Solar Inverter

To operate an a.c. receiver on d.c., the Solar Mfg. Corp., 599 Broadway, New York City, has placed on the market the "Inverter." It can be used on 110, 220, or 32 volt d.c. lines, giving 110 volts a.c.

The inverter is 11 in. long by 6 1/2 in. wide by 7 in. high. Shipping weight, 20 lb. The price range is from \$22.50 to \$26.—*Radio Retailing*, December, 1932.



Emerson B-Power Unit

For radios in automobiles, police cars, airplanes, motorboats, etc., the Emerson Electric Mfg. Co., 2018 Washington Ave., St. Louis, Mo., has brought out a new power unit with low voltage tap. It is a compact, self-contained unit designed to supply B voltages for 180-90 volt or 135-67 1/2 volt sets.

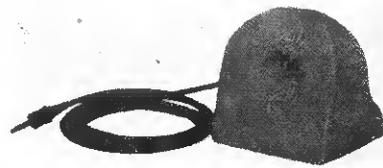
It measures 7 1/2 by 4 1/2 by 6 1/2 inches and consists of a dynamotor, rubber mounted, and filter mounted on a steel base plate and assembled into a compact unit. Weight 12 1/2 lb. All leads are metal shielded to eliminate noise pick-up. The price complete, ready to install, is \$21.95.—*Radio Retailing*, December, 1932.

Magnavox P. A. Speaker

Available in two popular types, the public address speakers of the Magnavox Co., Fort Wayne, Ind., list at \$36 for model 517 (14 in. dynamic, 110-volt, d.c., for public address systems and de luxe consoles), and at \$60, less rectifier tube, for model 521 (14 in. dynamic, 110 volt, a.c., for p.a. systems). — *Radio Retailing*, December, 1932.

RCA Victor Pillowette

Although designated "Pillowette" the new model AF-6220 of RCA Victor Co., Inc., Camden, N. J., is not in the form of the previous Pillow Speaker. It is so designed as to be placed in any convenient position near the listener's head, giving ample volume for individual use without disturbing any adjacent persons even though they may be only a few feet away. Unit is packed ready for use, no air chamber to inflate, no extra wiring, no pillow slips to bother with. It is covered with a light green (fast color) rubber covering.—*Radio Retailing*, December, 1932.



Remler Condenser Mike

The Public Address Division of Remler Co., Ltd., San Francisco, Calif., is now ready with a new line of condenser microphones. Models include hand, desk and floor types, in addition to a suspension model.—*Radio Retailing*, December, 1932.

Photo-Electric Cells

Continental Electric Co., St. Charles, Ill., is making the Cetron photo-electric cell available in types to operate in any sound head. Longer life and more uniform operation are made possible by patented processes developed by this company.—*Radio Retailing*, December, 1932.





Get the Facts

ABOUT THE

L. TATRO 32 VOLT Superheterodyne

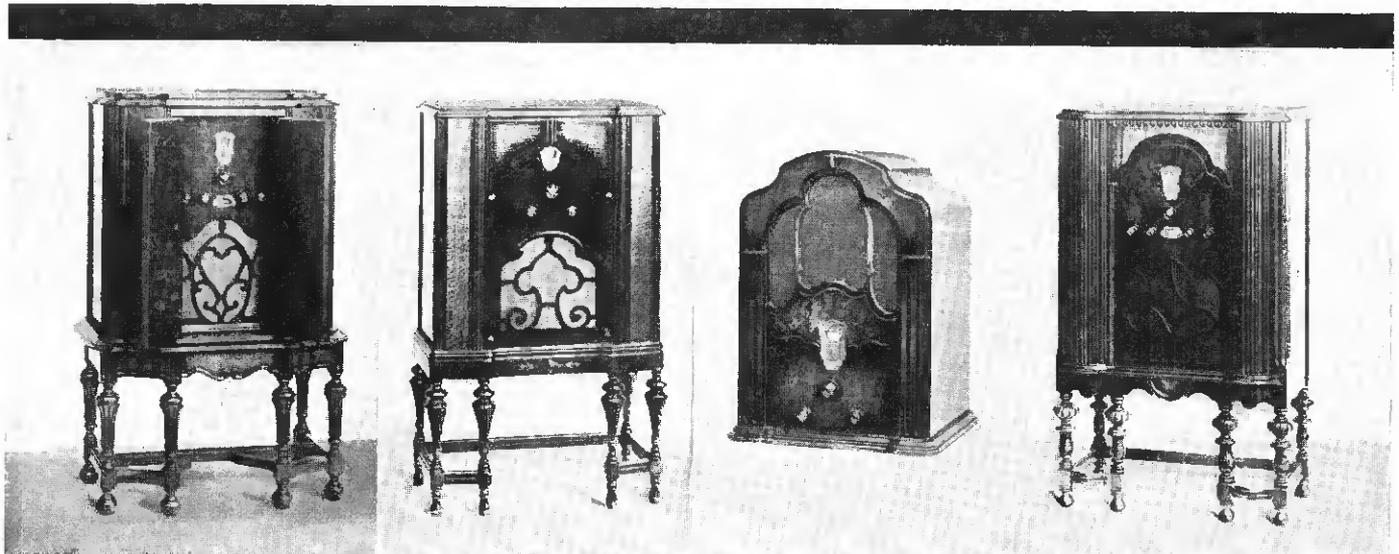
• Here is the sales opportunity you have been looking for! This phenomenally successful 32 Volt All-Electric Superheterodyne is setting sales records that are unusually profitable to both distributors and dealers.

GET THE FACTS—we will gladly send you complete details of our money-making proposition. Write or wire today.

MULTI-TUBE

DUO-DIODE DETECTION

AUTOMATIC VOLUME CONTROL



Admiral

Captain

Ensign

Commander

America's Favorite Farm Radio!

L. TATRO PRODUCTS CORPORATION

DECORAH • IOWA

Testimony for the Plaintiff (Continued from page 20)

new outlets; which course practically results in the jobbers' salesmen selling at wholesale to the outlet who, by no possible stretch of the imagination, is a radio dealer.

WEDEMEYER RADIO CO.
Ann Arbor, Michigan
per George Wedemeyer

Canadian Radio Magazine Concurs With "Radio Retailing"

Radio and Electrical Sales joins with Radio Retailing in its appeal for sanity in manufacturing and merchandising radio.

RADIO AND ELECTRICAL SALES
Toronto, Canada

You Have Left Nothing Unsaid

You have left nothing unsaid that would directly affect the dealer. It must be recalled though that you have been preaching this doctrine for some years, or since the advent

of the midget, and yet take a look at today's prices! Who will educate the dear public away from these "bargains"?

Too much cannot be said against the flood of new tubes that have appeared this season—and have made obsolete thousands of dollars of testing equipment in the hands of the hard pressed dealer.

ARDMORE RADIO & REPAIR CO.
Ardmore, Okla.
per F. E. Stayton

Have Started a Creditable Job

Copy of your address before the RMA is at hand and I hasten to congratulate you. If all the members of the Radio Manufacturers Association could be induced to subscribe to such a declaration of principles there is no doubt in my mind that the radio business would soon regain most of its lost prestige.

You have started a very creditable job and I wish you quick and complete success.

D'ELIA ELECTRIC CO., INC.
Charles A. D'Elia, President
Bridgeport, Conn.

Phonograph News

(Continued from page 29)

charming child characters come to life in the records, talking and singing and telling stories as they do in A. A. Milne's delightful books.

Audak's Duo-Disc Fits Any Turntable

The Audak Company recently perfected a two speed turntable designed to fit any electric phonograph motor revolving at 78 r.p.m. Our observation of tests made the other day prompts us to recommend this attachment wholeheartedly. It is easy to install. An accordion sleeve fits over the top of any motor spindle, a small cylindrical box is placed on top of this and held stationary by a pin and slide screwed fast to the motor board, the turntable is dropped over the spindle and everything is set. You simply turn a screw on top of the turntable's own spindle and you get either 78 r.p.m. or 33½ r.p.m., as desired. No reduction gears are used and the device is practically fool proof and delivers a critically constant 33½ r.p.m. speed if, of course, the motor revolves at 78 r.p.m.

Brunswick

There were some of us who thought that Crosby, after being a favorite for over two years, had passed his best best-selling days. And were we surprised to learn that his *Please* (No. 6394) topped all previous marks for any Bing Crosby disc. It is still moving quickly. Records hot off the presses, not in the regular December lists are: Guy Lombardo's, *We Better Get Together* and *I'm Sure of Everything But You* (No. 6426) and *No More Love* (by brother Carmen) coupled with *Just Because You're You* (No. 6417), all fox-trots in that salable manner. . . . Cab Calloway's *Harlem Holiday*, the hi-de-ho master at his best (No. 6424). . . . *Willow Weep For Me* and *More Beautiful Than Ever* by Ted Fio Rito and His Orchestra, a newcomer to Brunswick's lists who looks good (No. 6422). . . . The Three Keys doing *Basin Street Blues* and *Wah-Dee-Dah* (No. 6423). . . . Bing Crosby's latest, *I'll Follow You* (No. 6427) and the Boswell Sisters' *Down Among the Sheltering Pines* (No. 6418). The dealer who doesn't stock these records is on his way to a slow suicide. They'll be asked for.

From Shanghai CHINA



Gives His Last Dollar for "Radio Retailing"

TO EDITOR,
"Radio Retailing"

I find "Radio Retailing" so essential to my business that you have herewith my last American dollar to pay for it. Please begin with the August issue—as a special favor. I hope you mail it at once.

ROBERT STEWART, General Manager
AMERICAN RADIO EQUIPMENT CO.
265 Avenue Haig
Shanghai, CHINA

Reaching Out Everywhere for Sales for YOU...

Whoever Wins!
You Win the Business of the Radio Fans who Want their Sets in Order

RADIO FANS WANT Results!
YOU CAN GIVE them SERVICE RESULTS with OHIOHM Cooperation

FREE HELPS
... for the MAN who makes his LIVING in RADIO!

OHIOHM

Everywhere — wherever radio men or radio users cast their eyes — OHIOHM Resistor advertising is to be found. Even police chiefs are reached with the story of OHIOHM Suppressor Sets for automobile radios.

QUALITY TALKS

Consider every point of resistor value and you'll find OHIOHMS check perfectly. Accuracy . . . Permanency . . . Absence of noise . . . Mechanical strength . . . Straight wire leads . . . Color coded and printed values . . . Every worthwhile point!

Ask us to send you the complete story — how we help jobbers, dealers, service men — the right package to fit each need — the free helps.

OHIOHM RESISTORS

THE OHIO CARBON COMPANY, Cleveland, Ohio

Ohiohm Resistors are made in Canada by C. C. Meredith & Co., Ltd., 67 Bay Street, Toronto

SOMETHING NEW! CLEANAIRE ICE-BOX and REFRIGERATOR DEODORIZER

Absorbs and destroys food odors. Stops tainted foods. A 50c. item. Add it to your line.

KELLOGG



401 A.C. TUBES

are PROFITABLE!

for DEALERS and JOBBERS. Right in your own locality there are users of 401 A. C. tubes. They are good customers. Their purchases of 401 tubes give you a real profit. Very often you can make more money by selling a set of Kellogg tubes for replacements than you can by selling a new radio! Be on the job to serve these good customers. Stock and display Kellogg tubes for the owners of the following sets:

KELLOGG Sets—510, 511, 512, 514, 515, 516, 517, 518, 519, 520, 521. McMILLAN SETS—26, 26PT, MOHAWK Sets. SPARTON Sets—62, 63, A-C 7. DAY FAN Sets—5143, 5144, 5145, 5148, 5158. MARTI Sets—TA2, TA10, DC2, DC10, CS2, CS10, 1928 Table, 1928 Console. CLEARSTONE Sets—110. And the first A.C. models of the following: Bell, Walbert, Wuriltzer, Pathe, Shamrock, Bush & Lane, Minerva, Crusader, Liberty, Metro, Supervox and Case.

Write Dept. 68 now for name and address of your nearest jobber.

KELLOGG

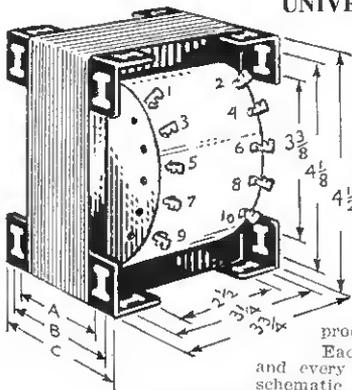
SWITCHBOARD AND SUPPLY COMPANY
1066 WEST ADAMS STREET CHICAGO, ILLINOIS

GENERAL REPLACEMENT TRANSFORMERS

For several years past the General Transformer Corporation has been, and still is, supplying the leading radio manufacturers with their transformer requirements. It is, therefore, in a particularly advantageous position to furnish to the radio service engineer, at competitive prices, the same fine quality products as supplied to the makers of radio receivers.

Months of intensive study and research into every phase of the problems confronting the serviceman in the replacement of defective power supply units, has resulted in the formation of a program for meeting his replacement transformer requirements by building up an unusually comprehensive line of exact duplicates, a general line comprising various types and styles of mountings, and a universal line.

UNIVERSAL REPLACEMENT POWER TRANSFORMERS



Suitable for Practically Every Power Supply Requirement.

A small stock of our line of Universal Replacement Power Transformers will enable you to quickly, economically and satisfactorily repair practically any receiver requiring a new power supply unit. These are provided with black japanned brackets having a wide flexibility for various combinations of mounting holes. Laminations are rust-proofed with varnish coating.

Each terminal lug is numbered, and every transformer is provided with schematic diagram indicating the corresponding leads. Installation is thereby simplified, and possibility of error eliminated.

SENT FREE

This new catalog of General replacement transformers describes and illustrates in detail over 300 Exact Duplicate transformers, Universal replacement power transformers, input and output transformers, chokes, Microphone transformers and the New Class "B" amplifier transformers.

We believe that this is the industry's most complete line of replacement transformers.

GENERAL TRANSFORMER CORPORATION

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Cable Address "Gentran"



GENERAL TRANSFORMER CORPORATION
1906 N. Kilbourn Ave., Chicago, Illinois

Please send to me free your new illustrated eight page catalog with diagrams and prices

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CITY..... STATE.....

A More Profitable Tester for Dealers!



\$15.00
NET TO DEALERS
List ~~↑25.00~~

Readrite Tester No. 406

NOW you can test tubes over the counter or out of the set quicker and more accurately than ever before. Why pay more than \$15.00 (the net price to dealers)? Send the coupon today for additional facts. See for yourself the reasons why dealers prefer this tester. Besides being lower in price, it accepts or rejects tubes as effectively as testers costing many times its low price.

A Remarkable Instrument At a Remarkable Price

No. 406 Readrite Tester is simple to use—every tube is tested in the same manner—mistakes are eliminated by several exclusive Readrite features.

This tester is so simply designed that anyone can operate it. A push button provides two plate current readings for determining the conductance and worth of a tube. A new and exclusive Readrite feature applies the same test to rectifier as with all other types of tubes. A separate push button provides for testing both plates and rectifier tubes. Sockets for the new six- and seven-prong tubes are provided.

If your jobber cannot supply you, we will ship the No. 406 Tester directly to you—when remittance accompanies your order at dealer's net price of \$15.00.

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MAIL COUPON NOW

READRITE METER WORKS
39 College Ave., Bluffton, Ohio

Gentlemen:
Please send me information about Readrite No. 406 Counter Tube Tester. Also catalog of other servicing instruments.

Name

Street Address.....

City..... State.....

- MANUFACTURERS
- ENGINEERS
- EXPERIMENTERS
- AMATEURS
- SERVICEMEN

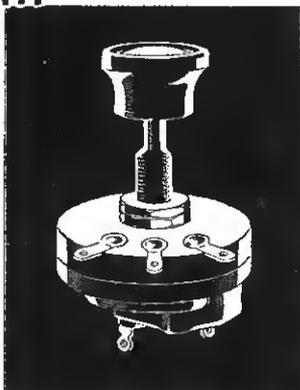
all discover sooner or later that there is no substitute for
Centralab

Quality

Leading manufacturers equip their radios with Centralab products, (Volume Controls, Fixed Resistors and Motor Radio suppressors).

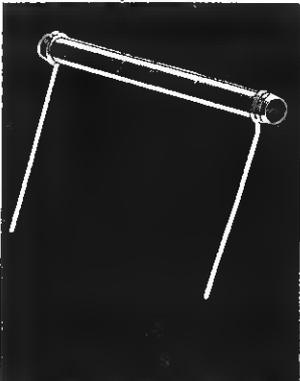
Amateurs get DX performance with Centralab . . . and Servicemen solve their Replacement problems with Centralab.

P. A. and Sound projection engineers specify CENTRALAB.



Centralab Volume Controls
 Maintain their leadership through constant and successful performance.

Centralab Fixed Resistors
 Baptised with fire in the making and will withstand a greater load than any other composition resistor of equal size.



Centralab Motor Radio Noise Suppressors
 50% to 500% more efficient in reducing spark noises.



CENTRAL RADIO LABORATORIES
 MILWAUKEE



**THE NEW
 1933
 FRESHMAN
 BELMONT
 RECEIVERS**

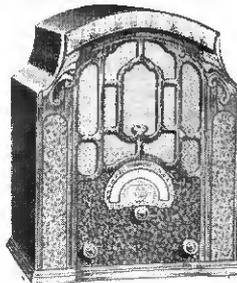
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 for
**TODAY'S
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 to
**TODAY'S
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Good business judgment results in more net profit. Sometimes we miss an opportunity but make up for it when another one comes along. It pays in good cold cash today to be alert and not overlook a real chance when it presents itself. All we ask is that you investigate the Freshman Belmont line. Send the coupon and get complete details also facts on our attractive sales proposition for every radio dealer. We believe you are going to be interested and that your business experience is going to point out to you the advantage in terms of profit, of featuring this line of receivers.

A complete line—4 tube table model to the 10 tube De Luxe console.

BELMONT RADIO CORPORATION
 520 N. Michigan Ave.
 Chicago, Ill.

FOREIGN radio buyers should communicate with our export department — address **Belmont Radio Corp., 520 N. Michigan Ave., Chicago, Ill., U. S. A.** Cable Address: Belrad

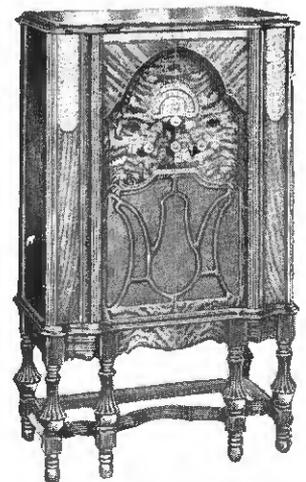


Model 51-A

New 7-Tube—Super Power Duplex Superheterodyne — Automatic Volume Control—New Duplex Diode Triode Tubes.

Incorporates every new and proven feature of radio—full vision spot light tuning dial—automatic volume control—wizard dual tone control, a super power matched dynamic speaker. Extremely sensitive—unusually selective—tremendous distance in reception.

Tube Equipment
 1—55 Duplex Diode Triode, 1—56 Super Triode, 1—57 Triple Grid Amplifier, 2—58 Triple Grid Super Control Amplifiers, 1—57 Power Amplifier Pentode and 1 CX280 Full Wave Rectifier.



10-Tube Imperial Duo-Super-sonic Superheterodyne.

Nation-Wide Reception
 Full, Resonant, Clear Tones!
 Full Vision Vernier Spot Light Dial . . . New 6-Leg Cabinet.
 Two Dual Dynamic Speakers . . . Automatic Volume Control.
 Static and Noise Suppressor . . . New Mercury Rectifier Tube.

Tube Equipment
 4—56 Super Triode Tubes, 2—59 7-prong Power Tubes, 2—58 Triple Grid Super Control Amplifiers, 1—57 Triple Grid Amplifier, 1—58 Mercury Vapor Circuit Rectifier.
Model 1000—10-Tube Duo-Super-sonic Superheterodyne.



BELMONT RADIO CORP.
 520 N. Michigan Ave., Chicago, Ill.

Please send literature on the new 1933 line, also tell me about your sales proposition.

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ADDRESS _____

CITY _____ STATE _____



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RECORD CHANGER**

BY
Homer Capehart

MOST SIMPLE -- LOWEST PRICED -- MODERN-
IZES OBSOLETE MACHINES

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End Resistor Troubles This Easy Way

Why take chances of losing profits and customer's goodwill by installing replacement resistors of unknown brand? When buying resistors, look for the green Continental "Certified" label.

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13902 Lorain Ave., Cleveland, Ohio
Canadian Factory—Toronto, Ont.

Enclosed please find fifty cents, for which I am to be sent, postage prepaid, one copy of the New Continental Replacement Resistor Guide.

Name

Address

City..... State.....

**A Question » »
for Manufacturers :**

**HOW LONG IS AN
Advertising
Campaign?**

☞ It's as easy to answer this question as it is to say how long you want to be in business—how long you want to stay in business and make money—how long you want to maintain leadership over your competitors.

☞ If the purpose of business is to stay in business and make money then the advertising that is designed to accomplish this should stay in business, too.

☞ It is more than mere coincidence that many of the manufacturers whose advertisements appeared in the first issue of *Radio Retailing* ever published are still in business and still advertising.



Radio Retailing

A MCGRAW-HILL PUBLICATION

Member of the ABP and ABC



Millions of Sets including M A-JESTIC and other standard lines need Ballast Replacements NOW.

JOBBER—DEALERS

Send for our plan outlining Ballast Replacement Market and Money Making Plan. Also Volume Control Replacement Data Book.

REPLACE BURNT-OUT and DEFECTIVE BALLASTS

CLAROSTAT Mfg. Co., Inc.
287 North 6th Street, Brooklyn, N. Y.



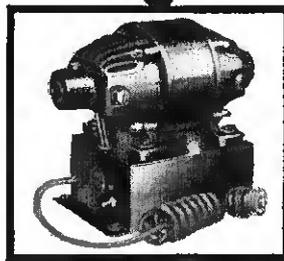
NEW LOW PRICED RECORD-CHANGER
By *Homer Capelhart*
1/2 USUAL PRICE-SPACE-PARTS LIST PRICE \$50 TAX PAID
LIBERAL DISCOUNTS
DETAILS ON REQUEST
PACKARD MFG. CORP.
H. E. Capelhart, Pres.
FORT WAYNE, IND.

A Message to Manufacturers:
Standing Still Is a Rapid way of Going Backward These Days

It takes only a mild scare for some manufacturers to stop their advertising. "Oh, well", they say, "we have been advertising right along so we can coast along for a while on the momentum that our advertising has given us". Slash! goes their advertising campaign. Crash! goes the morale of their sales force. Down! go volume and profits.

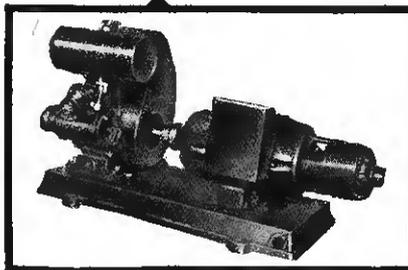
Fallacious, disastrous reasoning! For momentum is the gradual process of coming to a dead stop. The manufacturer who relies on the momentum of past advertising surely must some day get steam up all over again. And that takes time and money.

RADIO RETAILING
—A McGraw-Hill Publication



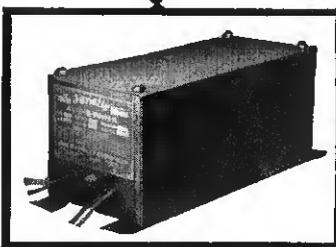
JANETTE Rotary Converters

Dealer profits from D.C. districts! The JANETTE Converter changes D.C. to A.C. and makes possible the use of A.C. receivers on D.C. circuits. A complete range of sizes assures a converter for every radio requirement. The electrical and mechanical quality of these units have made the JANETTE line world-famous and the standard of the entire radio industry. Low prices make selling easy. For 6, 12, 32, 115 and 230 volts D.C.



JANETTE Electric Plants

JANETTE offers a complete line of D.C. and A.C. gasoline engine-driven generators with a fine range of sizes from 250 to 2,250 watts output. Furnish current for the lighting of homes, yachts, farms, summer resorts, etc., and are especially adaptable for the operation of amplifiers on "sound trucks."



JANETTE Auto-B-Power

The outstanding "B" eliminator for auto-radios, manufactured with the traditional JANETTE quality. It is, of course, the dynamotor type of eliminator, well filtered, and equipped with a dynamically balanced armature, steel frame with laminated steel pole pieces, and ball bearings. Runs off the storage battery—low current consumption, also low price. For 6 or 12 volts. Delivers 180 or 135-volt "B" current with intermediate voltage taps.

SEND COUPON OR CABLE

Janette Manufacturing Co.
555 West Monroe Street
Chicago, Ill., U. S. A.

Cable: "JANETTECO CHICAGO"

Please send full information on your:

- Rotary Converters
- Electric Plants
- Auto-B-Powers

Name

Address

City

State

(Country)

SEARCHLIGHT SECTION

EMPLOYMENT and BUSINESS OPPORTUNITIES—SURPLUS STOCKS—DISCONTINUED MODELS

UNDISPLAYED—RATE PER WORD:
Positions Wanted, 5 cents a word, *minimum* \$1.00 an insertion, payable in advance.
 (See ¶ on Box Numbers.)
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 our New York, Chicago and San Francisco offices count 10 words additional in undisplayed ads. Replies forwarded without extra charge. *Discount* of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

DISPLAYED—RATE PER INCH:
 1 inch.....\$7.50
 2 to 3 inches..... 7.25 an inch
 4 to 7 inches..... 7.00 an inch
Rates for larger spaces, or yearly rates, on request.
An advertising inch is measured vertically on one column, 3 columns—30 inches—to a page. Radio Retailing

POSITION WANTED

YOUNG man, seven years' experience, capable of taking full charge of Radio Oil Burner Department. Hustler. Good reference. Eugene Hendrick, New Boston Rd., Dracut, Mass.

REPRESENTATIVES WANTED

FACTORY REPRESENTATIVES, jobbers or distributors wanted. Exclusive valuable franchise for the fastest selling line of midret radios. Only those in the industry several years need apply. London Radio Corp., 130 W. 17th St., N. Y. C.

REPAIRING

GUARANTEED microphone repairs — any make or model — 24-hour service. Stretched diaphragm double button repairs \$7.50. Others \$3.00. Single button repairs \$1.50. Write for 1933 catalog with diagrams. Universal Microphone Co., Ltd., Inglewood, Calif.

MANUFACTURERS' AGENTS WANTED CONDENSERS

A few sales territories open to established sales organizations actively contacting wholesalers or distributors. High quality product with good sales and income possibilities.

MORRILL AND MORRILL
 30 Church St., New York

MICROPHONE REPAIRS

Any make carbon or condenser, 24-hour service. All repairs guaranteed for six months. Stretched diaphragm \$6.75, others \$1.50 per button. Condenser Microphones \$9.00. WRITE FOR NEW 1932 CATALOGUE.

MAYO INSTRUMENT CORPORATION
 281 E. 137th St., New York City

FREE

13th ANNIVERSARY RADIO CATALOG



124 pages containing the most complete listing of radio items for the dealer and serviceman at real bargain prices.

Send for your copy now!

AMERICAN SALES COMPANY
 Wholesale Radio Distributors
 RR-44 West 18th Street, New York City

**We are in the Market
to BUY Large Stocks
of Radios and Tubes!**

Give Complete Details
by Mail or Wire.

All information will be treated confidentially!

Middlewest Distributor's Co.
 No. 601 Washington Blvd., Chicago, Ill.

SPECIAL NOTICE:

To the Radio Industry

Advertising in connection with legitimate offers of surplus stocks and discontinued models of radio merchandise is acceptable in this section of "Radio Retailing."

Extreme care will be exercised by the publishers to prevent the use of advertising in the Searchlight Section to encourage price cutting on current models of merchandise or equipment. Nor will advertising which invites violation of the dealer's contract with the manufacturer be acceptable.

All merchandise offered in the Searchlight Section must be accurately and fully described and must be available on order.

MR. DEALER:

IF YOU SELL RADIO SETS—

YOU NEED RADIO PARTS, and you know from experience how much time and money you have wasted in attempting to buy special parts from different sources. Avoid delay and save money by making ALLIED RADIO CORPORATION your headquarters for service parts and accessories. ALLIED has radio's greatest stock of STANDARD replacement parts, test equipment and radio accessories. Send for the big free 1933 ALLIED catalog today, and learn how you can increase your profits. Write in on your business letterhead or enclose your card.

SAVE TIME AND MONEY

All ALLIED merchandise is guaranteed to be fully rated and tested, insuring you against "off" brands, seconds, and distress merchandise. Your orders will be filled within twenty-four hours after being received, for radio's fastest service. Make ALLIED your constant, sure source of radio supply. We are pioneers in the radio industry.



THOUSANDS OF ITEMS

Do radio servicing for your customers and build up good-will and confidence, as well as new profits. Send for the big ALLIED Wholesale Catalog today. It is absolutely free to you, Mr. Dealer. Make it your service guide and build your radio business up enormously.

Allied Radio Corp.

833 W. JACKSON BLVD.
 CHICAGO, ILLINOIS

START YOUR CAREER TODAY IN THE WORLD'S FASTEST GROWING INDUSTRY—

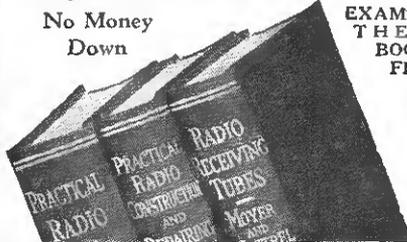
Radio Construction Library [New Edition] Including Television Receivers

This practical Library includes: PRACTICAL RADIO—The fundamental principles of radio, presented in an understandable manner. Illustrated with working diagrams. RADIO CONSTRUCTION AND REPAIR—Methods of locating trouble and reception faults and making workmanlike repairs. RADIO RECEIVING TUBES—Principles underlying the operation of all vacuum tubes and their use in reception, remote control and precision measurements.

The world's biggest building project, RADIO CITY, going up when a depression holds back every other business, is a sign of the future. RADIO holds for those who start their careers NOW, while the industry is still young. Remember, the world's failures are the men who put off until tomorrow the things they should do today. Send in the coupon TODAY,—you'll never regret it.

No Money
Down

EXAMINE
THESE
BOOKS
FREE



McGraw-Hill Book Company, Inc.
 330 West 42d St., New York.

Send me the new RADIO CONSTRUCTION LIBRARY, three volumes, for 10 days' free examination. If satisfactory, I will send \$1.50 in ten days and \$2.00 a month until \$7.50 has been paid. If not wanted I will return the books.

Name

Home Address

City and State

Position

Name of Company FS. R.R. 12-32

FREE EXAMINATION COUPON

TAKE OFF THE BLINDFOLD

See for yourself

.... how 40,000 radio dealers and service men have had their eyes opened to bigger profits

By removing the blindfold of precedent —by getting facts about their source of supply — these dealers are building profitable business. They are enjoying fast turnover on more than 3,000 radio items stocked by Federated and offered at consistently low prices.

They've seen the light. They have tied up with Federated's aggressive purchasing power, critical engineering and exhaustive testing. They know by *experience* that they are assured quality merchandise, 100% guaranteed by a reputable, *growing* organization founded on service.

And they have come to recognize the advantages which our proximity to shipping lines means to them in speedy deliveries and that these facilities effect substantial savings in shipping charges.

Years of delivering this kind of dependable service has built our business to tremendous proportions in spite of generally dull business conditions. Today 40,000 appreciative customers rely on us to supply their needs—promptly, efficiently, economically.

Any questions regarding the details of Federated service or the merchandise offered are answered in our



108-page catalog. Ask direct or from any address below for a copy of Radio's most comprehensive Buying Guide. See Federated for yourself.

Federated's EXPORT SERVICE

Federated Purchaser maintains an export department at 25 Park Place, New York City. The facilities offered have won wide recognition in the export trade. The efficient handling of special orders, by an experienced staff—a capable information bureau—a qualified linguist—a staff of radio engineers—an expert packing and shipping group—are among the services rendered by Federated's Export Department to several hundred active export accounts throughout the Globe. If you are developing export business, call on Federated to help you.



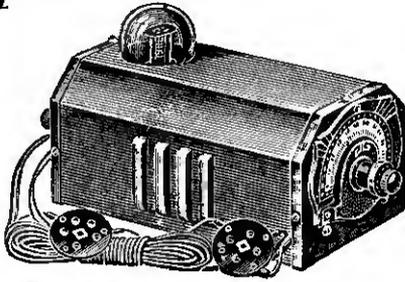
Federated Purchaser Inc.

25 PARK PLACE **NEW YORK, N. Y.**
The Following Distributing Units Maintained for Your Convenience:
JAMAICA, L. I. 92-26 Merrick Road
PHILADELPHIA 2909 Broad Street
MT. VERNON, N. Y. 51 East 3rd Street
NEWARK, N. J. 273 Central Avenue
ATLANTA, GA. 631 Spring Street, N.W.

Fill in and mail this coupon back to our main office at once for a Free copy of Radio Bargain News.

Name
Address
City State.....

Superior!



I. C. A. SUPER SHORT WAVE CONVERTER

Ideal for tuning in all wavelengths between 40 and 200 meters. Hook up the I C A Super Converter to any broadcast receiver and bring in police calls, amateurs, airplane, coast guard signals and all the rest of the most fascinating things in Radio—Short Waves!

Converts a T R F receiver into a Superhet! Operates with any A.C. receiver.

This unit far surpasses other types that only utilize the receiver's audio tubes. The I C A Super Short Wave Converter makes use of the entire receiving circuit! Employs one 27 tube which draws power from the receiver through adapters furnished with each Converter.

Enclosed in a handsome metal casing with brown crackle finish, decorative brass dial, tuning knob and vernier.

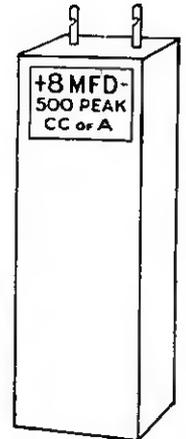
Insuline Corp. of America
 23-25 Park Place New York, U. S. A.
 Cable Address: INSULATING NEW YORK

Service Men... Here's A Tip!

THE new Aeracon semi-dry electrolytic units are better for condenser replacement work. Specifications and performance prove it. And there's a type for every requirement.

Aeracon's new aluminum case "mike" type tubular paper condenser is another hit with service men everywhere.

Take the tip. Try Aeracon for your next job.



DC-8 Type

Write Today For Catalog!

CONDENSER CORP. of AMERICA

259 Cornelison Ave., Jersey City, N. J.

Factory Representatives In:

Chicago Cincinnati St. Louis San Francisco Los Angeles Toronto
 And Other Principal Cities

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Member A.B.P. Member A.B.C. Printed in U. S. A.

CROSLLEY Breaks

all Records.. for VALUE in these amazing NEW SETS!



The Crosley Fiver Lowboy

The Crosley Fiver Lowboy is a beautiful console radio incorporating the same FIVE-tube Superheterodyne chassis and features as the Crosley FIVER. The cabinet is a fine piece of furniture. Top and sides are attractively finished in Adam brown. Front panel decorated with walnut veneer and a burl maple arch. Pilasters are also of walnut veneer. Legs are turned and fluted. Dimensions: 40" high, 24 1/2" wide, 13 1/2" deep.

\$29.99

Complete with Tubes
Tax Paid

The Crosley Septet

A distinctive table model housing the new Crosley seven-tube Superheterodyne chassis employing Automatic Volume Control. Beautiful figured stump walnut veneer is used on the front panel. There is a burl maple overlay on the arch and pilasters. The top and sides of the cabinet are finished in Adam brown. The chassis employs the new Heater Type Tubes.

In addition to Automatic Volume Control, the Crosley Septet also incorporates other outstanding features such as Continuous (Stepless) Static and Tone Control, Three Gang Tuning Condenser, Pentode Output Manual Audio Level Control, Illuminated Hairline Shadow Dial with Vernier Drive and a Crosley full floating moving coil dynamic speaker.

Dimensions: 15 1/2" high, 13 1/2" wide, 8 1/2" deep.

\$29.99

Complete with Tubes—Tax Paid



The Crosley Septet Lowboy

The front panel is of center matched walnut veneer and is decorated with an arch of burl maple. The top and sides are finished in Adam brown. It incorporates the same Crosley seven-tube Superheterodyne chassis employing Automatic Volume Control, as the Crosley Septet.

Dimensions: 40" high, 24 1/2" wide, 13 1/2" deep.

\$39.99

Complete with Tubes
Tax Paid



The Crosley Jewel Case

Here is something new, fresh and captivatingly beautiful. A solid oak chest decorated with replicas of rich carvings—a faithful reproduction of an old Italian cassone. Crosley craftsmen have here caught the spirit of fine old-world treasure chests. So well designed that it reflects the good taste of its owner in any environment. When not in use it resembles a chest for valuable papers or a jewel case. Lid is raised to turn radio on and left open a few inches to reflect the sound into the room.

Dimensions: 9" high, 14 1/2" wide, 9" deep.

\$34.75

Complete with Tubes
Tax Paid

The Crosley Book Case (Library Universal)



This marvelous receiver represents a set of books bearing these titles: Music, Religion, Education, News, Politics, Sport, Entertainment, Humor. So real in appearance that many persons glancing casually at it, will try to remove one of the art volumes for closer study. Book backs covered with fine leatherette of antique coloring. Backs and sides are embossed and embellished in old gold, as are the titles and the name. Book backs are mounted on two doors which swing open permitting the radio to be operated as a conventional table model set.

Dimensions: 10 1/2" high, 13 1/2" wide, 8 1/2" deep.

\$34.75

Complete with Tubes
Tax Paid

Not what Crosley wants, but what the people want! Not what Crosley thinks, but what the people NEED . . . Here, in a nutshell you have the Crosley policy—consistently followed for years—that explains the amazing progress of Crosley and Crosley dealers.

The radios shown here are a resounding emphasis of this policy. They represent values for which the public has been waiting, values that far exceed anything the radio market has ever offered. They represent extraordinary beauty, daring creativeness, high quality, unbelievable performance at a price no one heretofore even dared to dream about.

Crosley dealers, with these sets, are a long lap ahead of the field. They cash in on the one radio line that is a direct answer to public demand.

The Crosley SYMPHONY

Undoubtedly this is the greatest radio value ever produced. This outstanding value is due to its unusually fine cabinet work and efficient 12-tube Superheterodyne chassis. The cabinet is of a popular design commonly associated only with receivers in a much higher price range. It has a stump walnut veneer front panel decorated with an arch of California walnut veneer. There is a decorative inlay on both sides of the front panel just as you see on very expensive receivers. The arch above the speaker grille is of burl maple. The side panels and top are of walnut veneer.

The 12-tube Superheterodyne chassis used in this cabinet has full Class "B" Amplification using the new Mercury Vapor Tube, Static Control with Manual Adjustment, Meter Tuning, Automatic Volume Control, Double Tuned Image Suppressor Pre-selector, Four Gang Tuning Condenser, Manual Audio Level Control, Continuous (Stepless) Tone Control, Illuminated Hairline Shadow Dial with Vernier Drive and Dual Dynamic Speakers.

Tubes utilized include the New Heater Type Tubes and are as follows: Four type -58, three type -56, two type -42, two type -46, and one type -82. Dimensions: 41 1/2" high, 26" wide, 14" deep.



\$89.50

Complete with Tubes—Tax Paid

The Crosley Fiver

In the Crosley Fiver, you obtain a genuine FIVE-tube Superheterodyne chassis that is non-regenerative, neutralized, and completely balanced at the factory. Tubes used include the new Heater Type Tubes, and are as follows: One type -58 tube as oscillating modulator, one type -58 tube as intermediate frequency amplifier, one type -57 tube as second detector, one type -42 output tube, one type -80 rectifier tube. These five tubes virtually eliminate regenerative whistles and squeals usually found in radios with less than five tubes. Sensitivity is greater because it is inbuilt at the factory.

Other features are an illuminated dial and a dynamic speaker. The cabinet is beautifully finished in Adam brown and the front is decorated with a genuine walnut veneer overlay. Dimensions: 14" high, 11 1/2" wide, 8" deep.

\$19.99

Complete with Tubes
Tax Paid

Montana, Wyoming, Colorado, New Mexico and west, prices slightly higher.

THE CROSLLEY RADIO CORPORATION

Powel Crosley, Jr., President

CINCINNATI

Home of "the Nation's Station"—WLW

YOU'RE THERE WITH A CROSLLEY

CROSLLEY RADIO



Extending to the radio dealers of America,
the Season's Greetings and a sincere wish
that the New Year may bring them pros-
perity, happiness and a full measure of
the good things of life. # # # # #

RCA RADIOTRON COMPANY, INC. ~ HARRISON, N. J.
A RADIO CORPORATION OF AMERICA SUBSIDIARY

RCA RADIOTRONS
THE HEART OF YOUR RADIO