

• 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 1933 line.

Challe



### STEP UP SALES THIS YEAR with the feature that puts a new thrill in radio . . . . the



#### **4 DIALS IN ONE**

#### THE LAST WORD IN PERFECTED WORLD WIDE RADIO RECEPTION

#### Stewart-Warner, first with simplified Round-the-World Radio . . . now offers a public eager for a new sensation . . . the ONE big reason for buying a NEW radio

Against the background of glittering generalities and technical jargon Warner's advertising of the Magic Dial stands out in vivid contrast. Here is the something new-the something spectacular-that the public wants. Here is a real, definite reason for buying a new radio.

For the Magic Dial opens up to a Nation eager for new thrills, a New World of Radio Entertainment.

#### THINK OF THE SALES OPPORTUNITY THIS OFFERS YOU

Here is a radio backed by a name nationally known and appreciated. Here is the only radio that can offer World Wide reception proved by a year's use among owners all over the country. Here is the only radio that offers the Magic Dial-startling-mysterious-gripping-in an 11-tube, duo-superheterodyne circuit with automatic volume

in an 11-tube, duo-superheterodyne circuit with automatic volume control among many sensational features. With the story of the Magic Dial appearing in the national magazines of greatest circulation; with national newspaper adver-tising inflaming curiosity; with colorful Magic Dial displays in your window – people will be drawn to your store – to hear what the Magic Dial displays in cocharge it works Magic Dial does - to see how it works. Then what a sales demonstration you can give them-with the

master selling aids we make available to you. Get all the facts about the New World of Entertainment-and

other merchandising plans that turn prospects into Profits for you. Write your nearest Stewart-Warner Distributor, or mail coupon today.

STEWART-WARNER CORPORATION 1826 Diversey Parkway, Chicago, Ill.	R. R10
Please send me full information on your	Magic Dial Radio Line.

Name Address ... .... State .... City ... ------



#### Master ALL-WAVE Console

11-tube, duo-superheterodyne circuit—Magic Dial, Automatic Tone and Volume Control-with Stewart-Warner new type Electro-dyna-mic speaker. Console of modified 18th Cent-ury design. Genuine wood-carved front of matched Butt walnut with flanking curved pilasters. Grain walnut sides. 45% inches high, 26% inches wide, 16 inches deep--com-plete to retail at \$157.50.

A complete line of 11 models, including a separate short wave converter-priced from



Radio Retailing, October, 1932, Vol. 16, No. 4. Published monthly, McGraw-Hill Publishing Company, Inc., 330 West Forty-second Street, New York, N. Y. 82 per year 25 cents per copy. Central and South American countries, \$3. Foreign, 33. U. S. Currency, or 15 shillings. Canada (including Canadian duty), 52.50. Entered as second class matter April 16, 1925, at the Post Office at New York, N. Y., under the Act of March 3, 1879. Printed in U. S. A.



AMERICAN BOSCH VIBRO-POWER RADIO LINE

THE GRAND OPERA-Model 312G. Vibro-Power 12 tube triple action superheterodyne in cabinet de luxe. \$178.95.

THE GRAND CONCERT - Model 312C. Vibro-Power 12 tube triple action superheterodyne. \$147.95.

THE WORLD CRUISER—Model 260C. Vibro-Power 10 tube double action multi-wave superheterodyne, in cabinet de luxe, for long and short wave broadcasts. \$132.95.

THE WORLD ROVER-Model 260R. Vibro-Power 10 tube double action multi-wave superheterodyne, for long and short wave broadcasts. \$105.95.



THE EMPIRE-Model 242E. Vibro-Power 8 tube double action superheterodyne. \$69.95.

THEMANSION-Model 250M. Vibro-Power 10 tube double action superheterodyne. \$95.95.

THE FIRESIDE—Model 226F. Vibro-Power 8 tube superheterodyne Air Cell receiver. \$99.95

THE METROPOLITAN-Model 224D. Vibro-Power 8 tube superheterodyne for DC current. \$84.95.

PERSONAL RADIO CHESTS-Models 200A and B. Equipped with police signal switch. \$49.95.



PERSONAL RADIO-Model 236A New 6 tube superheterodyne. \$45.95. PERSONAL RADIO-Model 205A. New 5 tube set. \$34.95. With Police Switch, \$39.95.

MOTOR CAR RADIO—For battery operation as low as \$59.95. All electric model with Magmotor \$85.90. - the newly discovered SUPER-FORCE in RADIO!

AMERICAN BOSCH VIBRO-POWER RADIO

### -now backed by a new SUPER-FORCE in radio merchandising

"How many radio sets can be sold in my neighborhood this fall?"

"Are there enough prospects to justify a real go-getting effort?"

"If so, how can I get after them most profitably?"

Finding the answers to these questions now is half your business battle this year. Let us help you with the new American Bosch Dealer-Profit Plan. It provides a simple, practical, TESTED plan for sizing up your own local market, organizing it, going out and selling it!

Fortifying this plan is the newly discovered Super-Force in radio— Vibro-Power. It revolutionizes radio enjoyment. It is the triumphant hit of the radio world! Distributors and dealers admit they never dreamed radio could be as good as the new American Bosch Vibro-Power Radio.

A sure-fire merchandising planthe "hot" line of the year-a Vibro-Power set for every purse or purpose-the American Bosch name with its 40 years' background of experience in precision electrical products-here is the line worthy of your concentrated effort. Write or telegraph today for full description of American Bosch Vibro-Power Radio and the Sales Plan behind it!

UNITED AMERICAN BOSCH CORP. SPRINGFIELD MASSACHUSETTS Branches :

New York Chicago Detroit San Francisco Manufactured under patents and applications of RCA



2



BLUE TUBES in CHINA

and in 74 other countries throughout the world

3

ARCTURUS

ANY Set is Better with Arcturus Blue ARCTURUS PZ-PENTOUS

BLUE TUBES in FRANCE

## **BLUE Tubes**

THE world over, where quality is essential, Arcturus Blue Tubes are used. Many American set manufacturers, through experience, equip all their export sets exclusively with Arcturus Tubes. They, like their foreign accounts, cannot take chances with tubes that are put in service thousands of miles away.

No other radio tube has been paid as great a tribute.

In the United States, Arcturus Tubes are used by more set manufacturers as initial equipment than any other tube—asignal tribute to the quality tube.

When engineers include Arcturus Blue Tubes in their specifications, when radio jobbers and dealers offer them to the public, they have the ample justification of world-wide approval.



### IN THESE GREATER RADIO VALUES

 $\star$ 

TYPICAL of the greater values afforded in the new U. S. Radio line are these two popular receivers, Models 9B and 9A.

Every new feature in radio engineering, every significant advance, is embodied in these splendid new models. With handsome new cabinets, in both console and compact styles, they afford a merchandising combination of attractive price plus easily demonstrated value.

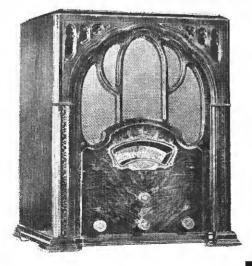
Check the greater values in the U. S. Radio line. Note that there is a model for every specific sales possibility. Judge by the dual standard of *Performance and Price*.

You'll realize then that in the 1932-1933 models U. S. Radio has advanced its reputation for affording Distributors and Dealers the opportunity to build sound and increasingly profitable business.

Write or wire now for complete informationwithout obligation.

United States Radio and Television Corporation MARION, INDIANA





U. S. HERMETIC REFRIGERATOR \$99.95 f.o.b. Factory The first hermetically sealed refrigerator in a price range starting under \$100—setting a new standard of values. Available in three sizes—five models—and covered by 3-year guarantee.

**U. S. RADIO, APEX MODEL 9B,** 9-tube Superheterodyne, shown above, embodies every new feature in radio, including: Automatic Silent Tuning...



cluding: Automatic Silent Tuning ... New Triple Grid Tubes ... Class B Amplication ... 4 Indicator Illuminated Dial ... Oversize Dynamic Speaker. Also available in another and larger cabinet with Matched Dual Oversize Speakers at \$75.00.



**U. S. RADIO, APEX MODEL 9A,** compact table style, 9-tubes, including new triple grid and dual grid types...Class B Amplification ... Automatic Silent Tuning.

#### Other U. S. models from \$33.50 to \$150.00.





CRISP, biting orders rapped over the air ... caught instantly on short-wave radio receivers by alert policemen and firemen patrolling a flood-ridden city. Read the record of radio-reports flashed to police and firemen during the recent serious situation in Oklahoma City when torrential rains flooded the city, rivers rose, people were exposed to drowning, and thievery and fire ran rampant!

Excerpts from the radio-log of 32 hours of tense, hair-raising action are reprinted here. You can see how, with the tools of modern science at its command, a city copes with so desperate a situation. You can see how important it is that the short-wave receivers of these police cars should be equipped with Evereally four-pillar Tubes — sturdy safeguards against damage and impairment to reception from all jolts and jars.



Here is dramatic proof that Eveready four-pillar Tubes do stand up — dramatic reason why you can recommend them to your customers — dramatic assurance that they will give long and satisfactory performance under all service conditions!

NATIONAL CARBON CO., INC.

General Offices: New York, N. Y. United Enton Carbide

#### **EVEREADY RAYTHEON** 4-PILLAR RADIO TUBES

#### LOG\* June 3, 1932

noon .	Relieved Gaudy, Electrical starm,
0.01£ B	http N. W. 10th Street. Suspicious minu.
101110	2101 N. W. 2000. One shitten entered.
0126	Electrical storm warsas, Bouning hard,
0140	Fire at N. E. 70h
0,044	Bewey SL water running over enribing.
0312	High writer on oast side of town. No-
0352	919 N. E. oth floated into street.
1014	El Reine reports heavy pains, Elver book full. Expect it will go out
2879	Woman drowning. 1400 block S.W. 28th.
Bill B	Desemond full of water of 250 W. Main.
0832	Between S. Rockwood and S. Barnes, Children manufael, You can lake them of it you burry, Get there immediately,
0.021	Report three families at innicellate mood 1% miles north of Taxlor School, En- tirely sufferended by water, Will drown if not rescued in shart time,
093756	River is rising
LIND LE	Main and Hudson traffic lights are mit.
1115	American Lewion Post has research and
	relief station at sog W Commerce.
113136	Report woman and children stranded in marret of house at 2200 S. Broadway.
1188.92	Get report on conditions in flood area. on E. 23rd as soon as convenient.
1134	E. 22rd Street highway impressible. Dis- courage sight-sector parties. We do not
1338	would them to hamper operations. Rise in S. Canadian River at Geory, Unable to get any information from Vition or El Kens.
1470	N. Canadian River during fast hait hait haur riseu s to 10 molars.
1139	One hundred yards north of Prisco Boundhouse resetue boat capsized. Three men in heat. Only two accounted for.
17.88	Be on lookout for hit-run driver. Hit othe boy, injured him very hadry. Went north on Wilway, Crean colored
1828	softm. Tag 353-385. Pick the up, Lost two, Tommy G, age a, wear- ing represent, shirt and panta. Miss- ing from 1418 W, grad.
213 4.5	had west of Western Avenue, ald bridge, People on R. Bridge liable to go.
2506	Pick up a cur, tag 119-272, These men- stopped a man. Represented them- selves to be officers of the law. Pulled

serves to be officers of the law. Pulled partol, Whoever is in the car, has ploted and represents bimself as officer. Pick up and bring to investigation bureau. These are only 26 out of a total of 292 and

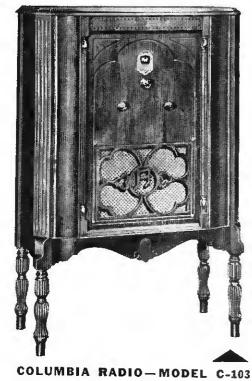
"These are only 26 out of a lotal of 252 such reports broadmast to Oktohoma CDy police and fre department cars on June 2, 1872

## Columbia COMES THROUGH

COLUMBIA RADIO-MODEL C-95 Sheraton cabinet of selected, matched walnut, beautifully tooled. The chassis is a full superheterodyne, with a device to cut out interstation noise, high-light-low-light tuning, new 21/2-volt tubes, duo-diode detector, pentode output stage, automatic volume control, continuous tone control, and full-size, bal-

anced twin-speakers. The dealer's price makes possible a liberal trade-in allowance. List price, complete with 





Full-size console-type cabinet in rich walnut, 36 inches high, 23 inches wide, 11 inches deep. Full superheterodyne chassis with the latest technical developments . . . 21/2-volt tubes, pentode output stage, automatic volume control, continuous tone control,

shadow-line tuning, full-dynamic speaker. List price, complete with 

STARTING from scratch just a few months ago, Columbia has achieved an unusual success in the radio field. It has put across its line, obtained distribution, and won favorable recognition for both its products and policies. Dealers and distributors from coast to coast have placed their unreserved approval on the new Columbia set-up.

Illustrated here you see two of the tangible reasons for Columbia's success-the top-price and bottomprice models in the Columbia line. The twin-speaker

highboy incorporates every proved feature of modern radio engineering, yet is listed at only \$139.50. The console model has a full-size, up-to-date chassis, yet lists at only \$49, the price of a good

midget. Between these two models is a range of radios for every requirement-each built to musical standards determined by nearly a half-century of experience.

Behind the Columbia line are the intangible reasons for Columbia's success. Sane and sound policies of production and distribution, merchandising and advertising-formulated and carried out by Columbia itself. A program that calls, first of all, for a fair deal to dealers and distributors, in order that all may earn consistent, steady profits.

Will you call on your Columbia distributor, or write direct to us for full details about Columbia? Columbia Phonograph Company, Inc., 55 Fifth Avenue, New York, N. Y. Copyright 1932



The makers of

### SYLVANIA RADIO TUBES

#### announce

### Points #1 and #2 in a

## SIX POINT PLAN

### Point " - A plan that . .

#### A-GUARANTEES RAPID TURNOVER B-ELIMINATES TRADE OBSOLESCENCE C-GUARANTEES FULL PROFIT

This plan is not consignment . . It is definitely more constructive and far-reaching than consignment can ever be!

### Point \*2 – A New Analyzer and a New Analyzer Plan..

Sylvania offers to the trade a new Analyzer testing all the latest types of tubes, in fact MORE types than any analyzer now available and with full provision for many future types • This Analyzer will be made available at a selling price substantially below competitive offers of instruments in this class. As usual, Sylvania dealers will be able to obtain this splendid instrument at NO ACTUAL COST.

Points 3, 4, 5 and 6 will be announced in rapid succession. It will pay you to keep in close touch with your Sylvania Jobber

> HYGRADE SYLVANIA CORP., SYLVANIA DIVISION EMPORIUM • PENNA.

Radio Retailing, A McGraw-Hill Publication

## **ATWATER KENT RADIO** How old are the radios in your town?

### Do they have These Features? The 1933 Atwater Kent does!

- \* Tonebeam visible tuning—beam of light signals stations at point of purest tone.
- \* 7 to 12 latest super-power tubes, including mercury vapor rectifiers, 4 to 7 pentodes and double-diode-triode.
- ★ B-amplification, increasing power more than 4 times.
- ★ 2 speakers, each receiving 10 full watts.
- \* Automatic silent tuning.

- \* Automatic volume control.
- \* Tone control.
- ★ 5-gang condenser.
- \* Super-heterodyne.
- \* Compensating Quick-Vision Dial, with all stations showing simultaneously, over the whole range.
- \* Modern cabinet appeal—from 6-legged highboy to dainty Compact.

MILLIONS of radio sets in American homes today do not even have dynamic speakers!

Millions do not have a *single one* of the advanced features which distinguish the new 1933 Atwater Kent.

Every radio dealer knows, from his service calls, that a huge number of families are getting, from their old, worn-out, obsolete radios, reception that is a libel on the very name of radio.

THIS YEAR—PRESIDENTIAL YEAR—is the best opportunity you will have in four years to get these battered old has-beens out of your customers' homes and up-to-date, modern radio in. Take around the new Atwater Kent and show 'em what 1933 radio really is!

#### ATWATER KENT PRIZE CONTEST Your Greatest Sales Aid of the Year!

Everywhere people are visiting Atwater Kent dealers to see the new models and to get free entry blanks for the contest. The lure of big cash prizes (\$5,000 first prize and 53 others) plus the fun of seeing who can make the most words out of the letters in "Atwater Kent Tonebeam" is sensational. Feature the contest! Remember: They have to come to you for entry blanks!

From the Rockies west and in Canada prices are slightly higher

ATWATER KENT MANUFACTURING CO. . A. Aucaser Kent, Pres. . 4700 WISSAHICKON AVENUE, PHILADELPHIA, PA.

Model 627-7-tube Compact.

\$53.90 Complete

Nodel 260

10-tube semi-highboy



## ipehant gennormes

New MODELS New PRICES New PROFITS

## >> New Merchandising Progra

The Capebart

300

Increased profits through higher units of sale. Multiplied selling opportunities through a new and enlarged line of the finest phonograph-radio combinations ever built. A merchandising, sales and advertising plan that is productive of results... These are some of the major factors in the new Capehart program giving dealers an unexcelled opportunity for steadily growing profits.

Complete coverage of the quality market is now afforded in the eleven models presented by Capehart, ranging in price from \$169.50 to \$1255. Every model is distinctive and beautiful; and every model is true to the established Capehart standard of tone quality and fidelity of reproduction.

Capehart dealers are given advantages never before equalled to cash in on the growing and highly profitable market for quality phonograph-radio combinations. Increasing interest and demand are making it necessary to add to our established dealer organization. Write for detailed and illustrated specifications of the complete Capehart line and attractive dealer plan.





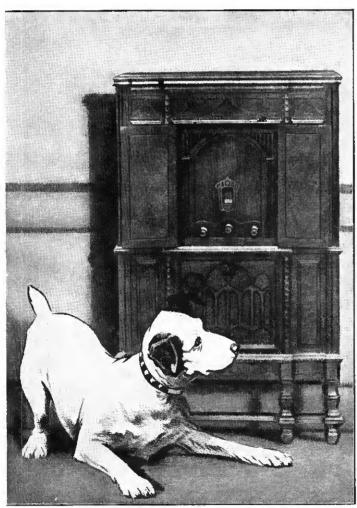
The Capebart 400

THE CAPEHART CORPORATION » » FORT WAYNE, INDIANA



# sings again

His Real Voice at Last ... From priceless Master Records by a secret process 11 years in the making... RCA Victor creates a new, quickselling Caruso for Bi-Acoustic Radio Phonographs. Get your share of this profitable business.



"His Master's Voice" on the air



The greatest voice that ever lived-the golden tones of Enrico Caruso-captured on a brand new record-more thrilling than his most glorious previous recordings!

It's all because of Bi-Acoustic principle. And the new, improved recording methods Victor engineers have perfected. Plus a touch of ingenuity that was nothing less than inspired!

Camden engineers began with priceless master molds from Victor's vaults. They stripped away the old, tinny, mechanical accompaniment-and left Caruso's voice pure and undefiled. Then, by new methods -methods unknown in Caruso's day-they wedded his lyric notes to a new, modern orchestral accompaniment...

And a new record, that makes musical history, was born!

Played with the benefit of all the new improvements of Bi-Acoustic Radio-Phonograph, such records are a revelation of what the modern radio-phonograph and modern recording methods can mean to customers. And thus they offer a sure fire way to increase record sales.

The RCAVictor Co., Inc., Camden, N.J.

"RADIO HEADQUARTERS"

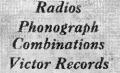
A Radio Corporation of America Subsidiary

RAE-84 (Shown at left)

lone

The Masterpiece Musical Instrument of Today. A 12-tube "Bi-Acoustic" Radio-Phonograph with improved Auto-matic Record Changing, Home Recording (Two-Button Microphone and Volume Indicator), Long Playing Record Device, "B' Amplifi-cation, Full Range Pickup, Advanced Automatic Tone Compensator, Tone Equalizers, Dual Automatic Volume Control, Noise Sup-pressor, Micro Tone Control. List price complete, with RCA Radiotrons . . . . \$310.00

RE-81 ... 10-tube Radio - Phonograph Combination with Home Recording. List Price complete, with RCA Radiotrons \$178.00



Radio Retailing, A McGraw-Hill Publication



### DEFEATS ALL COMPETITION IN FEATURES—IN PERFORMANCE ——AND IN PRICES

MODEL 97



in performance — and in sales "punch." A man-size radio set in dimensions and performance. Not a dressed up "ballyhoo" leader but the biggest value for the least money in the radio industry.

Incorporates a standard large FADA RADIO chassis—a large newly developed 12" multiple action dynamic speaker that fills the cabinet, plus all these listed features:

These two new Models 55 and 97 are typical of the quality and value of the entire FADA RADIO line of receivers ranging in price from \$39.50 to \$142.00 inclusive, including tubes and excise tax.

FADA RADIO AND ELECTRIC CORPORATION LONG ISLAND CITY, N. Y.

Automatic Flashograph **Illuminated Station Recorder Tuning Silencer Triple Automatic Volume Control Floating Speaker Baffle ToneFilter and Noise Suppressor Floating Gang Condensers Dual Function Diode Detector** Perfect Interstage Shielding **10 Kilocycle Selectivity Fractional Microvolt Sensitivity** "True-to-Life" Tone Super-heterodyne Circuit **Push-Pull Pentode Tubes** Large Cabinet-41" high 24 1/2" wide, 12 1/2" deep Nine Powerful 2 1/2 Volt Tubes



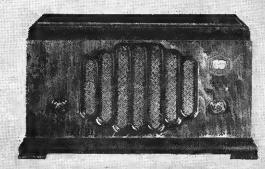
Including

Tubes and Excise <u>T</u>ax









MODEL 55-5 TUBES

A new 5 tube super-heterodyne receiver using the new powerful two and one half volt tubes, complete with a 9" dynamic speaker, in an extremely pleasing mahogony finish cabinet 19" long, 9" wide and 10" high.

The very first low priced "compact radio receiver with a "true-to-life" console tone.

Would you like to receive a copy? Write to The American Weckly, 959 Eighth Avenue, New York City.



## GOOD BUSINESS

THE ultimate success of any important advertising campaign is dependent, first, upon the selection of the medium which reaches the greatest possible number of people.

When a manufacturer advertises his product in THE AMERICAN WEEKLY, he is enlisting the selling force of the greatest magazine in the world. With a circulation of 5,581,137, its influence is so wide and powerful that it actually exerts pressure on the buying habits of one out of every five families in America.

The way to make the readers of THE AMERICAN WEEKLY your customers, and to get your share of their business, is to feature the merchandise advertised in this magazine. That's good business!

#### What is The American Weekly?

The American Weekly is the largest magazine in the world. It is distributed through 17 great Sunday newspapers. In 558 of America's 995 towns and cities of 10,000 population and over, The American Weekly concentrates 70% of its circulation. In each of 136 cities, it reaches one out of every two families In 105 more cities, 40 to 50% of the families

In an additional 153 cities, 30 to 40%

In another 164 cities, 20 to 30%

In another 104 cities, 20 to 30%

... and, in addition, more than 1,750,000 families in thousands of other communities, large and small, regularly buy and read The American Weekly.

muntus. WE tailed to find a single tube defective."

THE THEM advantages of your consignment when the share a horizon of manufacture to a star a horizon of the start and a start of the sta

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Tuttes thest and and an and takes. . . . During five

tegitimate protit . . . Sales show up curve. (

## **READ THESE LETT**

The were tired boosting. And the second and the sec

from successful Tung-Sol dealers. They tell their aw story. The quality of Tung-Sol—and the Tung-S al Consignment Plan operate together to produce increasing repeat business with profits unimpaired by price competition. For complete details regarding the Tung-Sol proposition write—

TUNG-SOL RADIO TUBES INC. NEWARK, NEW JERSEY



Licensed under patents of R. C. A

to belleve you wave

RIDLES ROMON STRAT

Radio Retailing, October, 1932

know the answer?

## How many of your customers own typewriters?

HERE ARE THE FACTSI LESS FAMILIES OWN TYPEWRITERS THAN AUTOMOBILES. OR RADIOS. OR ALMOST ANY SINGLE LINE YOU CARRY. IMMILLIONS HAVE ALREADY BEEN SOLD AT \$60 YET THE MARKET IS BARELY TOUCHED. PRICE HAS BEEN ALMOST THE ONLY OBSTACLE. I EVERY MODERN FAMILY NEEDS A TYPEWRITER. PAR-TICULARLY THOSE WITH CHILDREN OF SCHOOL AGE. II WHAT A TREMENDOUS FIELDI WHAT A WIDE-OPEN OPPORTUNITY FOR THE WIDE-AWAKE EXECUTIVE WHO IS SEEKING ADDITIONAL QUICK TURNOVER ITEMS FOR HIS STORE! II THE ROYAL SIGNET — THE FIRST REAL SMALL-SIZED TYPEWRITER AT A LOW PRICE—WAS DESIGNED ESPECIALLY FOR THIS MARKET. IT IS BACKED BY THE MOST EXTENSIVE ADVERTISING CAMPAIGN OF TYPEWRITER HISTORY! AND PRICED TO FIT THE AVERAGE BUDGET—WITH AMPLE PROFIT MARGINI STURDY! HANDSOMEI SIMPLE TO USE—EASY TO SELL! DEALERS EVERYWHERE ARE LEARNING TO THEIR ADVANTAGE ABOUT THE ROYAL SIGNET, AND ROYAL'S PLAN OF COOPERATION AND PROTECTION. OUR ORDERS PROVE ITI IN WRITE AT ONCE FOR SALES INFORMATION. NATURALLY THIS INCURS NO OBLIGATION. ROYAL TYPEWRITER COMPANY, INC. 2 PARK AVENUE, NEW YORK CITY

The ΟΥΔΓ SIGNFT 10NO-FACE ۲ NO SHIFT KE

#### CONVENIENCE COUPON

I'd like to learn more (without obligation, of course) about the Royal Signet and Royal's Special Safes Proposition for Deaters.

Name		
Street		
City	State	R-10

## To the hundreds of dealers who lately have swung over to MAJESTIC MODEL 311 7 tubes . . full-pentode amplification . . \$44.50



MODEL 293 9 tubes...full-pentode amplification. \$73.00



MODEL 294 12 tubes ... long and short wave .. \$99,50



7 tubes . . speakers, \$69.50



MODEL 307 11 tubes . . . full-pentode amplification .... \$99 50

Recalling the enthusiasm with which dealers rallied to the Majestic banner when in 1928 we announced the first moderately priced all-electric radio with full dynamic speaker, and recalling the sensational success which rewarded their efforts, I cannot help seeing in the recent swing to Majestic one of the most hopeful signs that the radio industry has witnessed in the last five years.

It means that you dealers who have handled many varied lines and tested many different merchandising programs are convinced ....

- (1) that the new Majestic is the outstanding value of 1932-33
- that Majestic discounts afford you unusual opportunity for profitable trades
- that the Majestie name, coupled with (3) that the majestic hand, our the new Majestic promotional plan, spells swift and profitable turnover
- that Majestic quality spells service-free (4) that majorito quanty spectral for thousands of satisfaction on the part of thousands of new customers, and
- that by joining forces with Majestic you will be building for yourselves the strongest position in the retail radio field. (5)

May I extend to you my personal congratulations upon a connection which seems destined to be highly profitable, not only for our company but for you and the thousands of other Majestic dealers upon whose efforts must largely depend the continuing success of Majestic Radio.

Very sincerely,

Chairman of the Board and President Grigsby - Granow Company, Chicago



MODEL 304

ANNIVERSARY MODEL 324 12 mbes . . . twin speakers, \$149,50

All prices quoted are for sets completely equipped with Majestic tubes, and with federal tax paid.



MODEL 291 9 tubes ... full-pentode amplification ... \$62.50



Patents and applications of R. C. A., Hazeltine, LaTour, Lowell & Dunmore and Boonton Research Corporation. Prices slightly higher on West Coast.



MCGRAW-HILL PUBLISHING COMPANY, INC.



October, 1932 Vol. 16 No. 4

-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

## \$24.98, \$21.35, \$18.95, \$14.86 and— The Forgotten DEALER

HIS fall radio was on the point of stabilizing. Prices were going up. "Quality" merchandise again was becoming the watchword.

Then—crash—the bombshell of a new low price level was tossed into the industry! As a result, schedules have tottered . . . Manufacturers have scurried to whittle out competitive bargains.

Before this havoc shall spread further, we rise to ask:

- 1. Will cheaper sets further distort the public's sense of true radio values? . . . Unequivocally-Yes!
- Can dealers and jobbers make a profit and continue in business if they must conduct it at today's low price levels? . . . We doubt it.
- 3. Is the manufacturer jeopardizing his success by placing in his line a set to sell for less than \$25? . . . We think so.
- 4. Will inferior reception further dull the edge of listener interest? . . . Unquestionably.

At this time, therefore, it is especially pertinent that *Radio Retail*ing again call attention to the need for making and distributing receivers on certain sound principles rather than on a policy of opportunism which, apparently, bids for volume at any price.

T WAS to throw needed light on this situation, so vital to radio, that Ray V. Sutliffe, managing editor of *Radio Retailing*, went before the Radio Manufacturers Association, at Cleveland last month, and told the set makers the unvarnished facts about the dealer's needs.

Every radio retailer will be interested in reading, on the following pages, Mr. Sutliffe's amplification of this subject, as presented to the manufacturing executives —in whose hands alone lies the relief needed.

O.H. Caed

## The DEALER Has

Text of an address delivered before an informal meeting of the directors, Radio Manufacturers Association, by Ray V. Sutliffe, managing editor of "Radio Retailing," September 15, at Cleveland, Ohio

GENTLEMEN: On August twenty-third, by membership vote, the Radio Manufacturers Association reestablished itself on a more operative basis. Under the provisions of its present by-laws the set makers will exercise a majority control of its policies.

So far, excellent! Radio's key trade body now has a more responsive vehicle to serve it. But this action at Cleveland, while necessary, will be without lasting effect unless practical and courageous use is at once made of this new machine which you have assembled. "Where do we go from here?"

This is a critical time in radio affairs. Listener interest is waning; dealer effort stifled. Never, I repeat, has there existed a greater need for specific and forthright action. What can we now do, therefore, to help restore this industry of ours to its rightful heritage?

This morning you gentlemen, the newly appointed board of directors of RMA, held your first meeting. Presumably you discussed, among other things, this very question. And now, meeting informally, you have granted me the privilege of the floor. I welcome this opportunity to talk to you and with you. Frankly, I think it is fitting at this time that you hear from someone who can present to you from an intimate and unbiased viewpoint and, I trust, accurately, the cause of the ethical and often "forgotten" dealer. Need I add that it is my hope that out of this discussion will come certain definite assurances to the dealer and the crystalization of a few simple merchandising policies—backed by the endorsement of a large majority of the leading set makers in the country. Such measures should go far toward putting our industry on its feet.

#### Fight It Out on a Five Year Basis

Our first point of attack should be in cities and towns of 200,000 and under. And, gentlemen, this market represents at least seventy per cent of your total sales opportunity. The reason I recommend disregarding, for the present, the metropolitan cities is that the logical and practical field in which to begin building back dealer good will and aggressiveness and convincing the public that there is such a thing as quality in radio sets, will be found in communities of less than 200,000 population.

So let's start with the small town dealer. Let's fight shoulder to shoulder with this battler if it takes five years to win out. My plea this morning is for a new concept of dealer relationship and for *long term* thinking. From now on we must cultivate the worthwhile dealer in a manner never before undertaken, we must consider him as a permanent institution. Before I close I will present, in the form of a declaration of sales policies from the manufacturer to the dealer, three simple suggestions designed to accomplish this objective. They are fundamentally obvious, gentlemen, yet their observance in the past has almost been entirely disregarded.

#### Dealer Full of Sales Possibilities

But first let us take an open minded view of this dealer of ours. Based on a long and in-thestore acquaintance with veritably thousands of retailers of radio products—for nine years I have been traveling every state in the Union east of the Rockies interviewing radio merchants — may I have the temerity to make a few suggestions? One of these is that the average dealer is by no means as dumb as he has been painted. Lethargic, at times, yes! Frequently with good reason. But please remember that this long suffering music merchant, radio specialist or radio department manager is your dealer; he's the only one you've got, or can get, to do your selling job in seventy per cent of your market. So why not study him anew? He's really full of sales possibilities, gentlemen, if you will but give him half a chance.

To illustrate: After the exercise of considerably more effort and business sagacity than you might imagine, Dealer Jones sells Mrs. Smith a radio set—Model K. Two months later he is notified by Mr. Manufacturer, with enthusiasm, that Model K has been superseded by Model L— "bigger and better than ever and at a much lower price." Fine! But how does Mrs. Jones take the good news? What will she do about the balance of those time payments? What will she say to her neighbors? And what will Dealer Jones do about his stock of Model K's, his cash investment in them and his community good will?

Is it any wonder that the public, as well as the dealer, refuses any longer to get excited when the oft-blown trumpets herald the birth of yet another radio set?

It's an old, old story. You gentlemen know it

## His DAY in Court

as well as I. Of course we cannot, and would not, stay the hand of progress. We appreciate that competition—yes, and all too often the voracious cries of the dealers themselves — and engineering research mean that new models must be produced occasionally. But why be so crude, so thoughtless about it all? From now on let's check and triple check, with the dealer, the timing and character of each new set announcement.

So much by way of illustration. I could cite you hundreds of case examples to prove this point and the other points I propose to make: territorial pro-

tection and wisely planned sales support. What can be done to rectify matters? Well, for one thing do not do those things which increase resistance at the point of sale, which hamstring the dealer.

Now I know, just as well as you do, that this sounds simpler than it really is. Why haven't we, long ago, done business with the dealer on a more constructive basis? Many factors enter into the composite answer to that question. Some are uncomplimentary to you set and tube executives, some to the dealer. And then there are other external and hard-to-control influences. But I think I can sum it all up in this expression: The way we've been doing it has been easier.

#### Declare for Sounder Selling Policies

True, it has been easier to follow the paths of expediency. It will take a whole lot of courage, of patience — intelligently directed—for you fellows to get together and formulate mutually acceptable and workable policies which will put the dealer on his feet and keep him there for the next five years. But such a procedure is the only way out. It must be undertaken. Remember again, this "forgotten" dealer is your dealer, your selection, the only one you've got. How else can you hope to sell Mrs. Brown, of Keene, N. H., or Mr. Black of Stockton, California.

The initial remedial measures I suggest boil down to just simple common sense. Yet our present merchandising set-up does not rest upon these foundation policies. A few manufacturers, it is true, are endeavoring to follow some of the practices I recommend and with highly satisfactory results—but, to bring to pass an *industry* right-about-face, these policies must be agreed on *collectively* — by every nationally known set concern.

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Furthermore these manufacturers, all members of the RMA, must back up their good intentions with a published declaration of these policies. For psychological reasons, and as a preliminary indication of good faith they should state openly, to the trade, what they propose to do.

NOTE: Mr. Sutliffe concluded his remarks by submitting for consideration the following sales policies. He urged that they be adopted, "to instill fresh courage and confidence in the hearts and minds of the 'effectives' on the firing line and to restore their status as merchandisers rather than price concessionaires."

#### Five Things Dealers Ask of Manufacturers

Only through the permanent prosperity of the ethical dealer can the radio industry retain its entity and financial stability.

To establish the dealer in his community as an energetic seller of radio products the manufacturer should:

- 1. Stabilize model and price policies . . . Fewer models and model changes . . . Radical changes to be announced not oftener than once a year
- 2. Stop demanding modifications in tube design . . . The evils arising from the recent flood of special tubes—for sales ammunition purposes only—are outweighing the minor technical advantages thus obtained
- 3. Grand territorial protection . . . Assign exclusive or semi-exclusive markets . . . The manufacturer to use his best efforts to keep out of that territory current merchandise offered at lower than suggested lists
- 4. Render practical sales help... The efforts of the manufacturer and jobber should be more largely devoted to helping the dealer solve his "point of sale" problems
- 5. Go on record as subscribing to these policies

Note: A declaration along these lines might properly conclude with a statement, in effect, as follows:

"To these objectives we pledge our untiring efforts, both singly and collectively. We count with confidence on the reciprocal support of every dealer who believes in making radio a business—not a racket."

## Skipper Sam Ellis

... Selective selling accounts for the four-time expansion of his business

E IGHTY-SEVEN per cent saturated! That's the story of Rockville Center, N. Y., according to the 1930 census—threethousand five hundred and three families and 3,040 radio sets. Hardly virgin territory for a radio business, is it? Yet Sam Ellis, Long Island's pioneer radio man. sold 127 sets in 197 business days this year right among those selfsame families—and in competition with the cut price artists of Cortlandt Street, New York City.



Three times fleet captain of the South Shore Yacht Club. Skipper Ellis finds, in his love for the water, opportunities for business as well as pleasure

Starting at scratch, with KDKA in 1922, "Captain" Ellis has hung up a grand total record of 4,000 set sales.

There must be an outstanding reason for such a showing. There is . . . the personal touch. For years Mr. Ellis has been one of Rockville Center's most prominent citizens. He is an active Elk, belongs to many other fraternal organizations, takes a major part in civic matters and, last but not least, is an ardent yachtsman. Many a prospect and customer has been entertained on his 50-ft., sea-going craft, the After You.

**B**UT more than good-fellowship and a wide acquaintance are needed to sell sets in today's market. This personal knowledge of prospects must, according to Mr. Ellis, be systematically used—"applied to selective selling." to quote him. In other words, planned cultivation of every worthwhile prospect, without wasted effort.

Like other live radio dealers, Ellis relies mainly on these four things for selling in a replacement market: the salesman, the servicer, the telephone and newspaper advertising. But telephone and personal calls are con-

20

fined strictly to those prospects who, after investigation and analysis, might reasonably be considered ready and able to indulge in the luxury of a new set. The following factors, therefore, are always checked before the customer is contacted:

1. The carded record—Reviewed as to the kind of set now owned, how long on the job, has it been a trouble maker and its service history.

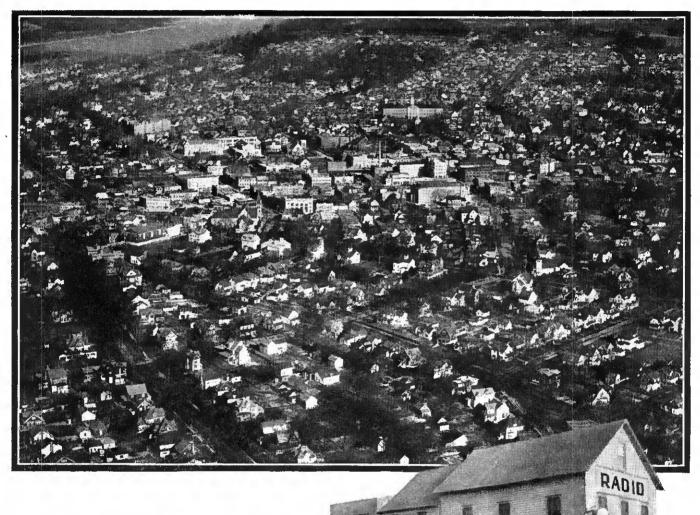
2. Experience with customer—Is he, or she, a good average person, with reasonable demands or a chronic kicker, hard to satisfy.

3. Personal fortune—Has he had any salary cuts, enforced vacations or actually lost his job? What is the scale of living of the family in relation to its income?

From the above it will be seen that when a name is turned over to a salesman or servicer he knows that failure to do business will call for more than an ordinary alibi.

It is worthy of note, that after a name has been decided on no attempt is made to make an appointment in advance by telephone. When the salesman calls at the

## of Rockville Center



house either previous acquaintance or the reputation of the concern gains him ready admission. He remarks that this is a periodical check-up call to determine whether the radio set is giving satisfaction. The answer he receives generally gives him a clue as to whether or not the old set has been actually satisfactory or whether the purchase of a new set has already been the subject of conversation.

If the set appears to be giving complete satisfaction he tries to get the prospect interested in improved reception, some other style of cabinet or in short wave reception. At the slightest suggestion of the need for adjustment, possibly some new tubes, the proposal is made to have a general check-up of the set at the shop, during which a new set is supplied so that the customer can try it at home. Every effort is made to gain permission to install a new set and where

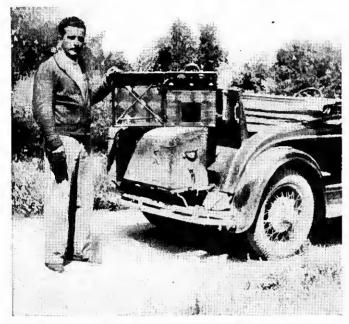
the old set continues in operation it is pointed out that a comparison can be made to better advantage, right at home. Remember that Ellis' prospects have previously been singled out as being ready, able and willing to buy a new set, if sufficient salesmanship is applied to make them think that they need it. Thus whenever the Sam Ellis salesman succeeds in getting a new receiver into (Please turn to page 50)

Rochville Center, Long Island, has a population of 14,000. Yet, in this limited

market, radio has forced a four-time store expansion policy

1922

## Paving the Way



This salesman eclipsed last year's record by reporting a faulty line to the local power company, then installing a truckload of sets in the district affected on approval

SET saturation is high .... where reception is good. Most people in districts supplied with good, clean broadcast signals already have radios, many of these being comparatively new. So sales resistance is stiff; selling costs high.

There *are* districts, however, in which few new sets are to be found, those in which electrical interference has severely retarded purchasing. The Radio Supply Company of Boise, Idaho, is finding it extremely profitable to pave the way for its salesmen in such areas by running down and eliminating the offending noise. The company, in fact, has secured the bulk of its 1932 radio business in such areas, profiting not only through the sale of sets but also on the installation of filtering devices.

#### LOCATING THE TROUBLE

The possibility that areas heretofore shunned by salesmen might be cleaned up was brought forcibly to the store's attention last fall when one of its salesmen, working in the "bench country" south of the city tried canvassing near the Franklin School in a nice, residential section populated by well-to-do farmers. He quickly found that all the housewives told approximately the same story. They would be delighted to have a new radio if it were not for the terrific noise which blotted out reception every night.

Now the salesmen know that there were few sources of noise which could not be located and he had noticed while driving out in his car that the power line passed through many trees. Perhaps this was the cause of the neighborhood trouble. On the way back to Boise his suspicions were further confirmed by the sight of several broken insulators in the transmission system. By curing interference in Boise, Idaho's "bad spots," the Radio Supply Company has created a new market for sets

#### By Wilbur Selby

He interviewed power company officials. They showed little interest, practically put it up to the salesman to do something; they didn't think their line was causing trouble. The prize seemed worth much trouble ... a whole, untapped territory ... so he went from the Utility's office back to his own, where he set to work equipping a small, battery superheterodyne with a directional loop.

#### SALESMAN CASHES IN

Next day, with the set in operation, he drove again to the noisy neighborhood. Driving slowly, stopping often to tune in the offending noise, he quickly located the specific trouble-points in the power line by using the loop as a "radio compass." The loop pointed toward the noise from any point within range and the intersection of these imaginary lines showed the approximate location of the trouble.

As he had suspected the grief was caused by loose or broken insulators, wires coming into contact with trees and even buildings. Specific defects were carefully listed in a report which he immediately turned in to the power company with an estimate of the increased power consumption which might be expected if radios were used by the community. The average radio in rural districts runs about 5 hours a day, he reasoned, and draws about 75 watts. This should interest the Utility. He was right . . . the company was favorably impressed by the workmanlike report where the salesman's original pleas had been ignored and sent a lineman out to look over the district. Within a short time all the trouble had been eliminated and interference practically ceased throughout the area.

Now it was time for the set salesman to convert his preliminary work into dollars . . . and this he did with commendable rapidity by loading a truck full of new sets, installing these on approval in all homes into which he could get entry. The commissions more than paid him for his original time and trouble as an interference sleuth and coming at a time when sales were slow, proved to be a lifesaver not only for him personally but also for Radio Supply.

#### PROFITS ON FILTERS

Other territories have since been opened up by the store in a similar manner, the power company sometimes curing the trouble and the retailer himself taking it in hand in other cases. The Utility is called in where line trouble is the source of noise, while the Boise dealer remedies interference caused by equipment susceptible to filtering.

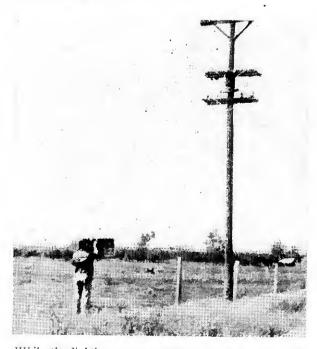
Electric motors of all kinds, those on domestic refrigerators, stokers, sewing machines and washers are the principle sources of grief, sometimes affecting entire neighborhoods. Radio Supply, while chiefly interested in paving the way for set sales, has repeatedly sold filtering devices at a profit as well as sets. While other dealers struggle for business in good districts this store quietly searches out the bad reception areas and does something about it to its considerable profit.

#### WORK NOT DIFFICULT

Motor trouble is often remedied quickly and without great expense merely by cleaning brushes. In other cases it is necessary to connect two condensers having a suitable breakdown rating and capacity in series across the supply line and the center point grounded. More often than not manufactured filters are used as many of these are expressly designed for particular jobs and can be relied upon when time is short.

Electric signs, large motors and more complicated electrical equipment are sometimes more difficult to filter but there are circuits and methods which effectively subdue noise radiation, either direct or via the power lines. Combinations of inductance and capacity, shielding and proper grounds almost invariably clear up trouble and where the concern finds itself incapable of successfully prescribing it enlists a manufacturer of filtering devices.

"We have heard of dealers specializing in interference elimination," says the store manager, "but we know of no other shop that deliberately looks for trouble as we do. We've stumbled across an unscratched market which is ours for just a little trouble."



While the lighting company corrects troubles caused by its equipment the dealer himself silences electrical noises which are susceptible to filtering

### As Buffalo Sees the Business

WHERE are tomorrow's sales coming from? How may prospects best be reached and business stimulated? These questions recently were discussed by a representative of this magazine with fourteen wellknow radio dealers located in Buffalo, N. Y. Based on these interviews, we have prepared the following tables:

#### TOMORROW'S RADIO SALES

Source Pe	r Cent
Replacements-involving a trade-in	
Replacements-not involving a trade-in	10
Buyers for the first time	30
Second set buyers—persons adding one or more sets to the first one	
	100

While there was a considerable divergence of opinion concerning the worth of the various sources from which the radio business of the future will come, careful tabulation and weighing of the respective judgments gives the following concensus, named in the order of their importance:

- 1. The store and its organi- 5. Direct mailings
  - 6. The telephone canvass

8. Handbills

- zation 2. Old customers
- 7. Newspaper advertising
- 3. Outside sales force
- 4. Service men

The reasons why store selling will gain ground may be summarized in the terse statement of dealer C: "Radio is now out of the specialty class," he explained. "From now on it will be sold as a staple, rather than as a specialty item. Manufacturers' advertising, satisfied customers, intelligent salesmanship on the part of our service men, plus the use of direct mail advertising, bring the type of people I want to sell to my store. They are interested in something they know a great deal about. They will not be sold on a novelty basis, but on a basis of value and performance. A store sales force is much better able to sell on such a basis than is an outside one. I operated an outside crew until this spring, but am not going back to it because the scarcity of new prospects led my salemen to place far greater emphasis on price and trade-ins than was profitable."

From a dealer who favors "using the user": "Every customer on my books is a four-way prospect for me to contact. He may be interested in a new set, a second set, he may know of someone in the market for a set or he may want the old one fixed up. I include all of my old customers in every new-set-folder mailing I make, and call each of them on the telephone at least twice a year. This latter practice has sold new sets, second sets, given me service jobs and many new prospects."

**B** UT a great deal, of course, can be said for outside selling; in fact this method lost out for first position as a prime source of business by the narrowest of margins. Dealer D speaks very convincingly for this policy when he says:

'There is a very definite need for outside, canvassing (Please turn to page 47)

Radio Retailing, October, 1932

## "Show Me!" say

DESPITE the fact that public address equipment is ideally suited to sale by the radio trade, dealers, in general, are not doing as good a P.A. job as they might. This, in my humble opinion, is due primarily to their inability, or unwillingness, to take the equipment right out to the prospect and demonstrate it.

Too many merchants, remembering the early days of radio when customers came to them for sets, expect this new business to walk into the store, too. It won't! Demonstration is even more essential in the public address field than in the home radio. Because P. A. is comparatively novel to the majority of people to whom it must be sold, prospects are naturally skeptical . . . their's is a "show me" attitude. Fortunately, demonstration pays higher dividends than in the radio field. In the public address business a sales-to-demonstration ratio of 75 per cent is not unusual and this amply compensates for the extra selling expense involved.

Three dealers bear me out in my statement that the all important factor in public address selling is demonstration. Their sales records provide an excellent example of what can be accomplished in this new business by radio dealers who go after it properly:

1. Radio Research Laboratories, Poughkeepsie, N. Y., originally specialized in radio service and repairs. Then public address came along and Daggett Ramsdell, recognizing the attractiveness of the proposition for an organization of his type, took hold. From the very beginning he *demonstrated to sell*, with the result that P.A. sales represent 60 per cent of his \$58,000 volume for the first nine months of 1932.

Two of Ramsdell's excellent installations are pictured on these pages. The photos were not taken especially

#### PROOF

—that radio dealers can do a volume publicaddress business.

#### Radio Research Labs., Poughkeepsie, N. Y.

. . . 60 per cent of its business is in P.A.

#### J. E. Guetens Radio, West Haven, Conn.

. . . 50 per cent of its business is in P.A.

#### Hari-Mac Radio, New York.

. . . 10 per cent of its business is in P.A.



A Hari-Mac installation in the Globe Theatre, where a railroad drama is playing, realistically reproduces the "clickety-click" of a train speeding over the rails.

for use here but were in the company's files, along with many other examples of its work. It is significant that such a complete photographic record is maintained for Ramsdell frequently uses then in closing. If the mountain cannot be brought to Mahomet a picture of it, at least, certainly can be.

Many of R.R.L.'s jobs are of the mobile variety. These bring from \$250 to \$2,500; the Cough Drop King's installation, illustrated, going for \$1,800. Large, permanent jobs are not uncommon, however. Two the concern is especially proud of may be inspected at Vassar College . . . \$7,800 . . . and at the ultramodern Samuel Bowne Memorial Hospital.

2. J. E. Guetens, of West Haven, Conn., is another radio dealer who seriously recommends direct demonstration as a means of obtaining public address business. Guetens added P.A. to radio sales and service in November, 1931. His first few jobs were obtained as a result of his reputation as a serviceman. Then outside selling was resorted to and is the chief source of business today, public address accounting for 50 per cent of the volume.

Guetens' activity is along a slightly different line than that of Radio Research Lab's. He *rents* the use of a

## Public Address Prospects

Seventy-five per cent buy when equipment is properly demonstrated according to

> J. J. Bressler Public Address Dept., Federated Purchaser, Inc.



The two bewhiskered Ramdsell boys demonstrate their contribution to the Cough Drop King's advertising campaign.

sound truck and several portable amplifiers, the average charge being \$20 for an evening or afternoon's use. A job requiring the apparatus for an entire day brings \$65. The sound truck itself, well plastered with signs, is a "walking demonstration" of inestimable value.

Public address is becoming more important each day as a source of revenue.

3. Hari-Mac Radio of New York City roots for the demonstration method of selling public address in no uncertain terms. "We always make a sale where we are able to demonstrate a job similar to the one wanted by the prospect." These words are Clarence A. Bernard's.

The company was originally engaged in the sale of sets and accessories, later adding sporting goods and

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electrical appliances. Then, two years ago, public address was taken into the fold and now represents 10 per cent of the business, with every prospect of doubling this season. The biggest job closed to date was an installation, equipped with four microphones and four turntables, behind the scenes of Jed Harris' musical show, "Wonder Boy," '31. This rang the bell at \$4,000. Will Oakland's Terrace night club ran a close second with a \$3,000 installation using four condenser-mikes and four speakers. Oakland later used it when making personal appearances in vaudeville.

Several \$850 recording units which cut their own records and \$2,500 worth of smaller recorders using pregrooved discs constitute part of this year's business. And Bernard warns against neglecting the small amplifier business. He has installed many for as little as \$45 in stores and theatre lobbies, claiming that these are not only profitable but drum up business for big jobs. The Globe Theatre's amplifier (pictured), used to ballyhoo features, is a typical example of such small jobs.

The company also rents equipment, both small and large units, for periods ranging between one night and ten weeks. Where it is required for more than ten weeks purchase is advised, and the sale is usually closed by putting a suitable amplifier out on actual demonstration.

LIVE wires like these are leading the way, proving that radio dealers can do volume public address business if they will take the equipment out and demonstrate it. Equipment has been so simplified that it is now necessary to do little more than connect several pieces of equipment together by joining terminals having identical markings. And in the last eighteen months design improvements have reduced P.A. prices by nearly half.

Many people who can use public address equipment . . . positively have a crying need for it . . . are still skeptical. Now is the time to "show them" !



An ingenious method of inclosing trumpets devised by Radio Research Laboratories. The equipment is "streamlined" into the top.

## 3 Things Needed to sell Parts

M&H Sporting Goods, Philadelphia, has them... and so, turns a \$20,000 stock 5 times annually

HREE things are essential to the sale of any quantity of radio parts in this day and age, avers secretary Louis Herbach of the M & H Sporting Goods Company, Philadelphia.

- 1. A reputation for fair-dealing
- 2. Technically experienced salesmen, and
- 3. A complete stock.

With ten years of experience behind it, this concern turns a fifteen to twenty-thousand dollar stock of such equipment from 4 to 5 times annually, slightly less than 50 per cent of it going over the counter to local customers while the remainder constitutes C.O.D. mail-orders gleaned through a widely distributed catalog.

The company's books record the names of 5,000 parts buyers in the Quaker City area alone, estimated to be made up as follows: 3,000 employees of radio and electrical equipment plants who purchase parts for use in company and personal experiments, also for the occasional repair of a neighbor's set; 750 part-time servicemen; 500 full-time servicemen; 500 transmitting amateurs and approximately 250 set-building "fans."

#### REPUTATION

"Reputation, though I fully realize that the word sounds 'bookish,' is nevertheless the most important single contributor to our business. I cannot overstress its importance in this interview," states Herbach. "We jealously guard ours because we know that there is little profit in a one-time sale of small items. Customers must keep coming back.

"Repeat business is insured in a variety of ways. We are, for example, particularly careful to describe each item in our stock accurately. No overstatements or omissions are tolerated. We go farther than that, determining the particular



Secretary Louis Herbach is never too proud to get behind the counter

use for which each part is required when a customer comes in to buy in order to be certain that it has been wisely chosen. While no buyer is ever 'switched' without reason, we often recommend parts other than those originally selected where we are convinced that these cannot give satisfaction.

"It is also our policy to be extremely liberal in the handling of exchange and refund requests and customers rarely abuse the privilege. There is no substitute for time, may I point out, in building goodwill. Ours has accumulated over a decade of fair-dealing relationship with the trade."

#### SALESMEN

"The technical knowledge of salesmen employed by this company is responsible in no small measure for our success. Fully 60 per cent of our customers, I would say, while knowing the general type of part required for each job, need advice as to its correct installation, often as to the *size* of the part. Such information we are in an admirable position to give and parts buyers have confidence in its accuracy. For Don Lusk and Jack Wagon-

seller operate amateur sta-tions W3ZF and W3GS and are both widely known as district communication managers for the ARRL; Maurice Rademan has been answering technical questions satisfactorily from behind our counter for a number of years and salesman Kiss is an ex-RCA Institute instructor and at present head of the city's association of servicemen. In addition to their value as technical advisers these men attract considerable business by virtue of their radio activity outside the store

"When a customer comes into our store to buy a part he knows he is entitled to technical advice, whether his is a 10-cent or a 10dollar purchase. This advice is invaluble to many buy-Questions concerning the correct wattage-rating of resistors are quite common at this time, for example. For while circuit diagrams give ohmage they rarely tell how much current resistors must safely carry and it often requires a junior-engineer to figure it out.

"I am absolutely convinced that the time is long past when a non-technical salesman can succesfully sell parts to the satisfaction of both the customer and the company."

#### STOCK

"A complete stock is essential to the proper conduct of a parts business as buyers, particularly servicemen, soon tire of the house that always must 'get it for them.' No matter how impressed they are with any concern, customers soon gravitate to the one which can supply their everyday needs instantly, over the counter. The average serviceman, remember, is usually in a hurry for the parts he orders as these are generally to be used in the repair of a receiver awaiting their arrival at his shop.

"So in order to satisfy the demand for prompt service we carry from \$15,000 to \$20,000 worth of parts at all times and while it is sometimes necessary for us to place rush orders for good customers in spite of the completeness of our stock this does not occur often enough to give them the impression that we are hand-to-mouth buyers.

"A successful parts business cannot be conducted with any mere 'skeleton' stock. "We handle new parts exclusively, refrain from buying

in job lots of surplus material. Surplus and salvaged parts, I realize, can sometimes be purchased at prices which permit them to be re-sold at a substantial profit. And by not handling such merchandise I probably lose the business of those buyers who invariably shop for bargains. But this loss is counterbalanced by the retention of the better class of trade that knows everything bought from us to be new and in perfect condition. On those infrequent occasions in the past when we have fallen for a particularly attractive job-lot, returns by customers have always mounted perilously high."

#### TRAFFIC

"Store traffic is especially important in the parts business. It takes many, many customers to support this department. Ours averages 55 buyers per day, which high figure I attribute entirely to the three qualifications already stressed: our reputation for fair dealing, the technically experienced salesmen and a complete stock.

"Occasionally we help traffic along with special advertising stunts. One of the most successful has been the running of a 'show' upon the arrival of any new line of parts. A short time ago, for example, we received an entirely new assortment of 'International' resistors. So we printed several thousand penny postcards inviting our local customers in to see these, promising that there would be a factory man on deck to answer all questions pertaining to the use of the equipment.

"The show ran for five days and nearly trebled our store traffic."

The Trend in Set Design

V

An analysis of the radio receiver specifications which begin on page 35

PRICES Range Average low Average high	\$19 to \$895 \$52 \$147	Essentially the same as in Chicago last June Up nine dollars since the trade show Down fifteen dollars
MODELS Range Average number of models per line Average number of consoles Average number of table models Ratio, consoles to total home models	1 to 23 8 4 3 53%	One company had 27 earlier this year One less than the Hotel Stevens average Fewer consoles in many lines No change in number Off about fifteen per cent
TYPES Lines with chest, or "personal", models Lines with double-purpose furniture models Lines with auto-radio models Lines with shortwave and broadcast combinations Lines with broadcast and longwave combinations Lines with phono-combinations Lines with automatic phono-combinations Lines with 2-volt battery models Lines with portable models	8% 6% 30% 47% 17% 14% 6% 6% 8%	Practically non-existent last year Lessened activity in this field These sets have retained their popularity Status unchanged Indicates increased interest in export market Shows a decrease in such models Fewer made than in June No appreciable increase or decrease An old friend come alive again
TUBES Range Average number of tubes Lines with a.f. pentode models Lines with Class-B output models Lines with "universal" output tube models Lines with push-pull 45 models Lines with double diode-triode detector models Lines with mercury-vapor rectifier models Lines with automatic noise-suppressor models Lines with automatic volume-control models	4 to 15 7 97% 26% 8% 7% 46% 24% 25% 62%	One company had a 20-tuber in the spring New multi-purpose types have reduced the number Still almost universally used by makers Gaining, but very, very slowly Watch the use of these flexible types grow Down, but by no means out Indicates instant acceptance of these new types Shows satisfactory gain since trade show Another new development that is going well Still used by just as many manufacturers

## **"Business Prospects**

#### October, 1932

#### Other News of the Month,

#### FALL SALES EXPECTED TO REFLECT IMPROVED BUYING SENTIMENT, TELEGRAPH SURVEY INDICATES

Price Cutting, Poor Retail Credit, Continue As Sore Spots. Stocks Unseasonably Low

 $\mathbf{T}$  HE trade everywhere is noting a distinct improvement in buying sentiment and although this trend has not yet positively expressed itself in terms of dollars and cents it will be reflected, dealers and jobbers think, in October, November and December sales. Price cutting and poor retail credit continue as sore spots. Stocks, on the other hand, are unseasonably low.

These facts concerning the present status of the national market were revealed by a telegraphic survey of leading radio and electrical wholesalers conducted just before "*Radio Retailing*" went to press. Five questions which may be considered barometric were asked, and the replies tabulated as follows:

Question 1. Is retail buying sentiment better? 97 per cent of the jobbers replying said "Yes."

Question 2. Do you expect consumer buying to increase in the next three months? 76 per cent answered in the affirmative.

Question 3. Is price-cutting showing any decline? 65 per cent replied "No change."

Question 4. Has there been any improvement in retail credit? 68 per cent noted no such improvement.

Question 5. Are wholesale and retail inventorics unreasonably low? 94 per cent agreed that stocks were unseasonably low.

Several typical replies appear herewith exactly as received. These were selected for their variety of "date lines" rather than any unduly optimistic character of contents...

"Wholesale and retail inventories undoubtedly low and retail buying sentiment some better during past three weeks with promise of future improvement. Rock bottom prices still dominate. No way retailer credit can improve until he gets some business." D. W. BURKE, Detroit, Mich. Radio Distributing Co.

"Radio well established and understocked. No decline in price cutting and possibility of refrigerator dumping. Credit situation satisfactory under present conditions." CHARLESTON ELECTRIC SUPPLY Co. Charleston, W. Va.

"Wholesale and retail inventories are by far at the lowest point we have ever known them to be at this time of year. We are sincere in belief that there will be increase in retail buying within next thirty days. Price cutting has shown definite decline but retail credits still a sort spot." E. B. LATHAM,

New York, N. Y. E. B. Latham & Co.

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"Dealers optimistically stocking radio anticipating reasonable fall consumer demand. Increased public buying this fall problematical. If banks and finance companies would take present good paper dealer would be much relieved. General impovement slowly coming."

A. VAN ANTWERPEN Milwaukee, Wis. Radio Specialty Co.

"All inventories unseasonably low. Business here definitely on uptrend. Price cutting still prevalent but trend toward regular low priced merchandise." *Los Angeles, Calif.* HARRY FOX.

"Retail inventory low and buying showing improvement but consumer plans on a conservative basis. Price cutting slightly less and credit situation little improved." Portland, Ore. STUBBS ELECT. Co.

"Conditions our territory improving, increased prices cotton and tobacco causing trade to look forward fall business with some degree of optimism. Inventories extremely low."

Atlanta, Ga. FULWILER & CHAPMAN.

"We are now receiving thirty per cent increase in dealer inquiries; indications point to substantial increase in business." *Boston, Mass.* JOSEPHI L. MILHENDER.

"Hand to mouth buying policy continues however trades mental attitude much better. Believe consumer buying will show small increase each successive month." *St. Louis, Mo.* F. X. MEEHAN,

#### Capehart's New Plans

The Capehart Corporation has announced a new sales program and is out with a new series of effective advertising helps. This Fort Wayne concern also has placed six new district managers in the field to supplement the work of its regular organization. This latter move

### Who Has The Oldest Radio?

"Majestic" dealers are in the midst of a nation-wide contest designed to smoke out old receivers and stimulate replacement sales. The factory has offered \$100,000 in prizes to the owners of the oldest sets bearing its trade-mark. This unique competition ends October 15.

was made necessary due to the increased interest shown by the trade in combination instruments since its presentation of its eight new models.

The Chicago area, including Wisconsin, will be served by S. C. Schulz, formerly district manager for the Brunswick Phonograph Company. R. M. Peters has taken over the state of Iowa, eastern Nebraska and southern Illinois. E. D. Swayze will look after Michigan an dNorthern Ohio. H. G. LaForge has been given the West Coast. Mack Wells will cover Sioux City and a portion of Nebraska, also eastern Colorado, while H. H. Secord has Duluth, Minneapolis and St. Paul.

#### A-K Shows Line in Wichita

The American Electric Company, newly appointed Wichita, Kansas distributor for Atwater Kent, conducted a show to introduce the company's new line late in September. Fine dealer attendance reported.

The Crowd Roars



Hey! Hey! They're off down the track—and Jockey Charles Adams comes in first in the Sylvania Radio Tube Handicap. For being a smart boy, Adams receives a Philco midget donated by Sylvania. Here we see Charles D. Castino, Mid-West Distributing Co., making the presentation while Judge J. William Brooks of Chicago watches

Radio Retailing, October, 1932

## **Better''** Jobbers Wire

#### Arranged for Busy Readers

#### New York, N. Y.

#### Arthur T. Haugh Becomes **President of Echophone**



Arthur T. Haugh, former president of the Radio Manufacturers Association and one of the best known executives in the industry, became president and director of the Echophone Radio Company, Wau-kegan, Ill., on Sep-Wautember first. Mr. Haugh was also elected a director of Western Television

Arthur T. Haugh

Corp., with which Echophone is affiliated. The selection of Mr. Haugh to direct the expansion program of Echophone completes the first stage of its plans for intensive cultivation of the domestic and

foreign radio markets. For twelve years "Art" Haugh has been actively identified with radio in an executive capacity. He came into radio via the automotive route. He was presi-dent of the National Standard Parts Association for three terms, as well as its founder.

His first radio connection, in 1921, was as vice-president and general manager of the King Mfg. Co., Buffalo, New York. His next move, as in the present instance, was to invest in a manufacturing company and to direct its activities. That enterprise was the introduction of the Peerless speaker. For the past three years he has been general sales manager of Zenith Radio Corporation.

One of Mr. Haugh's extra-radio activ-ities lies in the field of Ornithology. He is the founder of the Eoornis Institute, which devotes itself to the study of the Eoornis Ptrovelox Gobiences.

#### Dictograph Back in Radio

Confirming a rumor circulating among the New York trade, Vice-president Snodgrass of the Dictograph Products Co., 580 Fifth Ave., advises Radio Retailing that his company plans to re-enter the radio field with a complete line of public address equipment. Dictograph, whose chief busi-ness is the manufacture of communication devices for offices and hearing aids for the deaf, will be remembered by old-timers as one of the earliest manufacturers of magnetic speakers.

#### S-C Moves Kansas City Office

Stromberg-Carlson's Kansas City office is now located at 2017 Grand Avenue. A. J. Roberts, manager, directs the company's business in Missouri, Kansas, Arkansas, Oklahoma, Texas, Nebraska, Montana, Wyoming, Utah, Colorado, New Mexico and Idaho.

Radio Retailing, October, 1932



This Month's Line-Up M. F. Burns, sales manager, Central Division, RCA Radiotron, is looking rather equivocally at F. W. Gruesel, District Mgr., Appliance Sales, G-E Supply Corp., Milwaukee, and R. A. Graver, District Sales Mgr. RCA Radio-tron. But they and Chum-mee assume a real Murad nonchalance in spite of it.

#### Tracey Named General Sales Manager for Zenith

Eugene F. McDonald, Jr., president of the Zenith Radio Corporation, announces the appointment of E. A. Tracey as general sales manager. Nineteen years of radio experience is credited to Mr. Tracey's record. He formerly was a vice-president of the National Union Radio Corporation and replaces, at Zenith, Arthur Haugh, the latter joining forces with Echophone as president.

Mr. Tracey refuses to draw any line of distinction between dealer, jobber and factory. "All three must work in unison to serve the consumer," he insists.

#### Fall Lines Shown in N.Y.

During the week of September 19, thirty manufacturers, distributors and manufacturer's agents exhibited new fall lines to the local radio and electrical trade at the second annual show held at the Hotel Edison, New York. Displays were maintained in the main ballroom while demonstrations progressed in many auxiliary rooms.

On Monday, a Ziegfeld beauty opened the festivities by depressing a button which sounded a set of Telechime chimes. These, designed for use in homes, later attracted considerable attention in the booth of Rossiter & Com-pany, which also displayed Sylvania pany, tubes.

#### **RMA DIRECTORS** ARE FOR ACTION

#### Plan Aggressive Program of **Sales Promotion Enterprises** -Geddes Made Gen. Manager

The RMA, newly reorganized, swung into vigorous action on several important industry projects at its meeting in Cleve-land last month of industry leaders, comprising the Association's board of directors. Spurred by the upturn in general business, in recent radio sales and with "hot" broadcasting events promising further fall stimulus to sales, definite action to aid all radio interests was initiated.

Besides preparing sales promotion enterprises, the RMA directors ordered immediate work to develop a standard cost accounting system, industry statistics and standard trade practices. Other plans discussed provide for cooperation with jobbers and dealers, stabilization practices relating to the inopportune introduction of new set models and tubes and the present profit margins.

Giving the RMA a more compact and effectual reorganization for vigorous and prompt action, the committee set-up of the Association was radically revised, re-duced in size and all RMA activities placed under general direction of Bond Geddes as executive vice-president and general manager. This is to effect uni-fied administration of all RMA affairs under the direction of President Williams and the Board of Directors. The promotion of general manager Geddes came after five years of service in the RMA in varied capacities.

A large part of the more important association activities, such as merchandising, trade practices, relations with jobbers and dealers, radio legislation, development of export trade, and statistics, will be pressed by the Set Di-vision, under Chairman Murray and comprising leading set manufacturers.

The three important projects ordered for active prosecution by the Set Division were embodied in a resolution directing this committee "to work with all set manufacturers of the RMA to the end of developing, for the benefit of the industry, the following: (1) a standard method of reporting and exchanging set cost data; (2) general past sales statis-tics having to do with the set industry: (3) the development of standard trade practices and the necessary exchange of data having to do therewith."

Following the official meeting of the RMA Board of Directors, Ray V. Sut-liffe, editor of *Radio Retailing*, gave an interesting informal address relating to the broadcasting problem, and those of distribution, including the need for a closer relationship between manufacturers and dealer.



### Detector

THE magic name of "Ford" is being linked with auto-radio. Emerson Electric reports the sale of 5,000 motorgenerator type B-eliminators to this shining light of the automotive industry, Magnavox is reputed to have sold him as many speakers and we understand that Majestic is supplying chassis. Radio on Henry's cars will now be optional. Buick is also said to be seriously considering dashboard sets.

Things RMA: President Fred D. Williams has travelled literally thousands of miles in the last few weeks contacting leading manufacturers in connection with the Association's reorganisation. Paul B. Klugh, appointed delegate to the International Radiotelegraph Conference, sailed Madrid-ward September 8.

Paul Chamberlain has a new jobunder the old banner. Formerly sales manager for C. R. Rogers Company, Pittsburgh, Pa., he has been transferred to Cleveland, where he is clicking as general manager for Rogers-Philco. These are allied jobbing houses.

The radio outlook in Pittsburgh is on the mend—decidedly so. Last week we chatted with Hugh Eleyet, radio's inquiring reporter for the Sun-Telegraph. Hugh gets around a bit, knows all the radio big shots in that Vale of Smoke by their first names. Here's the picture:

Kaufmann's department store has entirely rebuilt and refurnished its radio headquarters. The other day one of its salesmen grossed over \$700 in sets—sold 15, average price, \$48 . . . Another department store, Boggs and Buhl, as this issue goes in the mails, is running a radio show all its own . . . May Stern Company, furniture, has just opened a new radio department, claims to be the largest one in Pittsburgh. Reports that a special sale on Clarions went over big . . . Elmer Hamburg, Hamburg Bros, (Majestic distributor) marshalled 420 enthusiastic dealers at his recent get-together. "More interest than at any time during the past two years." . . Here's from another angle: RCA, Philco, Majestic and Kolster are planning increased advertising expenditures of approximately 25 per cent for publicity in this district this season as over that of last year.

More about Pittsburgh . . An appreciable increase in business recently, states Harold Goldstein, president of Anchor Lite Appliance (Crosley jobber), who has signed up 130 new dealers within the past two months. Goldstein continues:

"From a survey recently taken of a large number of the dealers in western Pannsylvania, depletion of stock was evident in. nearly every case, and the radios shown were, to a great degree, last year's models. One of the questions asked dealers during the survey was their opinion of price trend for the present season. Over 90 per cent unswered that the real cheap radios would not be a factor."

Ten bucks is the least you can plank down for a radio up in Vancouver, B. C. And if the set lists higher than \$100 ten per cent is the minimum down payment. G. Lantry Bell, president of the radio section, Canadian R.M.A., who presided at the recent Retail Merchants Association meeting which okehed this policy, is our authority.

September was a gala month for New York distributor meetings. Wildermuth, Despres-Jacobs, G. E. Supply and half-adozen other bigtimers had us hot-footing all over town to see the new this-and-thats. Not-too-near beer, incidentally, was dispensed at most of these shindigs in lieu of more potent liquids. There were many near-drownings!

North American staged a party in behalf of the new Zeniths. This inquiring reporter traipsed uptown to the Broadway showroom, stuck his head into the innards of a set and was immediately intrigued by the tricky appearance of the new 7-prong tube. "Why all the pins?" we innocently asked a passing salesman. Quick as a flash he replied: "7-prongs . . . 7 days. Simple. One prong for every day of the week!" The meany.

More seriously . . . J. P. Kennedy of South Bend, Indiana, an inveterate bargain seeker, informs us that he has had to do his shopping in Chicago lately. Local jobbers are plum out of surplus stocks. This is a good sign.

"Baby Mikes!" "They'll sell well this coming holiday season," declares J. R. Fouch. And who are we to question the judgment of the president of the Universal Microphone Company, of Inglewood, California? We hope they do—and they will if dealers display them. To help the cause Universal has just published a bang up 29-page catalog. Also placed complete stock for spot delivery in "a dozen centers of population throughout the country."

A. C. Tamburino, who used to be with Victor and RCA in Chicago is taking the air. Not so fast . . . he is now with the air conditioning division of Frigidaire, in New York.

Tobe Deutschmann tells us that he still has some open territory available for the right kind of representatives.

#### Manufacturers' agents and others who want to help eliminate old man interference, may write him at Canton, Massachusetts.

Radisco, or more lucidly, the Radio Distributing Corporation, is getting New Jersey dealers all hopped about RKO's spectacular six-weeks broadcast of the radio drama, "The Phantom of Crestwood." Many will arrange to display RCA-Victor sets in the lobbies of theatres showing the film which is to be made of the story when some bright listener supplies a happy ending. Good work, Paul Krich.

Three assistant sales managers, each of whom has had more than ten years' experience in radio, have been appointed by Arthur T. Haugh, president of Echophone Radio, Waukegan, Ill. They are: Jim Kelley, Fred Will and Don Pieri.

Another "keep sweet" contest: Fifty pint bottles of milk kept fit for twenty days, eighteen hours, fifteen minutes and ten seconds in a Norge refrigerator out in the window of Kansas City Power and Light. Another box did its stuff for twenty-seven days, one hour, fortyfive minutes and fifty seconds. We're going to average all these reports and enter the next contest ourself?

"Fundamental Radio Course." This course, in textbook form, has been prepared by the National Radio Institute, Washington, D. C. It consists of 46 paper covered booklets, issued consecutively, by mail, to enrolled students.

A comprehensive survey of the science of radio, beginning with fundamental principles, continuing through modern receivers and their component parts to the actual servicing of a.c. sets. The experienced technician, as well as the beginner, will find these booklets of material benefit. The former will particularly value the handling of such advanced subjects as: "Photocells and Glow Lamps," "Variable Mu and Pentode Tubes," "Volume Control Circuits," "Oscillators," "Superheterodyne Principles" and "Power Amplifiers."

Six other textbook courses also have recently been released by National. These are titled: "Practical Laboratory Training Course." In five parts, for the man who wishes to experiment intelligently. Advanced. "Aircraft Radio." Nineteen booklets, including five on the mathematics of radio. Advanced. "Radio Servicing and Merchandising." A 25-booklet course including four on the practical problems of operating a shop. Advanced. "Sound Pictures and Public Address Systems."

Kay Jutliffe

Radio Retailing, October, 1932



Dealer HENNESSEY . . he makes a big noise about "noiseless" reception

## N THE last few months several "noiseless" lead-in

systems have been developed. Virtually eliminating signal pickup by the downlead portion of the antenna, these devices are attracting considerable public attention. It is relatively easy, radio men realize, to erect an aerial out in the clear, away from noisy electrical equipment, but something else again to keep the entire wire at a safe distance from such sources of noise all the way from the most distant insulator to the set. Many dealers, therefore, are pushing lowfrequency transmission lines and shielded lead-in systems as accessories with marked success.

And now Tom Hennessey, Woodlawn Electric Company, Chicago, points out that the noiseless lead-in has possibilities, as an integral part of the set sale, of far greater interest. Such combined systems, according to this man, can be made to perform the following valuable functions:

- 1. Increase store sales by making possible quiet store demonstrations
- 2. Help the dealer collect a profitable installation fee
- 3. Boost the ratio of sales to home demonstrations
- 4. Assist set salesmen to "sell up'
- 5. Stimulate replacement business.

Hennessey explains how his particular system (Kolster "Řejectostatic") can do these things in this manner:

"Store reception is now infinitely better than it has ever been before and we need no longer apologize for noise . . . there isn't any. Always, in the past, we have had to patiently explain to people who came in to hear a set that no radio, no matter how good, worked well here. This, of course, was entirely true. But many a prospect refused to be convinced, felt that we were trying to 'pressure' the sale by shipping a set to his home. Ability to give good demonstrations in our own building has increased store sales.

"Most dealers give away installation work and so, in order to compete, did we. This is no longer necessary for we now have an antenna system which not only does more than the ordinary garden variety but actually 'looks the money.' It is relatively simple to sell for \$10, an installation which can be guaranteed noiseless. So our new lead-in system not only has permitted us to charge enough to cover the cost of installation but actually nets a profit. Where the antenna must be installed more than the ordinary distance from the set in order to get it well out in the clear, we increase our charges and have little difficulty collecting.

"Our noiseless lead-in has made it possible to increase the ratio of sales to home demonstrations in a peculiar way. When prospects become interested in the set with which it is sold we commit them, in advance of the home trial, to buy that model if it can be proven that it will eliminate extraneous noise. Such matters as tone, selectivity, etc., are completely threshed out in the store, in fact most people assume that the set is up to snuff along these orthodox lines without asking for proof. The noiseless feature is so unusual that it completely eclipses other considerations in most cases. And with the prospect pinned down to just one thing it is a simple matter to convert the demonstration into a sale, for the lead-in system does perform beautifully.

The aerial feature also has enabled our men to sell up. Inasmuch as it is available only in our better models the purchase of noiseless reception automatically sells quality merchandise.

"Last but not least, noiseless reception helps our replacement business. We sell it only with a new receiver, instead of as an optional accessory, by pointing out to the prospect that only the most modern sets are so completely shielded as to take full advantage of the new lead-in system.' Our entire set selling operation is now centered around this valuable feature.

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## R. F. Stage Alignment

Why it is important. How to do it.

#### By H. L. OLESEN

Weston-Jewell

To secure the maximum performance from modern receivers employing high-gain r.f. stages with 10 kc. selectivity, radio frequency circuits must be aligned with great accuracy. The necessity for such careful adjustment may be easily seen by studying the relationship of the resonance curves of individual stages at any setting of the main tuning dial. These curves are formed by plotting the gain, or amplification, of each stage at various frequencies. These tuned stages are very selective, amplifying only a narrow band of frequencies. The sharper a stage is tuned the narrower is the range of frequencies which will be amplified by it.

For example, consider the resonance curves of three tuned stages such as are used in any t.r.f. set or as the preamplifier stages of a superheterodyne receiver. Let us assume that each stage has the same gain and the same shaped resonance curve. This is not always true in a commercial receiver but it may be assumed here to simplify the discussion.

Fig. 1 shows all three stages perfectly aligned with the result that the curves are superimposed and each stage has its point of maximum gain at 1,000 kc. In a properly aligned amplifier, this condition of simultaneous resonance of stages should follow over the complete tuning range. Then the amplifier is operating at maximum gain and, assuming a gain of 100 per stage, the overall gain for the r.f. amplifier at 1,000 kc. will be 1,000,000, or the product of the individual stage gains.

Fig. 2 shows the same three stages with the same individual gains of 100 per stage. However, stage B is tuncd a little higher than stage A and stage C is just a little lower than stage A. The resonance curves do not coincide, with the result that A still has a gain of 100 at 1,000 kc, but stage B has a gain of only 50 at 1,000 kc. Together these give an overall gain for the entire r.f. amplifier of only 150,000 at 1,000 kc.

The curves shown in these diagrams are not nearly as peaked as are the actual resonance curves of modern highgain circuits. It is easy to see that the sharper, or more peaked, the tuning of each stage, the greater the loss due to poor alignment, and the smaller amount of out-of-alignment needed to greatly reduce the gain.

Alignment, so carefully made at the factories, often needs readjustment after the set has been in service. In fact new receivers can lose their adjustment even before they reach the dealer's floor. Warping of parts and careless han,lling in transit are probably the most common causes, though there are other factors which affect alignment.

Test oscillators, incidentally, must be so well shielded that no r.f. energy can enter the set except through the desired input circuit.

#### T.R.F. Adjustment

Most superheterodynes and all tuned radio frequency sets have two or more ganged variable condensers, tuning broadcast frequency circuits. The adjustment of these circuits is the same in the t.r.f. and superheterodyne circuits except that in the super the variable condenser of the oscillator stage frequently has in series an additional trimmer, or tracking, condenser. The method described below for align-

The method described below for aligning these condensers is suitable for all receivers where ordinary out-of-alignment is encountered. Special methods for correcting more severe conditions in superheterodyne receivers are described in detail in manufacturers' manuals.

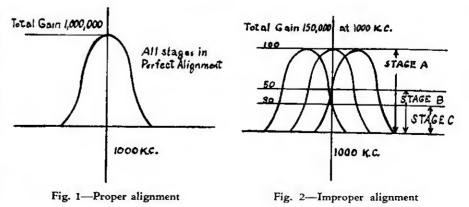
The chassis should be removed from the cabinet if necessary to secure ample working room. When all connections except the aerial and ground have been remade and the set is in operating condition, the output terminals of the test oscillator should be connected to the aerial and ground posts of the receiver. The output meter, which may be a separate unit or the output measuring circuit of a set analyzer, is connected across the voice-coil of the dynamic speaker. The better output meters and radio set analyzers are provided with a "high" range which has in series with it a condenser to block out direct current. Where the voice-coil is not readily accessible this range may be used by conne ting directly from the plate of the output tube to ground. Wafer-type adaptors are generally supplied to facilitate the connection to the plate. Either tube of a push-pull output stage may be used. Be sure the output meter, when used directly in the plate circuit, has a condenser in series with it so as to block out of the meter itself the direct current present in the plate circuit.

If the receiver gang condenser is equipped only with trimmer condensers and does not have split condenser end plates, set the tuning dial to approximately 1,400 kc, and the volume control at a fairly high position, but not high enough to allow the tubes to oscillate. Then adjust the oscillator output to the frequency which gives the greatest deflection of the output meter. The oscillator output attenuator should then be reduced until about  $\frac{1}{2}$  scale deflection is secured.

Starting with the variable condenser stator in the tuning circuit farthest from the antenna (detector stage in a t.r.f. set or oscillator in a super) adjust the trimmer condenser with an insulated tool to give the highest reading on the output meter. Repeat for each condenser section, taking care not to move the main tuning dial until finished.

Should the output meter reading exceed its scale due to the improvement in receiver sensitivity, reduce the oscillator input or shift to a higher range on the output meter.

To adjust a receiver with split end plate condensers on the t.r.f. stages, proceed as follows: Turn rotors into the stators until the next split section has come opposie the stator and adjust oscillator frequency for maximum reading on the output meter. Now proceed as before, except with an insulated toot bend this last end plate section toward or away from the stator until the output meter shows maximum reading. Repeat for each rotor section or group, without changing oscillator frequency, or position of receiver tuning dial.



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Proceed in the same manner for each of the remaining sections on the condenser rotor end plate—turn the tuning dial until the new section of the end plate is just completely in the stator, adjust the oscillator frequency, reset the attentuator, and adjust the end plate of each rotor section or group until maximum output is indicated by the output meter.

Should the receiver have both trimmer condensers and split end plates, adjust the trimmer condensers as described above and then follow by adjusting the split end plates.

#### I.F. Adjustment

There are two general types of superheterodyne intermediate frequency stages, the "peak tuned" and the "flattop tuned" varieties. The adjustment is the same in either case with the exception that additional flat-topping operations are made on the latter after the normal peaking adjustment is finished. For this reason the peak tuned stage adjustment will be outlined first.

With the chassis removed from the cabinet, connect the ground terminal of the test oscillator to the ground post on the receiver. Connect the other oscillator output lead to the control grid lead of the first detector, or mixer, tube, leaving the tube in its socket. Then cither remove the set's oscillator tube or darken its filament by insulating one of the heater prongs. The latter is preferable. Do not connect the antenna to the receiver.

Connect the output meter as described for  $\cdot$  t.r.f. adjustments. Then, with all tubes in place and the receiver turned on, adjust the test oscillator to the intermediate frequency for which the manufacturer designed the circuit. Be certain that you choose the proper frequency and also that your oscillator calibration is dependable.

Set the receiver volume control to maximum, the output meter to the most sensitive range, and adjust the oscillator ouput to give about  $\frac{1}{2}$  scale deflection on the output meter. The output of some oscillators cannot be sufficiently reduced to use the most sensitive output meter scale and will require the use of a higher scale on the meter. If a separate a.v.c. tube is used, remove it from the socket.

Some receivers have both primary and secondary circuit trimmers, and others the latter only. Begin by adjusting the secondary trimmers of the last intermediate stage, or the grid circuit of the second detector (demodulator) tube until the maximum deflection is secured on the output meter. Without changing this setting, perform the same operation on the primary trimmer in this same stage. Repeat this for all i.f. stages, working toward the first detector. When finished, check the alignment adjustment by going over each trimmer once again in the same order.

The procedure for "flat-top" tuned intermediate stages is identical up to this point. It differs in that a uniform response should be secured over a certain frequency band, whereas the "peaked" type has a maximum response at one frequency and drops off rapidly on either side of resonance. When the intermediate stages have been peaked as described, simultaneously adjust the primary and secondary stage trimmers until approximately the same deflection of the output meter is secured over the entire width of flat-top specified by the manufacturer. This is usually about 5 kc., or 2.5 kc. either side of the frequency to which the stage has been previously peaked. Repeat this for each stage in the same manner as the peaking operation.

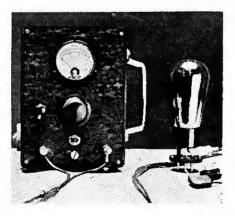
This discussion covers the general principle of making radio frequency adjustments. A few makes of receivers have unusual circuit or mechanical features that necessitate special methods of test or adjustment. Manufacturers' manuals will give complete instructions regarding the necessary procedure in such cases.

A few pointers useful when handling test oscillators are: (A) Be sure the batteries used for power supply are in good condition so that steady, constant frequency, and uniform amplitude signals are produced. (B) Be sure that the calibration of the oscillator is correct. This can be readily checked against broadcast signals known to be crystal-controlled. (C) Be sure the shield of the oscillator and the chassis of the set are both grounded. (D) Use the attenuator on the oscillator to regulate signal intensity, not the volume control of the receiver under test. The latter should be set in the position where it is most generally used. (E) Should the signal from the oscillator be too strong for the particular set being tested even with the attenuator at maximum setting connect a 0.1 to 1.0 megohm resistor in series with the antenna lead from oscillator to set. This resistor should be a non-inductive unit.

#### A Four-Purpose Meter

#### By V. W. Hodge

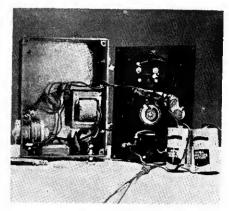
I use a combination voltmeter, ohmmeter, output meter and capacity meter which was built very cheaply. The heart of the instrument is a Weston model 506, type



S-38-J volt-ohmeter which lists for \$7. The meter is mounted in a small case, as shown in the photographs.

For testing high resistances and continuity work the test prods are hooked to posts A and C, the rheostat set so the meter reads full deflection with the prods shorted. The rheostat is used to compensate for changes in the battery voltage with use. The resistance under test is read directly on the ohmmeter scale which goes to 10,000 ohms.

For low resistance work such as testing r.f. or voice coils the test prods are hooked to posts B and C, switch No. 1 is closed, throwing full voltage on the meter. Any



resistance now tested is shorted across the meter, a dead short or zero resistance bringing the meter to zero volts. Although the battery is shorted when testing very low resistances there is usually enough resistance included in series with the circuit to protect it. With ordinary use two large flashlight cells last over six months. Switch No. 2 should be open for all resistance measurements. -The following table is used for low resistance measurement and is useful only in connection with the particular meter I use:

OHMS	DIAL DIVISIONS
1	1
2	;
3	23
5	4 5 6 7
	, ,
67	0
8	8
9	9
10	10
11	101
15	121
20	141
20 30	18
50	21
20	61

The meter scale is divided into tenths of a volt. Each tenth is taken as one division.

When using the meter as an output indicator, the output from the set under test is plugged into jacks D and E. I have found it much easier to use an adapter having leads brought out from the plate and filament prongs and plugged into the last audio stage, with a tube plugged into the adapter, than to fish around for the voice coil leads to the speaker. A four and five prong adapter takes care of most all sets. Switch No. 1 should be open and No. 2 closed. It will be found that the meter is quite sensitive to small changes in current which makes it valuable when aligning condensers, as it indicates small variations in capacity of the trimming condensers.

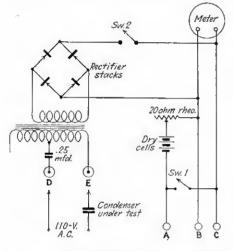
For use as a 0-3 volt d.c. meter the test prods should be hooked to posts B and C, with switches open.

For measuring capacity of condensers switch No. 1 is left open and switch No. 2 is closed. Then one terminal of the condenser to be tested is hooked to the 110 volt a.c. supply and the other to jack E. The other 110 volt a.c. leg is hooked to jack D. A shorted condenser won't harm the meter as 110 volts won't run it off scale. The capacity chart given is for 110 volts. Slight changes in voltage do not make much difference in readings.

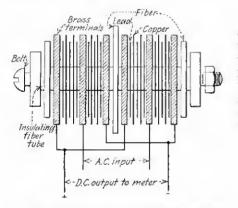
MFD.	DIAL DIVISIONS
.1	21
.5	5
1.0	71
2.0	8
4.0	63

Here again the meter scale is divided into tenths of a volt. Each tenth is taken as one dial division.

Most of the parts used were salvaged from the junk box. The transformer is an old output push-pull type with 10 ohm secondary. One side of the split primary was open. A shorted transformer shouldn't



be used. The rectifier is a copper-oxide type made from two salvaged stacks from an RCA 106 speaker. It is assembled as shown in the diagram and care should



be taken that the lead and copper washers are assembled properly. The only extra part required is a shorter bolt to clamp the parts together.

Switches No. 1 and No. 2 were salvaged from old battery sets, as was the 20 ohm rheostat and knob. The .25 mfd. condenser was picked as this particular size gave higher readings on the meter when used as an output indicator, and is rated at 250 volts.

"SERVICING RECEIVERS BY MEANS OF RESISTANCE MEASUREMENT," by John F. Rider. (Radio Treatise Co., New York— \$1.) A 200-page book devoted to the theory and practical application of a testing system advanced by the author as superior to orthodox voltage and current tests. Contains the following chapters: 1. Resistance; types, values and wattage. 2. Series, parallel and series-parallel resistances. 3. Resistance in power-packs. 4. Resistance in tube circuits. 5. Point-to-point resistance measurement. 6. Checking condensers. 7. Application of the ohmmeter to receiver servicing. 8. Working through the sockets. 9. Servicing receivers by means of resistance measurement. 10. Analyzing special circuits.

#### Worn Condenser Connections

#### By Charles Prescott

When the nuts of electrolytic condensers such as the Mershon outlast the threads saw a slot down through the center of the bolt to the lock nut, drop the proper wire into this slot and squeeze the slot together with heavy gas pliers.

#### Starting Machine Screws

#### By Allen Bosch

Machine screws can be held to the end of a screwdriver, when working in out of the way places, by first rubbing the blade in rosin chips. Rosin is sufficiently adhesive to hold even heavy screws.

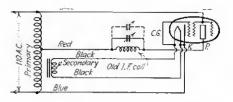
#### A.C. Driven Oscillator

#### By M. H. Dover

I use an a.c. driven oscillator which was constructed at low cost by utilizing partially "shot" replacement transformers and coils. An output transformer type No. 8554 from an RCA-80 (GE-31, Westinghouse WR-6) makes an excellent power transformer, its secondary supplying about the correct filament voltage, the tube selfrectifying its own plate and screen current. The transformer was easy to obtain



Writes V. W. Hodge from Claremont, N. H.: "The inclosed 'resistor' was actually removed from a set brought to me for repair. The guy who installed it evidently carries a chunk of coke around in his kit, breaking off suitable pieces as he needs them!"



as it is in the same case with the input transformer and several shops had the units in their junk heap because the input section was blown.

The tuning coil and condenser are from IF transformer part No. 8565 which had one coil shorted. Quite a few of these are to be found around New Orleans. If small by-pass condensers are shorted across the tuning condenser the harmonics can be made to cover practically the entire broadcast band as well as intermediate frequencies.

The '35 tube puts out a much sharper signal than a '24.

#### Nut Applicator

#### By W. H. Rhettenbock

A nut applicator, or holder, which has no parts to get out of order can be constructed by bending a small piece of brass or sheet-iron,  $\frac{1}{32}$  in. thick and  $\frac{3}{32}$  in. wide,



around a  $\frac{5}{5}$  in. or  $\frac{1}{4}$  in. hex nut so that it fits quite snugly. This "wall" is then soldered to a strip

This "wall" is then soldered to a strip of brass forming the handle  $\frac{3}{2}$  in. which approximately 6 in. long. A side-wise socket wrench is so formed. It may be made to take a different size nut at each end as shown.

#### F I

#### Modernizing A.F.

#### By A. W. Dugan

Most radios using two '71 type power tubes in push-pull audio may be changed over so that they use two '45 types merely by connecting the filaments in series. Where only one '71 is used it may be changed to a '45 by connecting the filament of the new tube in parallel with the 2.5 volt winding.

In some cases it will be necessary to use a center tap resistor across the filament leads and a C bias resistor of about 700 ohms. The Sparton 931 series using two '81 Cardon tubes may be changed over to '45 types by connecting filaments in series without further alteration.

RADIOLA. Better results are obtained with the models 30 and 30A when the metal frame of the powerpack is connected to the ground side of the antenna coupler.

# Radio Retailing's SPECIFICATIONS

(1932-1933)

# A reference guide to new radio equipment including BROADCAST...SHORTWAVE...AUTOMOBILE... PHONOGRAPH COMBINATION and PORTABLE RECEIVERS

• Tubes marked with a black-diamond perform several different circuit functions, these being similarly marked in their respective columns.

	List			Bat.	eta			-				— T	UBES						
Model	(with tubes)	Type	Cabinet	AC, ] or B	Range in Meters	1	- <b>RF</b> -2	3	1st Det.	Osc.	l	1 <b>F</b>	2nd Det.		<b>AF</b> 2	3	Auto. Vol.	Noise Supp.	Rect.
All-America	n Mohav	vk Corp., North	Tonawanc	la, N.	Y. (Lyric)														
SA-65 SA-66 SA-90 SA-130 SW-80 B-80 D.C. 65 D.C. 65 † Called "el	\$45.00 53.50 74.50 149.50 89.50 97.50 47.50 49.50 hannel co	***************************************	Lowboy Lowboy Console Console Lowboy	AC AC AC AC Bat. 110* 220*	200-550 200-550 200-550 200-550 14-550 200-550 200-550 200-550 200-550	58 58 58 58 34 39 39		· · · · · · · · · · · · · · · · · · · ·		7	58 58 58 58 58 34 39 39	58 58	<ul> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 56</li> <li>56</li> <li>30</li> <li>37</li> <li>37</li> </ul>	47 57 56 57 30 2-33 2-38	2-47 2-47 47 2-30	<ul> <li>k + k + k</li> </ul>	57	†2–5 <b>7</b>	80 80 80 80
Ansley Radie	o Labs.,	147 W. 23rd St.,	New York	, N. Y	(Ansley U	niverse	al)												
U-8 U-9 * 110-220	\$59.50 79.50	Portable Portable	•••••	AC-D AC-D	C 200-550 C* 200-550	39 39	••••	* * * *	39 39	37 37	39 39	* *** *	♦85 ♦85	:	2-89 2-89	• • • •	:	:	80 80
	nt Mfg. (	Co., 4700 Wissah	ickon Ave.	, Phila	delphia, Pa.	(Atw	ater-Ke	ent)											
812 612 260 469 480 188 558 627 558-D 558-D 558-Q 469-Q 91 93 † 1.5 to 19	73.75 63.90 53.90 68.90 89.75 68.90 89.75 73.25 41.25 .5 megaeg		Semi H'l Semi-H'l Lowboy Semi-H'l Lowboy Compact Compact Lowboy Compact Lowboy	AC AC AC AC AC AC AC AC BAC Bat. Bat. Bat. AC Bat. AC C Bat.		58 58 58 58 58 58 58 58 58 58 58 58 39 39 39 34 34 36			58 58 58 58 58 58 58 58 39 39 39 39 36 24	56 56 56 56 56 56 56 37 37 2 37 27	58 58 58 58 58 58 58 58 58 58 58 58 58 5	58 58 58 58	55 55 55 55 55 55 55 85 85 85 30 37	46 46 2-47 2-47 2-47 47 47 47 47 2-48 32 32 32 37 	2-46 2-46  30 30 2-38	2–30 2–30	56 	57 57 57 57 57 57 57 57 57 57 57	2-8 2-8 80 80 80 80 80 80 80
811	\$49.50	30 S. Green St., 9	Midget	AC		58		e esest	57	56	58		56♦	56	47		+	*	80
843 868 1011 1050 1068N 11300DN	56.50 64.50 56.50 66.50 77.50 109.50	• * * * * * * * * * * * * * * * * * * *		AC AC AC	1 • 0.000 ( • 5 2 0 2 2 5 2 10 - 1 • 1 • 1 = • 0 - 2 - 2 = 2 • 0 - 1 * 2 • 2 = 2 • 0 - 1 * 2 • 2 • 2	58 58 58 58 58 58 58	1000 10000 10000	    	57 57 57 57 57 57 57	56 56 56 56 56 56	58 58 58 58 58 58 58	58 58 58 58	56+ 56+ 56+ 56+ 56+	56 56 56 56 56 56	47 47 2-47 2-47 2-47 2-47	+ + + + + + + + + + + + + + + + + +	* * *	· · · · · · · · · · · · · · · · · · ·	80 80 80 80 80 80
Automatic B		g. Co., Inc., 112		, Boste	n, Maés.														
P45 V-45 P-35 P-25	\$44,50 39.50 34.50 29.50	• • • • • • • • • • • • • • • • • • •	Midget Midget	AC AC AC AC	<ul> <li>• ± + 4 ≠ + 40</li> <li>• ± + 4 ≠ + 4 ±</li> <li>• ± + 5 + 5 + 4 ±</li> <li>• ± + 5 + 5 + 5 +</li> </ul>	h			alar soon - din din din an		—Tubes —Tubes —Tubes —Tubes	Used: Used:	3-35, 24,	47, 80— 47, 80—		······			
Belmont Ra	dio Corp	., 520 N. Michig	an Ave., C	hicago	Ill. (Fresh	man-B	elmont)												
41-A 51-C 71-A 100-A 45 70-B † Has built	\$19.95 27.95 39.95 59.95 24.50 69.50 -in, B elin	Auto ninator. 1	Midget Midget Console		175-550 175-550 175-550 175-550 175-550 200-550	58 58 58 39 36		<ul> <li></li></ul>	57 57 57 36 39	7 56 56 36	58 58 58 39		57 ◆55 2-56 ‡ ◆	47 47 56 37 37	2-47 38	8 2 4 4 8 4 4 4	•		80 80 80 80 B.R.

Radio Retailing, October, 1932

	List			Q.4	ris.	÷	-					— TU	BES				87.87.97.97		
Model	(with tubes)	Туре	Cabinet	AC, D or Ba	Range in Meters	ī	— <b>RF</b> - 2	3	1st Det.	Osc,	<b>I</b>	2	2nd Det.	]	AF 2	3	Auto. Vol.	Noise Supp.	Rect.
Capehart Co 1 12 14 200 300 400-A 402-A	rp., Fort \$169.50 269.50 279.50 495.00 675.00 895.00 875.00	Short and Bdest Phono. Comb. Phono. Comb. Phono. Comb. Phono. Comb. Phono. Comb.	Lowboy Highb. Highb. Highb. Highboy Highboy Highboy	AC AC AC AC AC AC AC AC AC AC	200-545 15-545 15-545 15-545 200-545 200-545 200-545 200-545	58 58 58 58 58	· · · · · · · · · · · · · · · · · · ·		58 58 58 58 58 58 58 58 58	57 57 57 56 56 56 56 56	58 58 58 58 58 58 58 58 58 58	58 58 58 58 58 58 58	57 57 57 57 56 56 \$55 \$55	2-47 2-47 2-47 2-47 2-47 56 56 56 56	2-47 2-47 4-47 4-47		56 57 57 56 56 56 ♦	57 57 57 57 57 57 57 57	80 80 80 80 80 80 2-80 2-80 2-80
<b>Century Rad</b> 4-47 5-47 4-78 4-47-C 5-47-SW 6-55 5-38 7-38	1 1 - 1 - 1 - 1 	sbort and Bdest	Mantel Mantel Clock Mantel Mantel	AC AC AC AC AC AC AC	hicago, Ill. 170-550 170-550 170-550 170-550 170-550 170-550 170-550 200-550	24 24 524 24 58 39 39	24 24 58 39 39	58	24 24 57 24 24 55 36 37	н н н н 9 д н н 9 д н н 9 д н н 9 н н н 9 н н 4 9 н н 4 9 н н 4 9 н н 4	10 (2010) 10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (	- 10 - 10 - 10 - 10		47 47 47 47 47 47 47 2-38 37	2-38		· · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	80 80 80 80 80 80
	<b>bohograj</b> \$54,50 66,00 88,00 108,00 49,50 99,50 89,50 139,00	ph Co., Inc., 55 Phono. Comb.	Fifth Ave., Compact Lowboy Highboy Console Lowboy Console Highboy Console	New AC AC AC AC AC Bat. AC AC			imbia)	······································	58-S 58-S 58-S 58-S 58-S 32 58-S 58-S 58-S	56 56 56 56 56 30 56 56 56	58-S 58-S 58-S 58-S 58-S 58-S 58-S 58-S	· · · · · · · · · · · · · · · · · · ·	4-S 4-S 4-S 55-S 32 4-S 4-S	58-S 58-S 58-S 58-S 58-S 58-S 33 57-S	47 47 47 47 47 47 47 47 47 58-S †58-S	2-47 2-47	1	57-S 57-S	82 82 82 82 82 80 82 82 82
Treasure Ches	t \$36.00	2233 University A	Midget	ul, Mi AC AC	inn., ( <i>Coros</i> 200–550 200–550	nado) 35 35	35 35	· · · ·	24 24				* + + + + +	45 45		* * * *	4 -	5,7 +1+ 65 की की क	80 80
Crescent Bad 32-70 M-32 2-70 M-2 Car-Electric † 32 volts o	\$88.00 73.00 79.50 59.50 59.50		Lowboy Midget Lowboy Midget Portable	†DC †DC Bat, Bat, tAC or Bat	200-550 200-550 200-550 200-550 80-550	32 32 32 32 24 pattery.	32 32 32 32 32 24	32 32 32 32 32 24	32 32 32 32 32 24		  	· · · · · · · · · · · · · · · · · · ·	   	30 30 30 30 27	2-33 2-33 2-30 2-30 2-30 47	4 8 4 8 4 9 4 9 4 9		5 · · · · · · · · · · · · · · · · · · ·	• • • •
141-2-T 141-2-GA 129-2-BA 129-2-E 146-2-E 146-2-E 136-1-2-S 136-1-2-S 136-1-2-PA 132-1-2-MB 132-1-2-W 96 128-2-EA 128-1-LC 9-2-FF	\$29.95 34.50 39.95 52.00 55.00 65.00 65.00 75.00 89.50 75.00 119.50 39.50 59.95 73.50 22.50	3401 Colerain Av Short and Bdest Short and Bdest Auto Shortw. Adapt. in. 4th a.f. stage.	Chest Chest Chest Console Midget Console Console Console Console Console Console Console	AC AC AC AC AC AC AC AC AC AC AC AC Bat. Bat.	hio         (Crost           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           172-560         172-560           195-550         195-550           17-200         17-200	2ey) 58 58 58 58 58 58 58 58 58 58 39 32 32 32				57 57 56 56	58 58 588 588 588 588 588 588 588 588 5	58 58 58 58 58 58 58 58 58	57 57 57 58 58 58 56 56 56 56 56 56 56 30 30	47 47 2-42 2-42 2-42 2-42 89 89 2-56 89 42 42 42 89 30 30 	2-46 2-46 2-42 2-42 2-42 42 42 42 2-31 2-31	++++++++++++++++++++++++++++++++++++++	56 56 56 56 56		80 80 80 80 80 82 82 80 80 82 82 82 82 82
Dumont Ele 600 400 503 904	\$49.50 29.50 39.50	rp., 42 W. 17th S Phono. Comb. Bdcst, and Long.	Midget Midget Midget	AC AC AC AC AC AC	Y. 150-600 150-600 150-600 200-2000	35 35 35	35 35 35	35 35 35	24 24 24 —Tube	s Used:	3-35,	2-27. 2	2-47, 24.	47 47 47 80	• • • • • • • • • ¥ • • •	  	••••	· · · · · · · · · · · · · · · · · · ·	80 80 80
Echophone 1 5 10 15 20 4 44 35 12 14 16 17 18	\$39.75 59.50 69.50 89.50 24.75 24.75 159.50	Short. and Bdest Short. and Bdest Short. and Bdest	Midget Midget Lowboy Midget Midget Lowboy	AC AC AC AC AC AC AC AC AC AC AC AC AC A	Waukegan, 200-550 17-550 17-550 200-550 200-550 200-550 200-550 200-550 200-550 200-550	111. (4 58 58 58 58 58 58 58 58 58 58 58 58 58	Echopho	me)	58 58 58 58	57 57 57 57 57 56 57 57 57 57	58 58 58 58 58 58 58 58 58 58 58 58 58 5	58	<ul> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 57</li> <li>◆ 55</li> <li>◆ 57</li> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 55</li> </ul>	47 47 47 47	47 2-47 2-47 2-47 2-47 2-56 47 2-47 2-47 2-47	2-46	57 57	·····	80 80 80 80 80 80 80 80 80 80 80
3722 † B-Elimin:	\$89.50 ator inclu			†Bat.	. 200–550	39			;	36	39		♦ 37	39	2-41		•	4	
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	List			24	ul a							T	UBES			<u>-</u>			
Model	(with tubes)	Туре	Cabinet	AC, D or Ba	Range In Meters	ī	— <b>RF</b> - 2	3	1st Det.	Osc.		1F2	2nd Det.	1	• <b>AF</b> - 2	3	Aute. Vol.	Noise Supp.	Rect.
Emerson Ra AW-55	dio & Ph	ono. Corp. (cont Short, Bdest and	inued)																
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ada Radio	& Electr \$52.00	ic Corp., Jackson																	
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87 78 79 66	73.00 131.00 142.00	· · · · · · · · · · · · · · · · · · ·	Lowboy Lowboy Highboy	*AC *AC *AC	200-550 200-550 200-550	58 58 58		* * * * * 5 * *	58 58 58	56 56 56	58 58 58	58 58	◆56 ◆56 ◆56	56 56 56	2-47 2-47 2-47	• • • •		57 57	80 80 80
83 88	*****	Short. and Bdest.	Console Lowboy Lowboy	AC AC AC	15-550 200-550 200-550	35 58 58	*****	†	58 58	56 56	35 58 58		♦ 27 ♦ 56 ♦ 56	35 56 56	47 2-47 2-47	****			80 80 80
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55 * For 25 cy	39.50 cles sligh	tly higher. (Chas	Table sis marked	AC ("Z").	200-550 200-550 † Also h olts (Models	58 as add 732 au	itional nd 852)	24 short		56 7 tector,	58 58 35 coup	ling tuł	◆56 57 be and 27 c	56 47 scillator	2-47	2,810 - 1 2,810 -		* * * *	8( 8(
ederated P		, Inc., 25 Park P	lace, New	York,	N.Y. (Acre														
38 39 41 23	\$14.75 *16.25 *15.75 *14.75		Midget Midget Midget Midget	AC ‡AC §AC DC	200-600 200-600 200-600 200-600						-Tubes -Tubes	Used:	2-58, 57, 2-58, 57, 2-58, 57,	47, 80- 47, 80-				· 	
23 24 42 43	*16.25 *18.50 *21.50	Bdest. and Long.	Midget Midget	\$DC AC tAC	200-600 200-2000 200-2000	** ; *		5,5 ± +	* * # A * X e P	****		Used:	2-58, 57, 2-58, 57,	47, 80-			***** 5.414 *		
46 6 32	*19.50 *18.50 *19.50	Bdest. and Long. Bdest. and Long. Bdest. and Long.	Midget Midget Midget	§AC DC §DC	200-2000 200-2000 200-2000				e e e è è ave è		-Tubes	Used:	2-58, 57,	47, 80-			 		
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49 27 33	*41.00 *39.50	Phono. Comb. Phono. Comb. Phono. Comb. Phono. Comb.	Midget Midget Midget Midget	tAC §AC AC	200-600 200-600 200-2000 200-2000						-Tubes -Tubes -Tubes -Tubes	Used: Used:	2-58, 57, 2-58, 57, 2-58, 57, 2-58, 57,	47. 80-					•
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CB-81 F-5-AC F-5-DC	• • • • • • •	• • • • • • • • • • • • • • • • • • •	Midget Midget Midget	AC AC DC	200-550 200-550 200-550	35 58 39	58	4 4 4 4 4 4 4 5 4 4 4 5	35 57 39	27	35	* * * * * * * * *	24	47 47 37	89	9 9 4 A. 4 4 4 4	27		80 80
F-4-AC F-4-DC S-6	•••••	· ·	Midget Midget Midget	AC DC AC	200-550 200-550 200-550	58 37 58			57 39 58	56	· · · · · · · · · · · · · · · · · · ·	* * * * * * * * * * * * * * *	57	47 37 47	89	* * * *		4 4 4 4 4 4 4 4 4 4 4 4	80
BL-61		Bdest. and Long.		AC	200-2000	35	35	35	24					47	••••		* • • •		, 80
GF-110 GF-106 GF-111		Auto		AC	200550 200550 200550	39	8.8 mm	58	58 36 58	56 39 56	58 39 58	58	56 + 37 56	2-47 41 2-42			56 \$	57 57	80 82
GF-114	197.50	******		AC	200-550	1.1. 1.2.		58	58	56	58		56	4-42			56-58	55	2-8
100 101 102	• • • • • •	., 333 Linden Ave Auto	Midget	Bat. AC	200-550	35	* * * *		35	36	36 35		36	37 47	2-38				80
102 103 104 105	ه د ۲۵ و ۲۵ و را در او در د د در د د د د د د د د	Bdest. and Long. Bdest. and Long.	Midget	AC AC AC AC	200-550 200-2000 200-2000 200-550	35 35	35		24 24 24	24 27	35	****	24 24	47 47 47 47	9 = 319 + 4 = 4 9 = 4 = 4	****	· · · · · · · · · ·	+ + ,+ + + +	80 80 80 80
106 107 108	estra e e e e e e e e e e e e e e e e e e e		Midget Midget	AC AC AC	200-550 200-2000 200-2000	 35	35	5 + + h + 5 + + + 6 + 7 +	24 24 24	27	35 35	• • • • •	24 24	47 47 47		* * * * * * * = * 2 * *		 	81 81 81
reed Televi	sion & R	adto Corp., 22-1	7 41st Ave	., Lon	g Island City	, N. Y	. (Fre		nann)										_
52 53 54		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Midget Chest Table Table	DC DC DC	* *	39 39 39 58	39 . 39 39 58	**** ****	36 36 36 57	• • • • •	4, 5 4 4 4' 4 4 4 4 4 4 4	4 8 474 4 4 4 4 4 4 4 4	2014 - 14 2014 - 2014 - 14 - 14 - 14 - 14 - 14	248 248 248 47	1 0 0 0 1 0 0 0 1 0 0 0	****	8 18 18 18 18 18 18 18 18 18 18	*.* * * * * * *	8
56 58 59	• • • • • • • • • • • • • • • • • • •	• * • • • • • • • • • • • • • • • • • •	Midget Midget Chest	AC AC AC AC		58	58	  	57	7	58	  	55	47 47 47	****		* * * * * 5, 5, 4 * 5 * * *		888
63 72 90	• • • • • • • •	Chassis Chassis Chassis	******	DC AC AC	******	39 58 58	39		36 58 58	56 56	58 58	* * * * *	55	2-48 47 56	2-46			16-4-4-4 	8 8
120 alvin Mfg.	Corp., 8	Chaseis 47 W. Harrison Si	t., Chicago	AC	(Motorola)	58	• • • • •		58	56	58		55	57	2-56	2-46	• • • • •		8
88 61 † Has built	\$74.95 59.50	Auto Auto		†Bat.	200-550 200-550	36 36	**** ****	4.4 E 4 4 4 4 4		9 19	36 36	Чад н А 4 и и и	♦ 85 ♦ 85	37 41	2-38		*		B
eneral Elec J-107	etric Con \$104.50	n <b>pany,</b> Bridgepor	t, Conn. (( Lowboy	GE) AC	200-545	58			58	56	58		56	56	2-46		56		8
J-125 J-105 J-86	147,50 93,50 72,95		Lowboy Lowboy Lowboy	AC AC AC	200-545 200-545 200-545	58 58 58	****	4, 4, 4   	58 58 58	56 56 56	58 58 58	- <u>.</u>  	56 56 56	2-56 56 47	2-46 2-46		58 56 56	56	8 8 8
J-100	73.75		Table	AĊ	200-545	58	4.2.49		58	56	58	* 1 * 4	56	56	2-46		56	(Conti	8

# Radio Retailing's Specifications 1932-1933

	List			24	I su	_						TI	UBES						
Model	(with tubes)	Туре	Cabinet	AC, DC or Bat.	Range in Meters	-	— RF - 2	3	1st Det.	Ose.		<b>F</b> 2	2nd Det.		<b>AF</b> - 2	3	Auto. Vol.	Noise Supp.	Reet.
General Elec: J-82 J-85 J-85 J-75 J-80 J-70 H-91 K-82 J-109 J-88 H-72 S-42-B A-81 A-90	trie Co., 59.50 79.50 66.50 59.95 48.75 285.00 179.00 269.50 124.75 345.00 99.50 81.50 76.75	(continued) Phono. Comb. Phono. Comb. Phono. Comb. Portable Auto	Table Lowboy Table Table Gr. Clock Gr. Clock Highboy Lowboy Lowboy		200545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545	5855 335 335 588 588 588 332 335 332 336			58 24 24 24 24 24 24 58 58 24 32 32 36	56 27 27 27 27 27 27 27 27 56 56 27 30 30 37	585 355 355 355 355 588 355 358 355 358 355 355	35	56 27 27 27 27 27 27 27 56 56 56 56 27 30 ◆ 34 37	47 47 47 47 2-47 2-47 56 47 2-47 30 30 37	2-46 2-30 2-30 2-12-	· · · · · · · · · · · · · · · · · · ·	56 27 27 27 56 56 56 27		80 80 80 80 80 80 80 80 80 80
Gllfillan Bros 5 7-M 7-C 12	\$31.95 47.50 59.50	1815 Venice Blvg Short. and Bdest	Midget Midget Console	eles, C AC AC AC AC AC	Calif. (Gilf) 150-550 150-550 150-550 15-550 15-550	illan) 58 58 58 58 58 58	58 58	1 - 1 5   	57 57 57 57	56	58	58	<ul> <li>♦ 55</li> <li>♦ 55</li> <li>♦ 55</li> <li>♦ 55</li> </ul>	47 47 2-47 2-56	2-46	· · · · ·	*	57	80 80 80 82
Graybar Elect GT-7 GC-13 GT-8 GC-14 9 † Available f	\$46.75 66.50 59.95 79.50	420 Lexington A	Table Console Table Console	†AC †AC †AC †AC	N. Y. (Gr 200-550 200-550 200-550 200-550 200-550 200-550	aybar) 35 35 35 35 35 35	· • • •	· · · · · · · · · · · · · · · · · · ·	24 24 24 24 24 24	27 27 27 27 27 27	35 35 35 35 35	2 + 2 - 2 + + - + 4 + + + + 4 + + + 4 + + + 4 + + + 4	27 27 27 27 27 27	47 47 47 47 2-47		1 4 1 4 1 4 1 4	27 27 27 27	- * * * * * * * * * * * * * * *	80 80 80 80 80
311 291 314 293 307 304 324 294 "S" after tul † These recei	\$44.50 62.50 69.50 73.00 89.50 99.50 149.50 99.50 be means ivers also	5801 Dickens Av Short, and Bdest "spray-shield" use one G-58-S a -24-S and one G	Table Table Lowboy Console Lowboy Console Console Lowboy	AC AC AC AC AC AC AC AC	200-550 200-550 200-550 200-550 200-550 200-550 200-550 200-550 15-550	G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S	···· ···· ···· ····	  h-pull o	G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S g-58-S uiput	56 56 56 56 56 56 56 56	G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S G-58-S	****	◆G-55-8 ◆G- 4-8 ◆G-55-8 ◆G- 4-8 G- 4-8 G- 4-8 G- 4-8 ◆2-G48 ◆G- 4-8	G-57-S G-57-S G-57-S G-57-S G-57-S G-57-S G-57-S	47 47 †2-47 †2-G4 †2-G4	7	¢ G-57-6 G-57-8 G-57-8		80 82 82 82 82 82
Gulbransen ( 3521 3525 8726 3225 3226 3925 3622 3622 3722	\$39.50	No. Kedzie Ave., 4 Police and Bdest. Police and Bdest Auto Auto	. Mantel	AC AC AC AC AC AC Bat. Bat. Bat. Bat.	Ubransen) 75-550 75-550 200-550 200-550 200-550 200-550 200-550 200-550	58 58 34 39 39			58 58 58 34 34	57	35 35 58 58 58 34 39 39	58 58	57 57 56 56 30 ◆37 ◆37	47 47 57 57 30 39 39	56 56 30 41 2-41	2-46 2-46 2-30	57 •	57 57	80 80 80 82 82 82
Halson Radio 414-S 414 510 615 200 * Net prices	*\$9.75 *10.50 *13.50 *11.50 *13.00	orp., 45-51 Lispes		C, DC	150-550	Halson) 58 58 58 201 58	(Vikin 58 201	ng) (F	anhal-La 57 57 57 201 57	Salle)	· · § • • • · · · • • • • •			47 47 47 201 47	201	33			80 80 80 80
Pro. Comet	\$162.55	o., 424 W. 33rd S Shortwave Short and Bdest W reception	Table	AC AC	Y. (Hamr. 15-200 15-550	narlund)	****	4 4 5 4 (4 4,1% 4	57 57	†2–58 †2–58	58 58	58 58	57 57	47 47		· · · · ·	****		80 80
Horn, Herber 25 30 29 32 102 10	· · · · · · · · · · · · · · · · · · ·	27 Hill St., LosAn	Midget Midget Lowboy Midget	AC AC AC AC AC AC AC AC AC	Tany-Tone) 180-550 180-550 180-550 180-550 180-550 20-550 180-550	58 58 58 58			57	57 57 56 56	58 58 58 58 58		57 55 55 56 56	47 47 47 47 47 56 56	56 56	2-46 2-46	2 ( 2 ( 2 2 - 2 -  -  -  -  -  -  -  -  -  -  -  -               		82 82 82 82 82 82 82 82
K L 500 501 M Converter 33	\$89.50 109.50 365.00 395.00 139.50 39,50	t Sh. Wy. Conv'tr Auto	Console Hi-boy Console	d) AC AC AC AC AC ‡Bat.	150-540 150-540 150-540 150-540 13-200 13-200 150-540	58 58 58 58 35 44	58	· · · · · · · · · · · · · · · · · · ·	58 58 58 58 24 44	56 56 56 24 37	58 58 58 58	58 58 58 44	56 56 56 56 69 or 85	2-42 2-42 4-42 2-56 2-41 or 2-89		* * * * * • * : • • * : • • * : • : • * : • : • * : • :	56 56 56	57 57 57 57	80 80 2-80 82 27
Same as mo Dynamoto		olus 4 tube conve ed	rter																
Supersix Superseven Supersix Supersix Superseven	••••• •••• ••••	erica, 23 Park P Bdeast and Long Bdeast and Long Bdeast and Long Short, and Bdest	z	AC DC AC	I. Y. (ICA 200-550 200-550 200-550 1000-2000 200-550 1000-2000 200-550 1000-2000 12-550	1) 58 39 58 58 39 58 39 58	5   	· · · · · · · · · · · · · · · · · · ·		57 57 57 57 57 57 57	58 39 58 58 58 39 58		<ul> <li>◆ 55</li> <li>◆ 85</li> <li>◆ 55</li> <li>◆ 55</li> <li>◆ 85</li> <li>◆ 55</li> </ul>	47 37 47 47 47 37 47	2-43 2-43	· · · · · ·	• • • •	 	80 80 80 80 inued

Radio Retailing, October, 1932

				D.:	u s							— ТІ	BES						
Model	List (with tubes)	Type	Cabinet	AC, DO	kange in Meters	1	- <b>RF</b>	3	1st Det.	Osc.		1F-2	2nd Det.	1	- <b>AF</b>	3	Auto. Vol.	Noise Supp.	Rect.
		nerica (continued																	
		Short, Bdest and Longwave Short, Bdest, and		AC	12-2000	58			57	57	58	58	♦55	47		a	٠	6+++	80
Universal Com		Longwave Portable		AC, DC	12-2000	58			57	57	58	58	♦55	47			•		80
Envoyette			Midget	ind Bat AC	200-550	36 58	36 58		37				4 4 4 4 4 4 4	2-33	• • • •		****	4 + 4 + 414 + 4	2-32 80
Envoyette	,	Long Inverter	Midget	DC AC or DC	200-550 †1000-2000M	39	39		37 36	37	39		****	2-43				****	37
† Inverts all	longway	resignals to 1000 k	ie. ‡ 22	0 volts.						57									
Internationa PW	1 Radio \$25.00	Corp., Ann Arbo			<i>s</i> al 200-560	38			36					39					KR
PM PB	25.00 25.00		Midget	tUniver	rsal 200-560	38 38		2 * * * # * * * #	36 36				* * * *	39 39			 	)	KR KR
PD † Operates fr	35.00 rom DC,	AC, 25 to 60 cycl	Midget *	Univer	sal 200-560	38	• • • •	• • • •	36					39		****	1 4 4 4		KR.
Jackson Bell (	Co., Lti	1., 1682 W. Wash	ington St.,	Los A	ngeles, Calif.														
25-AV 25-AV	\$31.95 34.95		Midget Chest	AC AC	175-550 175-550	58 58			 2		57	 >	♦55 ♦55	47 47	+ + + + + + + +	** <*	:		80 80
26-AV 26-AV-SB	37.95 39.95	Short. and Bdcst	Midget , Midget	AC AC	175-550 20-136, 175-550	58 58			* • • •	56 56	58 58		♦ 55 ♦ 55	47 47	• • • •		•		80 80
27-AV 27-AV	46.95		Midget Console	AC AC	175-550	58 58			* * * *	57 57	58 58	* * * *	♦ 55 ♦ 55	2-47 2-47				****	80 80
28-AV-SB 28-AV-SB	57.95	Short. and Bdest	. Midget Console	AC AC	20-550 20-550	58 58	****	* * * *	57 57	56 56	58 58	****	♦ 55 ♦ 55	2-47 2-47			*	* * * *	80 80
212 205	98.50 39.95		Console	AC Bat.	175~550 200-550	58	****	· · · ·	58 58	56 57	58 58	58	55 ♦55	256 47	2-45	****	56 •	••••	83
	o & Tel	evision Co., 8440	South Chi	cago. C	hicago, Ill.														
8F-547 LK-447	\$23.50 19.75			AC AC	• • • • • • • • •	57 24	57	e ana a Ny Seri	57 24		9. m = 10 1 = 1 = 1		- · · · ·	47 47	(4 + n + n = n %	• • • •	± 105 € + 50404		82 80
J. M. P. Mfg.,	Inc., N	filwaukee, Wis. (	Auto-Dial)	)															
42	\$40.00		Steel	Bat. AC.	200-550	24	35	* * * *	24	1535			4-4-4-5	27	47	1914	م ترجم	a = 4 d	
				or Bat.	15-145	* • • •			27	1153		* * * *	4 5 4 4					÷ - + +	6.6.6
Karadio Corp 9	, 16191 \$86.50	Iennepin Ave., M Auto	inneapolis,		(Karadio)						-Tube	s: 3-36.	3-37, 3-71						
11 *''B'' Elimin	112.50 ator inc										Tube	s: 4-36.	3-37, 4-71	w					
Colin B. Kenr	iedy Co	rp., 212 W. Ewing	g Ave., Sou	th Ben	d, Ind. (Ken	nedy)													/
455 563		Short, and Bdest Short, and Bdest	. Midget	AC AC	75-550 75-550	58	<pre>0.0 * * * * * * * *</pre>	4 4 4 4 4 4 4 4		7	58		55 56	47			•••• 3.3.448	, , , , , , , , , , ,	80 80
164-B 266-B 366-B	4 + + 4 # - * + + + *	Short. and Bdest	. Lowboy	AC	15-550 15-550	58 58 58			†2-57 †2-57	+2-56	58	• • • • •	56	47 247 247		a e de La e e a	56	**** ****	2-80 2-80
1872-B 62-T)		Short. and Bdest	. Midget	AC	15-550 75-550 200-550	58		• • - • 2.2 - • • •	†2-57 57 58	+2-56 56 56	58	• • • •	56 55 55	47 247		4 3 9 4 8 4 4 4 4 4 4 8	57	56	80 80
62-D † Extra tube	is for sh			AC	200-550	58	1 2 7 7		58	56	58		55	2-47			57	56	80
Kolster Radio	, Inc.,	200 Mt. Pleasant .	Ave., News	ark, N.	J. (Kolster)														
K-110-K-112 K-114	71.25		Mantel Mantel	AC Bat.	200-550 200-550	58 34			58 34	56 30	58 34		♦ 56 ♦ 30	56 30	47 30	2-30	*	* * * *	80
K-120-K-122 K-113 K-123	76.50 66.25 81.75		Console Mantel	AC	200-550 200-550	58 39 39	****	• 5 m.* • • • •	58 39 39	56 37 37	58 39 39	••••	♦ 56 ♦ 37	56 37 37	47 2-38 2-38		*	* * * *	80
K-130-K-132 K-133			Console Console Console	AC DC DC	200-550 200-550 200-550	58 39	6 3 4 4 <sup>0</sup> 4 4 4 4	· · · · ·	58 39	56 37	58 39		♦ 37 ♦ 56 ♦ 37	56 37	2-47 4-38	· · · · ·		•••••	80
K-140-K-142 K-133-A		DeLux	ce Console ce Console	AC	200-550 200-550	58 39	1911		58 39	56 37	58 39	58	♦ 56 ♦ 37	56	2-47 4-38		*	* * * *	80
Lang Radio C	0767]	E. 132 St., New Yo	ork, N. Y.	(Lana)				- tala walis ya											
AA5 DC6			Midget	AC DC	200-550 200-550	58 39	58 39		57 ♦37				****	47 37	2-48		••••		82
AA7 DB7			Midget Midget	AC DC	200-550 200-550	58 39		• • • - •	58 39	56 37	58 39	14 4 4 45 4 4 8 8,8,	♦ 55 ♦ 85	*	47 2-48	* * * *	*	ر م م ي م م ي م	82
Minerva Radi	io Co., I	0 North Clark St.														• • · · · ·			
10 6	\$19.50	April and a state of the state	Mantel .	AC-DC	150-600	64 44	44	• • • •	64 37			• • • • • • ¢ • •	i di sene Norma e	68 2-38	an a	 	a scasá a á gca	16-16-16-14 16-16-16-14	67 80
Auto		********			200-550	36	36		36			****	Mar Anna	41		d wyrad e	+ 2 E A		
19-A		Ifg. Co., Inc., 14: Auto		†Bat.	200-550		(Missio			57	58		Wund.	41			1. j. j.	8 <u>8 8 8</u>	KR-
6-A DeLuxe		Auto	Mantel	AC	200-550	39 58 39	39	39	36 57	36	39	1.1.1.1 1.1.1.1	13 c.	41 47 47		****	37		KR- 80 80
5 17-A † Has built-i	n <sup>17</sup> B <sup>10</sup>	Portable			220-550 and auto set	39				36	39	• • • •	Wund. Wund.	4 [	* * * * *	* * * *		* * * *	KR-
		, 1800 Grace St., C								· ·							·	· · · -	
	\$16.95			‡Bat.	†195-550 t series tubes.		* * * <i>7</i>		$\Phi_{i}(\mathbf{r})=i\Phi_{i}$	*,* *	je na se se	~~ * *	1117	5,5 F.F.F	1.1.1.1				
		, Mass. (National																	<u> </u>
	\$129.00	Short, Bdest, Lor Short, Bdest, Lor	ng Metal	AC DC	9-2,000 9-2,000	58 34			58 34	1 4 5 5 1 4 5 4				27 30	2-45 2-31	* * * *			80
SW-3	189.50	Short, Bdest, Lor	ng Metal	AC	9-2,000	58			58				- + + 1	27				(Cont	80 inued)

				73.4	g s						Τι	BES						
Model	List (with tubes)	Туре	Cabinet	AC, DC or Bat.	Range in Meters		- <b>RF</b> - 2	3	1st Det.	Osc.	IF	2nd Det.	1	- <b>AF</b> - 2	3	Auto. Vol.	Noise Supp.	Rect.
National Co. SW-3 HFR HFC NC-5 MB-32 VSA † All prices	†55.00 \$ †129.00 †39.50 †39.50 †75.00 †85.00 †68.50	Short. Bdest. Lo Shortwave H.F. Conv. H.F. Conv. Short. Conv. Tuner Chassis Amp. and Pur.St	Metal Metal Metal Metal up. Metal	DC AC DC AC AC AC AC AC	9-2.000 3.75-4.50 ‡ 16-185 200-550 ¶ Also h	36 35 35 35	§35 eat osci	35 illator.	36 24 24 36 24 27 \$ Als	¶24 24 36 35 00 has 35	35 35 27 37 27 in 4th r. f. stage	27	37 2-47  27	2-45	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	80 80
5L IH A-16 M D		Service, Ltd., W Auto Ided. ‡Also	Midget Midget Console Midget	AC AC AC †Bat. DC	175-550 175-550 175-550 200-550 175-550	58 27 58 39 36 80 5-27	58 58 58 39 36 used as	58 ‡58	57 57 2-57 36 36		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	47 47 27 37 37	2-47 2-38 38		•	•	80 80 2-80
Ozarka, Inco V-6 V-8 V-10 V-16	\$65.00 100.00 125.00	, 1257 Fullerton	Table Console Console	AC AC AC AC AC AC	nois. ( <i>Ozar</i> 200–550 200–550 200–550 200–550 200–550	ka-Viki 58 58 58	ng)		58 58	57 56 56	58 58 58 — I I tubes of th	+55 56 56 e 50 series	47 47 56	2-46		56 56	• • • • •	80 80 80
Patterson R 70 107 207 70-AW 107-AW 207-AW 110-AW 210-AW	\$34.50 44.50 54.50 39.50 49.50 59.50 69.50	pany, 1320 Los Short. and Bdest Short. and Bdest Short. and Bdest Short. and Bdest Short. and Bdest	Compact Console Console Console Console Console Console Console	AC AC AC	ngeles, Cali 200–575 200–575 15–575 15–575 15–575 15–575 15–575 15–575	f.		58 58	57 57 57 57 57 57 57	56 56 56 56 56 56 56	58 58 58 58	<ul> <li>◆ 55</li> </ul>	59 59 59 59 59 59 59 56 56	2-46 2-46		* * * * * * *	· · · · · · · · · · · · · · · · · · ·	82 82 82 82 82 82 82 82 82 82
Phileo Radic 80-B 52-L 24-L †15-X 91-D 91-D 91-D 91-D 91-D 71-D 71-H 71-H 71-H 71-H 71-H 71-H 71-H 71-H 71-H 71-B 52-B 23-X 22-L 43-X 43-X 43-X 43-X 43-X 43-X 43-X 47-D 47-	$\begin{array}{c} \$18, 75\\ 37, 50\\ 75, 60\\ 150, 00\\ 100, 00\\ 99, 75\\ 89, 95\\ 69, 95\\ 69, 95\\ 69, 95\\ 69, 95\\ 69, 95\\ 69, 95\\ 49, 50\\ 39, 50\\ 39, 50\\ 39, 50\\ 120, 50\\ 100, 00\\ 129, 50\\ 100, 00\\ 129, 50\\ 100, 00\\ 89, 95\\ 59, 95\\ 100, 00\\ 89, 95\\ 50, 95\\ 50, 9$	sion Corp., Ont Phono. Comb. 	Midget Console Console Console Highboy Lowboy Lowboy Lowboy Lowboy Lowboy Console Lowboy Console Lowboy Console Lowboy Console Lowboy Console Highboy Lowboy Console Highboy Lowboy Console Highboy Highboy Lowboy Lowboy Console Highboy Lowboy	AC AC AC AC AC AC AC AC AC AC AC AC AC A	Philadelph 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 200-545 15-545 15-545 15-845 15-845 200-545 200-545 200-545 200-545	ia, Pa. 24 44 44 44 44 44 44 44 44 44	(Philco	>	44 44 44 44 44 44 44 22 32 32 32	35	'ubes Used:       24         44       44         44       44         44          44          44          44          44          44          44          44          44          44          44	36, 42, 80 37 37 37 37 37 37 37 37 37 37	0 (Super 42 37 37 37 37 44 44 44 44 47 47 47 47 37 44 44 44 44 44 44 44 45 30 30 30 37 37 37	42 37 37 37 42 42 42 42 42 42 42 42 42 42 33 33 33 33 37 37 37	2-42 2-42 2-42 2-42 2-42  2-42  2-42  2-42  2-42  2-43 2-43 2-43	37 37 37 37 37 37 37 37 37 37 37 37 37 3		800 800 800 800 800 800 800 800 800 800
Philmore M P-4 PD-4 P-7 P-6 P-8 † Has 56 "	\$25,50 24',50 52,50 47,50 59,00	3 University Pla Short, and Bdest Short, and Bdest Bdest, and Long Short, and Bdest Short, and Bdest gulator"	t. Midget Midget Midget Midget	AC AC AC DC AC AC AC	Y. (Philmo 75-550 75-550 200-2000 60-600 60-600	re) 58 39 58		   	57 36 58 36 58	56 37 56	58 39 35	57 36 2–57	47 201A 47 2–33 47	714	· · · · ·	····· ···· t		82 82 82
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Model	List (with tubes)	Туре	Cabinet	AC, DC or Bat.	Range in Meters	1	<b>RF</b> 2	3	1st Det.	Osc.	<sup>1</sup>	1 <b>F</b> 2	2nd Det.		— <b>AF</b> -	3	Auto. Vol.	Noise Supp.	Rect.
8-33-M S-33-C T-33-M T-33-C	\$84.25† 98.75† 75.35† 88.60†	p., Plano, Ill.	‡Midget ‡Console Midget Console	Bat. Bat. Bat. Bat. Superh	15-550 15-550 15-550 15-550 eterodyne.				-Tuł	les Used	: 2-34, : 2-34, ed: 3- ed: 3-	33. 32	3-230				* * *	 3 4 4	 2 + - 5 2 + - 5 2 +
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<b>Badio Chassi</b> SUA-36 FVA-35 AC-25 FVD-36 DC-25 CH-38 TR-36 TR-35 † On reques	\$37,50 31,00 27,50 34,50 29,50 † 39,50 38,50	10 W. 18th St., N Chassis	Midget	N.Y. AC AC DC DC AC AC AC	200-540 200-540 200-540 200-540 200-540 200-540 200-540 200-540	58 58 36 36 58 58 58 58	58 36 36 58	36	57 57 01-A 01-A 58	57  57 57	58 58 58 58	· · · · · · · · · · · · · · · · · · ·	56 55 55 56	47 47 56 71-A 71-A 47 47	47 71-A 71-A 47		* *		80 80 80 80 80 80 80
273 278 260-S	\$33.30 53.40 90.40	abs., 100 Wilbur Shortwave Port Shortwave Shortwave r amateur bands.		Bat.	d City, N. 7 20–100 † 17–87	Y. ( <i>R</i> ) 36 35	EL)		30 36 35	· · · · ·	• • • •	••••		30 38 27	27	· · · · · · · · · · · · · · · · · · ·	· · · · ·	n o h h 4 o h h 4 o h h	
B. C. A. Victo R-4 R-71 R-72 R-74 R-76 R-77 R-78 RAE-84 R-81 R-6 R-71-B 33 M-30 † Has noise	\$48,75 59.50 72.95 93.50 104.50 149.75 310.08 178.00 66.50 62.75 42.00 76.75	nc., Camden, N. Auto.Pho.Comb. ;Port. Turntable Auto or control. ;	Midget Table Console Console Console Console Console Console Console Table	AC AC AC AC AC AC AC AC AC Bat.	ctor) 200-550 200-550 200-550 200-550 200-550 200-550 200-550 200-550 200-550 200-550 200-550 200-550 use in conve	35 58 58 58 58 58 58 58 58 58 58 58 58 58	tandaro		24 58 58 58 58 58 58 58 58 58 58 58 58 58	27 56 56 56 56 56 56 56 56 56 56 56 56 56	35 58 58 58 58 58 58 58 58 58 58 35 34 34 36	58	27 56 56 56 56 56 56 56 56 27 ◆ 34 37	47 47 56 56 2-56 2-56 56 2-56 56 47 30 37	2-46 2-46 2-46 2-46 2-46 2-46 2-46 2-46	A	56 56 56 56 56 56 56 56 56 37	**** ****	80 80 82 82 82 82 82 82 82 82 82 82 82 82 82
Remler Co., 1 21-3 12-3 10-3 15-3 15-3-C	\$29.90 34.75 42.75 59.50	11 Bryant St., Sa Short. and Bdest Short. and Bdest Short. and Bdest Short. and Bdest Short. and Bdest	Midget Midget Midget Midget	o, Calif AC AC AC AC AC AC	f. (Remler) 75–550 65–550 46–550 46–550 46–550	58 58 58	· · · · ·	· · · · · · · · · · · · · · · · · · ·	58 58 58	57	58 58 58 58	• • • • • • • • • • • • • • • • • • •	57 57 57 57 57 57	47 47 47 47 47 47		• • • • • • • • • • • • • • •	56 56	57 57 57	80 82 82 82 82
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<b>J. &amp; L. Sara</b> SJ-4K	Compan \$43.75	y, Inc., 123 Lib Chassis	erty St., N		rk, N. Y. 200–550	(Sara)			;	57	58		♦Wund	•	47		•	r 3, n 4	80
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826 816 815 614 513 412 521 † Has noise	92.50 69.50 54.50 39.90 34.50 24.50 39.50	Short. Bdest. Long. Short. and Bdest Auto ion circuit.	Console Console Midget	AC AC AC AC AC	15-2000 195-550 195-550 85-550 175-550 175-550 200-550	58 58 58 58 39	· · · · · · · · · · · · · · · · · · ·		58 58 58 57	57 56 56 57 57 57 36	58 58 58 58 58 58 58	58	• 56 • 56 • 55 • 55 • 55 • 85	57 57 57 47 47 47 41	47 47 47	· · · · ·	*	1	80 80 80 80 80 80
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Radio Retailing, October, 1932

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14       471, 25	P P R R	\$29.95 29.95 29.95 19.95 19.95	Short, and Bdest Short, and Bdest Short, and Bdest Short, and Bdest Short, and Bdest Short, Long,	. Midget . Midget . Midget . Midget . Midget	AC DC Bat. AC DC	75-550 75-550 75-550 75-550 75-550 75-550	34 58 39	- 	9,194 9999 9999 9999 9999 9999 9999 9999	57 36	39 32	39 34	•••• •••• ••••	36 32	2-38 33 47 2-38	• • • • •	• • • • • • • • • < • •	a 10 + 14	• • • • • • • •	80
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tromberg-Carison Tel. Mfg. Ca., 100 Carison Road, Rochester, N. Y. (Bromberg-Carison)         37       **143.00       Console       AC 200-540       38	R-40-A R-43-A R-44-A R-45-A R-45-A R-47-A R-48-A R-50-A R-51-A R-58-A	\$52.45 67.45 83.95 96.95 81.95 167.25 157.50 194.50 270.50	Short. and Bdest Short. and Bdest Short. and Bdest Short. and Bdest Short. and Bdest Short. and Bdest Phono. Comb.	Mantel Console Console Console Console Port. Con Console Console Console	*AC *AC *AC *AC *AC *AC *AC *AC *AC	190550 190550 190550 190550 15550 190550 15550 13550 13550	58 58		9 4 4 4 9 4 5 8 9 4 5 8 9 4 8 9 4 8 9 4 4 9 4 4 9 4 4 9 4 4 9 4 9 4 4 9 4 9	57 +2-57 57 +2-57 +2-57 +2-57 +57-58 +57-58	56 †2-56 56 †2-57 56 †2-57 †2-56 †2-56	58 58 58 58 58 58 58 58 58 58		Wund, Wund, Wund, Wund, Wund, 27 27	PZ PZ PZ PZ PZ PZ 2-PZ 2-PZ		2 2	57 57		80 80 80 80 80 80 80 80 80 80 80 80 80 8
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200-A       \$49,95       Police and Bdest. Chest       AC       51       51       24	Tiny, 4-A Baby, 5-C Giant, 8-H	\$24.50 39.50 59.50	************	Midget Midget Midget	AC AC AC	190-570 190-570 190-570	58 58		****	. 56	58	° 5 8 °	58	5 m <sup>-2</sup> 4	48 56	2-48		Sec.		4
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U. S. Radio		sion Corp. (cont																	80
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Wilcox-Gay 255-30 2-T-5-30 2-V-7-31 2-V-7-510 2-W-10-51	\$31.00 33.00 45.90 59.70	harlotte, Mich. Short. and Bdest	Table Table Table Console	AC AC AC AC AC AC	200-550 75-550 200-550 200-550 200-550	58 58 58	4 5 6 7 8 5 5 6 9 6 7 8 6			7 7 56 56 56	58 58 58 58 58		57 57 55 55 55	47 47 47 47 47 50	2-47	• • • • • • • • • • • • • • •	56		80 80 80 80 80
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Zenith Radi 210 210-5 220 240 245 250 260 270 410 411 420 430 440	\$49.95 55.00 62.50 55.25 78.75 102.50 73.00 92.00	Short. and Bdes Short. and Bdes Phono. Comb.	Table Table Lowboy Table Lowboy Lowboy Lowboy Lowboy Lowboy Lowboy Lowboy Semi-higl	AC AC AC AC AC AC AC AC AC AC AC	ith, Zenette) 171-2100 171-2100 171-260 171-560 171-560 171-560 15-560 15-560 171-560 171-560 171-560 171-560	58 558 558 558 558 558 558 558 558 558		10 × 10 1 . 2 5 1  	24 24 558 558 24 258 558 558 558 558 558	27 27 26 56 56 27 27 56 56 56 56	58 58 58 58 58 58 58 58 58 58 58 58 58 5	· · · · · · · · · · · · · · · · · · ·	27 27 27 57 57 27 27 27 27 27 56 56 56 56	<b>47</b> <b>47</b> 599 597 <b>477</b> 599 597 <b>477</b> 599 596 556	2-59 2-59 2-59 59 59		57 57 57 57 57 57 57 57 57 57 57	57 57	80 80 80 80 80 80 80 80 80 80 80 80 80

# HERE Are the Answers

WHAT IS THE BROWN COMPANY'S ADDRESS?look it up in Radio Retailing's Specifications
WHO MAKES THE JONES RADIO?
How MUCH DOES THE SMITH SET COST?
WHO MAKES PORTABLES?
WHO MAKES ALL-ELECTRIC AUTO RADIOS?look it up in Radio Retailing's Specifications
WHO MAKES LONGWAVE SETS?look it up in Radio Retailing's Specifications
WHO MAKES 32-VOLT D.C. MODELS?
WHO MAKES UNIVERSAL CURRENT RECEIVERS?
WHO MAKES 5-METER RECEIVERS?look it up in Radio Retailing's Specifications
WHAT TUBES DOES THE DOE RADIO USE?
IS THE BLANK SET A SUPER OR T.R.F. JOB?look it up in Radio Retailing's Specifications

(Published Annually Since 1925)

All these questions, and many more, clearly and completely answered Radio Retailing, October, 1932 43 NEW $\equiv$ MERCHANDISE



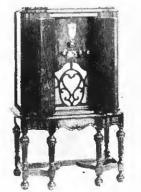
Fada Model 76

#### Fada 1933 Line

Fada 1933 Line A most complete line of sets is being made at the factory of the Fada Radio and Electric Corp., Long Island City, N. Y. Model 55 "compact" set with the five tube RG superhet chassis is \$39.50. Model 73 midget with the 7 tube RE chassis, a.v.c., tuning silencer, noise sup-pressor is \$52. Model 85, has same chassis in a lowboy console. \$62.50. Models 97, 74 and 76 have the nine tube RA chassis. Other features are automatic flashograph, tuning silencer, noise suppres-sor, a.v.c., etc. Model 97, opeu face low-boy, \$73; model 74, open face console, 83.50; model 76; sliding door lowboy, \$94. Model 66 with ten tube KY chassis, covers from 15-550 meters. \$109.50. Models 78 and 79 have the 11 tube RC chassis with all the advanced improve-ments such as a.v.c., automatic flashograph, automatic noise suppressor, etc. The former, a lowboy, is \$131 and the latter, a highboy, \$142. Following are the tube line-ups of the chassis mentioned above: RA chassis—4-58's, 3-56's, 1-37, 2-47's, 1-80. RC chassis—4-58's, 1-56, 1-55, 1-47, 1-80.

1 - 8080. RE chassis—3-58's, 1-56, 1-55, 1-47, 1-80. KY chassis—4-35's, 2-24's, 2-27's, 1-47,

All prices include tubes and tax.—Radio Retailing, October, 1932.



#### Tatro "Admiral"

#### Tatro 32 Volt Sets

L. Tatro Products Corp., 417 West Water St., Decorah, Ia., maker of 32 volt farm radio sets, has brought out five new sets —three all-electric and two B-battery models. These sets have full-wave second detec-

tor; delayed automatic volume control, variable tone control; pentode r.f. ampli-flers; duo-diode triode tubes and the "L. Tatro" lightning switch. The tube complements of the various models are: the Admiral and Captain models; four 44's, two 41's, an 55, a 37, and a BR. Both these models are all-electric.

and a BR. Both these models are all-electric. The Commander all-electric set takes three 44's, two 38's, and one each of the \$5, 37 and BR types. The Lieut, Commander and Ensign mod-els (B-Battery) use three 44's, two 38's, an \$5 and a 37. Additional features are: Admiral and Captain, tuning indicator and silent tun-ing. The Admiral also has full length doors and dual speakers.—Radio Retailing, October, 1932.



Columbia Model C85

#### Columbia Receivers

Columbia Receivers To supplement its recently announced line, the Columbia Phonograph Co., Inc., 55 Fifth Ave., New York City, has brought out Models C-95, C-85, and C-103. C-95 is an 11-tube superheterodyne Sheraton highboy. It has inter-station noise suppressor; high-light, low-light tuning indicator; full range tone control; automatic volume control; push-pull pen-tode output, and two speakers. \$139,50. Model C-103 is a lowboy. The chasis is built around the C-55-S, duplex-diode tri-ode. This tube functions as a detector and amplifier. In addition, four of the new 23 volt tubes are used, making seven in all. This set has automatic volume control, with full range tone control and shadow line tuning. \$49. Model C-2-85, illustrated, is a radio-phono-graph combination in a Jacobean cabinet. The radio receiver is an 8-tube super-heterodyne and the phonograph reproduces either 78 or 334 r.p.m. records. \$118.00.-Radio Retailing, October, 1932.

#### Domestic Coal Stoker

Harry Alter, Chicago radio and refrig-eration jobber, has organized the Auto-Home Stoker Corp., 1728 S. Michigan Ave., Chicago, for the manufacture of what he believes to be a practical side line oppor-tunity, an electric domestic coal stoker. This stoker is designed to take the drudgery out of home coal heating as it feeds the furnace at intervals in small quantities, and at the same time shakes the grate automatically, getting rid of ashes and maintaining an active and hot fire. It eliminates the many trips to the base-ment to add fuel to the fire. Installation is made in 10 minutes and does not involve the heating apparatus— the furnace or boiler remaining intact. It holds 300 lb: coal and the retail list price is \$179.50, f.o.b. Chicago.—*Radio Retailing*, October, 1932.



RCA Victor Model RE-81

### **RCA Victor Sets**

RCA VICIOF Sets The latest additions to line of the RCA Victor Co., Camden, N. J., are Models R-71-B, RE-81, and RAE-84. Model R-71-B is an eight tube battery operated superheterodyne table model using three 34's, a 32, and 4-30's. The list price is \$62.75. Model RE-81, a 10 tube radio-phonograph with home recording (two-button micro-phone and volume indicator), two speed iurntable for standard or long playing records, "B" amplification, tone equalizers, a.v.c., and Micro tone control. \$178. Model RAE-84 is a 12-tube "Bi-Acoustic" radio phonograph combination with auto-matic record device, "B" amplifica-tion, automatic tone compressator, tone equalizers, dual a.v.c., noise suppressor and Micro tone control. \$310.—Radio Retati-ing, October, 1932.



Philco Junior Model 52L

#### **Philco Receivers**

A four tube midget to retail at \$18.75, including tax, is now on the market. It is a superheterodyne with a 42, two 36's and an 80. The model designation is Junior 80-B and it measures 114 in. wide by 14 ½ in. high by 8Å in. deep. Other new sets of the Philco Radio and Television Co., Philadelphia Pa., are Junior Model 24-L with the standard 52 chassis, two speed motor for long and short play-ing records, large electro-dynamic speaker. Junior Model 52L, also with the 52 chassis, is a straight radio in a lowboy console 393 in. high. \$37.50.—Radio Re-tailing, October, 1932.

### **Majestic Radios**

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Majestic Model 304

#### **GE** Receivers

**GEL KECEIVETS** At its recent New York showing in the Hotel Edison, the General Electric Co., Bridgeport, Conn., had on display three new sets. Model J-125, a de luxe set, is a 12-tube suppressor, mercury vapor rectification. The tone equalizer first used by G. E., to counteract cabinet resonance, is greatly improved in this model by the addition of acoustic orifices. The six leg cabinet is Italian Renais-sance, finished in walnut with hand-rubbed, waxed, lacquer finish. Two small doors cover the tuning dial. The price is \$147.50. Model J-105 is a small console of 18th Century design. This set also has twin push amplification, new type tone equalizer, automatic volume control and tone control. \$93.50. Model J-107, also a 10-tube set with the

Model J-107, also a 10-tube set with the same features, is housed in an 18th Cen-tury design cabinet of the six-legged type. \$104.50.—Radio Retailing, October, 1932.



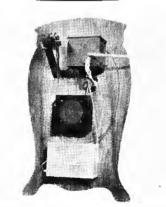
General Electric Model J107



Pilot "Dragon Emperor"

#### Pilot Receivers

**Pilot Keceivers** Two each of the t.r.f., superheterodyne and all-wave types of sets are being shown by the Pilot Itadio and Tube Corp., Law-rence, Mass., this season. "Corsair" treasure chest and "Armada" console are 5 tube t.r.f.'s, taking two 58's, and one each of the 57, 47 and 80 tubes. They are priced at \$39.50 and \$49.50 for a.c. and at \$44.50 and \$54.50 for d.c. "Twentieth Century" 7 tube superhet midget and "Golden Arrow" console with the same chassis list for \$44.50 and \$67.50 in the a.c. models. Tubes: 2-35, 2-24, 1-27, 1-47, 1-80. "Dragon-Monarch" and "Dragon-Em-peror," all-wave midget and console respectively, cover from 18-555 meters and have two speakers. To operate on a.c. the list is \$59.50 and \$99.50; to operate on d.c., the list is \$64.60 and \$104.50.— *Radio Retailing*, October, 1932.



Components of Gulbransen Auto-Radio

#### Gulbransen Line

Gulbransen Line In addition to its line of home receivers, the Gulbransen Co, 816 North Kedzle Ave, Chicago, Ill., is making a six tube super-heterodyne auto radio, known as Model 3622. The tube complement includes one 36, a 37, three 39's, and a 41. This set is very compact, the outside dimensions of the chassis container measuring 64x54x7 and in the sensitient of the steering column by means of a clamp. Adjustments to the chassis are facil-tiated by the removable covers. This set may be used with either B batteries or B eliminator. The price for B battery operation is \$62.50 with tubes and suppressors; for B eliminator opera-tion \$22.50, installation and tax extra. Gulbransen's home receivers include Model 3226, a 12 tube console, with dual speakers, \$129.50. Tax extra. It is a highboy and takes the following tubes: and an 82. As a semi-highboy, Model 222; it is \$99.50. Model \$726 is a 7-tube semihighboy with there 57's, two 58's, a 47 and an 80. This set so has two speakers and automatic cume control. \$69.50. Model \$252 is a five tube consolette list-for at \$40.50. The range is from 75 to 50 meters. This set requires two 57's, a 47, a 35 and an 80. \$49.50. As a mid-get, \$29.50.—Radio Retailling, October, 1932.

### **International All-Purpose** Radio

Operating from any 110-volt socket, direct or alternating current, the all-purpose radio of the International Radio Corp., Ann Arbor, Mich., lends itself to a variety of uses, such as in offices, hotels, steamships, camps, farms and homes. A patented basic circuit enables change-over from a.c. to d.c. without switches. The four tube t.r.f. circuit selects automatically 25 or 60 cycle, 110 volt, a.c. or d.c. current. An antenna is furnished in a special compartment in the back of the set. The tubes used are one KRI mercury vapor, a 336, a 338 and a 339.

a 339. It comes in an indestructible Bakelite cabinet in a selection of colors. This set is small enough to put into a suitcase, being but  $8\frac{1}{2}x6\frac{1}{2}x3\frac{2}{3}$  in. and weigh-ing 5 lb. net. The list price complete with tubes and antenna is 25. The carrying case may be had for \$1.50.—Radio Retail-ing, October, 1932.



#### Atwater Kent Sets

Atwater Kent Sets In addition to its Models 188, 260, 469, 612, and 469, the Atwater Kent Co., Phila-delphia, Pa., is showing several new sets. Model 612 is a 12-tube superheterodyne, with automatic silent tuning, Tonebeam, Class B amplification, new mercury recti-fier and double-diode triode tubes, two speakers, automatic volume control and quick-vision compensating dial. It is housed in a six-legged semi-highboy, and priced at \$116.50 complete. Model 812 is also a 12-tube superhetero-dyne with the same technical specifications. It comes in a six-legged console with slid-ing doors. \$139.50. Model 627 Compact is a 7-tube super in a Gothic design cabinet. \$53.90. Model 558 Compact similar in appearance to the above model, has 8 tubes, and sev-eral additional features including automatic silent tuning, automatic volume control. \$63.90. Model 558 battery Compact has 9 tubes.

\$63.90.

silent tuning, automatic volume control. \$63.90. Model 558 battery Compact has 9 tubes, permanent magnet-electro-dynamic speaker, Class B amplification, automatic volume control and range switch. It uses two volt tubes and air cell battery. The cab-inet is similar to Model 627. \$68.90. Model 558 D. C. Compact is an 8-tube job with automatic volume control. \$68.90. Model 480 is an all wave set. The fre-quency range indicator permits the choice of four wave band ranges: 1.5 to 4 mega-cycles; 3.6 to 9.2 megacycles; 8.2 to 21.2 megacycles, and the broadcast band. This set has Tonebeam, a.v.c. and quick-vision compensating dial. Broadcast performance similar to Model 469. The price is \$104.50. —*Kadio Retailing*, October, 1932.



Atwater Kent Model 612



### **Capehart Automatic** Combinations

Eight phonograph-radio combinations, ranging in price from \$169.50 to \$1,255 make up the 1932-33 offering of Capehart Corp., Fort Wayne, Ind. In the De Luxe 400 series there will be found the automatic changer which handles from 3 to 22 records, ten and twelve-inch sizes intermixed, playing each record on both sides. The radio is a 14 tube super using the new type tubes and having auto-matic volume control, noise suppressor and meter tuning. There are four of this type priced at from \$875 to \$1,255. Model 300 contains the automatic record changer and an 11 tube superheterodyne radio with a.v.c., meter tuning and noise suppression.

changer and an 11 tube superheterodyne radio with a.v.c., meter tuning and noise suppression. Model 200 contains a modified form of the automatic record changer, handling the records in rotation continuously and auto-matically. The radio set is the same as used in Model 300. \$495. Reaching into the lower price bracket, Capehart is producing what is known as the Combinaire Series, embodying Models 11, 12, and 14. The component parts of these three models are the same, the dif-ference being only in the cabinet styles. In this series is embodied the Model 10-12C record changer which plays ten of the 10 or 12-inch records of any make. The radio set is the same as that in Model 300. The list prices are: \$269.50, \$279.50, and \$299.50.This company also has introduced the Superheterodyne radio with a.v.c., noise supprheterodyne radio Retailing, Octo-her, 1932.



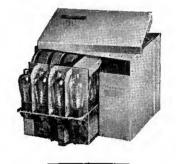
### Burton Automatic English-**Reading Tube Tester**

A portable or counter type "Confidence" automatic, English-reading tube tester can be obtained from the Burton-Rogers Co., 755 Boylston St., Boston, Mass. This tester provides for the testing of the new seven-prong tube and additional selective posi-tions and switch points are provided for future tubes so conversion can be made imexpensively.

tions and switch points are provided for future tubes so conversion can be made inexpensively. Model 4, the portable type, is housed in a leatherette case with removable cover, size 539x14 in. Model 5 is for counter display use only. The net price to the dealer is \$33,50 for either model. It is made for 110 volt, 60 cycle only.—Radio Retailing, October, 1932.

The new Models 35 and 61 "Motorola" auto radios of the Galvin Mfg. Corp., 847 W. Harrison St., Chicago, are 8 and 6 tube sets, combining the power supply and re-ceiver in the same housing. Size \$x5x79 in. Both models are supers with automatic volume control. The station selector and control is mounted on the steering post. It is claimed that the set is so thor-oughly shielded it can be mounted in the engine compartment with the assurance of little or no chassis pick-up. The power supply and chassis can be removed with-out disconnecting any wires. Interchange-able for service. Equipment includes lock and key for control, spark plug compres-sors, condenser and miscellaneous nuts and bolts. bolts

bolts. The tubes used in Model \$8 are two 36's, a 39, an 85, a 37, two 38's, and a BR half-wave gaseous rectifier. The list price is \$74.95, installation and aerial extra. Model 61 uses two 36's, a 39, an 85, a 41 and one BR half-wave gaseous rectifier. \$59.50.—Radio Retailing, October, 1932.



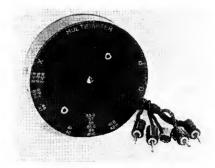
### Crosley "Temperator"

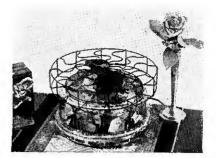
The "Temperator" combination thermo-statically-controlled electric heater and fan of the Crosley Radio Corp., Cincinnati, Ohio, provides, in the one appliance, an electric fan and heater. It is so designed that when the heating unit is in operation, the fan rotates at just the required speed that when the heating unit is in operation, the fan rotates at just the required speed to assure an immediate and even circula-tion of warmed air throughout the room. The thermostat feature automatically main-tains the desired temperature level. The Temperator is attractive in design and of convenient size and weight. A screen affords protection from the heating unit and fan blades. A handle provides a means of carrying the device from room to room. It is equipped with a 1,000-watt heater and both fan and heater operate on 110

It is equipped with a 1,000-watt heater and both fan and heater operate on 110 volt a.c. The retail price is \$9.98,--Radio Retailing, October, 1932.

### Multidapter

Efficient and easy to use, the "Multi-dapter" of the Radio City Products Co., 48 West Broadway, New York City, com-bines many adapters in one. It tests all the new tubes such as 29, 33, 55, 57, 58, 64, 82, 83 and 89 and second plate of 80's, etc. Provision is made for testing new tubes which may be brought out in the 4, 5, 6 or 7 prong types. It is a Bakelite product, sturdily built, neatly engraved, and complete with connectors. The list price is \$4.50. Net to dealer or service-man, \$2.75.—Radio Retailing, October, 1932.



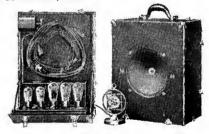


### Jefferson "Ozonator"

The Jefferson Electric Co., Bellwood, Chicago, has announced the "Ozonator" for purifying, vitalizing, and deodorizing offices, rooms, etc. The circulating fan helps to distribute the ozone and produce a slight movement of air. It consumes, the release states, no more current than a 25-watt lamp. It has an art-lacquer finish. The base is slotted for hanging, and the feet are rubber padded to prevent scratching. The retail price is \$15.—Radio Retailing, October, 1932.

# Webster Equipment

Webster Equipment Model PAS-347 electric portable sound amplifying system, consists of a single, compact, portable case with a 3-stage amplifier having push-pull pentodes in the output stage. Either 27 or 56 tubes can be used in the first or second stage. A dynamic speaker is mounted in the detach-able section. This can be located at any desired distance from the amplifier and microphone. A double button carbon micro-phone with desk stand and 12 ft. cord with plug is part of this equipment. For 110-V-50/60 cycles, the list price, its stifts.00; 220-V-50/60, \$162.50; 110-V-25/06 cycles, the list price, stude; have a similar in construction but is larger in size and more powerful. It lists at \$205, \$212.50 and \$215. Model PAS-50 is similar in construction for a matched companion unit to the portable PAS systems. It is equipped with dual speed motor, plays 10 or 12 in. rec-ords at 78 r.p.m., \$75. Webster Electric Co., Racine, Wis.—Radio Retati-ing, October, 1932.



### Clarion Deluxe Console

The latest Clarion receiver is the Deluxe 14-tube console at \$129,50, tax included. Class B amplification, tuning indicator, dual speakers, double-twin audio system, three audio stages, delayed automatic volume control, variable noise level control, tone control, twin diode detector with separate a.v.c. tube, automatic selectivity control and full vision dial combine to make this receiver worthy of the name "deluxe." Two small swinging doors cover the tuning dials. Transformer Corp. of America, 2309 S. Keeler Ave., Chicago.--Radio Retailing, October, 1932.

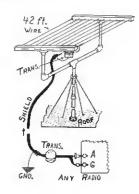
### Dewald Duo-Wave Sets

Pierce Airo, Inc., 512 Sixth Ave., New York City, announces Its Dewald model B. A. H. S tube superheterodyne with a range of from 60 to 600 meters. It embodies the following features: single dial-dual wave, improved circuit, dual grid power ampli-fication, triple grid super-controlled circuit; mercury vapor rectification, parallel detec-tion, shadow-graph selector, automatic volt-age control, tone control, and phonograph pick-up jack.—Radio Ketailing, October, 1932. pick-up 1932

## Fricker Radio Interference Suppressor

The Fricker system of radio interference suppression, consisting of the "Elim-O-Stat" and a special aerial with shielded lead-in (less pipe and guy wire) may be obtained from the Radio Service Co., South Bend, Ind.

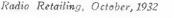
Ind. This system when properly installed will, This system when properly installed will, the manufacturer says, suppress man-made static, minimize swinging, fading and selective fading, and reduce atmospherics. Essentially the Fricker invention con-sists of extending the earthed shielding of the receiver to the collector (antenna proper) and a shielded electric resonator for building up the radio signal voltage much as if it were amplified.—*Radio Retail-ing*, October, 1932.



# Type 48 Power Amplifier Tetrode

A new power amplifier tetrode, with a type number 48, has been announced by RCA Radiotron Co., Inc., and E. T. Cun-ningham, Inc., both of Harrison, N. J. This tube has pentode characteristics at the recommended screen and plate voltages, for use in supplying exceedingly large power output from receivers designed for operation on 115-volt d.c. power lines. The large power-delivering ability of the 48 is made practical by the unique features of its electrical and structural design. Of to the inner surface of the plate. The ribs serve to suppress the effects of secondary emission which limit the power output of four-electrode, screen-grid types. The heater of the 48 is designed for series operation at 30 volts d.c. It is pos-sible, therefore, to operate the heaters of two of these tubes in series with the heaters of 6.3 volt types with a minimum of auxiliary resistance in the heater cir-energy to be dissipated in the receiver.— *Radio Retailing*, October, 1932.

salesmen in every retail radio operation. True, through elaborate advertising campaigns, people are now more interested in some particular make of radio, possessing features which appeal to them, than in 'just a radio'. but they have not narrowed down so finely their choice of the dealer from whom they will buy the radio in which they are interested. Having to offer for sale what the public wants when it wants it is what makes a retail store operation profitable. We carry six makes of nationally advertised raido. In our opinion, nothing can better convince the public that we have what it wants in radio, when it wants it, than the work of an outside saleman who carries this message. If the public can get what it wants with less effort from us-through our salesman at the door-it won't go to the greater effort of shopping elsewhere. We are getting more business with our outside salemen than we possibly could without them."





### Transmitting Condensers

A new line of Bakelite cased transmit-ting condensers is offered by Girard-Hop-kins Radio Laboratories, 1437 23rd Ave., Oakland, Calif. They are made of pure aluminum foil and linen tissue, non-in-ductive wound, oil impregnated, and cased in a bath of oil. The Bakelite box is molded in a single piece with no seams. The cover, separately molded, has stand-off porcelain insulators specially molded with and into the cover to insure a leak-proof assembly. They are made in the following sizes; 1, 2 and 3 mfd., 2,000 volts; 1 and 2 mfd., 3,000 volts; and 1 mfd. in 4,000 volts.—*Radio Retail-ing*, October, 1932.



#### ICA Auto-Radio Accessories

A variety of auto radio accessories is now being made by the Insuline Corp. of America, 23 Park Place, New York City. Included are spark plug and distributor silencers at \$.40 each; auto radio silencer kit listing at \$3 for 4 cylinder cars, \$4 for six cylinder cars, and \$5 for eight cylinder cars; running board antenna, \$3.50; flex-ible auto aerial that extends between the axles at the bottom of the car, with a heavy spring coil to take up any slack, \$3; generator silencer, \$.90; and a metal auto aerial with shock absorbing springs so constructed as to be attached to the run-ning board of the car, and to be adjustable both to the running board and the pick-up strength of the set used, \$3.95. ICA also makes the "Wizard" aerial to

# As Buffalo Sees the Business

(Continued from page 23)

And speaking in behalf of the service-salesman: "We have four service-salesmen now, on a salary and commission basis, where we used to have one service man and four outside salesmen. The new balance works better and produces more business," states Dealer F.

Direct mail was favored, ahead of the telephone and the daily newspaper, because it is available on a 50/50 cost basis and ties in nicely with the national publicity and the direct-contact sales approach.

The predominance of price advertisng in newspaper copy has discouraged the average Buffalo radio dealer on the value of the newspaper as a business building medium. A typical dealer's statement in this connection : "For a special sale, to clean out trade-ins or something of that sort, newspaper advertising is OK. Otherwise nothing much comes from it. We'll still tie in on distributor and factory 'spreads,' but don't anticipate making use of any 'straight' selling space."

be installed inside the cabinet of midgets or placed under the driver's seat. \$1.---Radio Retailing, October, 1932.



## 60-Watt Amplifier

Believing that there are many instances where power up to 60 watts is necessary, Victory Speakers, Inc., 7131 E. 14th St., Oakland, Calif., has developed its new Vic-tory a.c. 60-watt amplifier. This unit fills the requirements for alroorts, large audi-toriums, parks, playgrounds and schools. Six 46, four 45, one 56, one 57 and three 83 type tubes are used. It can be furnished also for mounting on a standard 19-in. rack. Mixers, volume-tevel indicators and selective output con-trols are built to order for use with this instrument. Its frequency characteristic is and \$,000 cycles, and the gain is 120 decibles.—*Radio Retailing*, October, 1932.

### Weston Tube Tester

Such features as direct reading three-Such features as direct reading three-color tube performance meter, zero-reset test circuit, line voltage indicator and com-pensating control are combined in the Model 677 tube tester the Weston Elec-trical Instrument Corp., Newark, N. J., has announced. Performance tests are pro-vided for all current types of tubes. Spare sockets are built in the test panel for future tubes.—Radio Retailing, October, 1932.



# Marathon DISCS Popular

Victor Turntable Attachment Places Long-Players Within Reach of Every Record Buyer ... Brunswick Announces "Show Boat" Album...Columbia Contracts with Formidable Array of New Artists

By Richard Gilbert

ONE year ago this month, Victor announced what proposed to be a startling innovation in the field of recorded music, namely a longer-playing phonograph disc which would give fitteen minutes of uninterrupted music. This development was obtained by introducing a greater number of grooves in a record made of a new substance and by cutting down the number of turntable revolutions per minute from the standard 78 to 33<sup>1</sup>/<sub>3</sub>. This achievement was hailed as epoch making in the field of home entertainment and it was augured that the phonograph would experience a veritable rebirth.

But this palingenesis was slow in gathering momentum for reasons now pretty well understood. Nothing daunted, Victor technicians set to work devising something better. Now it's here. The present day long-player supplies *excellent* music for approximately ten minutes playing time. It will be noted that the original list prices of the silver and gold labelled discs have been reduced to conform with this contraction. Most important, though, is the perfection of a really inexpensive and truly fool-proof dual speed attachment—promised from the very beginning but not reaching the dealers until late this summer.

This inexpensive device, which converts a 78 r.p.m. motor into a two-speed motor, warrants the attention of every record dealer. Its possibilities as a sales item in itself and as a purveyor of the gradually increasing library of Victor marathon discs are too evident for appraisal here. There has been an increasing demand for this attachment since the appearance of the *Gurrelicder* (Schönberg), *Prometheus* and *Poème d'Extase* (Scriabin), *Song of Faith* (Carpenter), *Grand Canyon Suite* (Ferde Grofé), *Skyscrapers Ballct* (Carpenter) and *Don Quixote* (Strauss) recordings. The recordings just mentioned were made either last spring or since that time and represent the new mechanism of longer-playing recording at its best.

This ingenious dual-speed turntable can be installed by either dealer or customer by simply lifting off the old turntable, fastening a sliding switch to the old motor board by means of two wood screws and placing the new turntable over the motor spindle. With the switch in the "fast" position, the turntable is directly coupled to the phonograph motor and revolves at 78 r.p.m. With the switch in the "slow" position, a ball race is brought into play, reducing the turntable speed to 333 r.p.m. This equipment can be used on practically all electrical phonographs. It is available in three models and sells for the attractive and reasonable sum of \$7.50.

By all means equip your booth demonstration instruments with this apparatus; demonstrate to your customers its simplicity and, for a splendid performance, play the Paul Whiteman recording of Ferde Grofé's Grand Canyon Suite (Nos. L-35001 and L-35002). The turntable, once adjusted perfectly, with motor hitting 78 r.p.m. regularly, cannot fail to revolve at the correct lower speed. The recent longerplaying releases are notable for tone quality and volume: give them another push—the impetus will gather speed in sales this time.

#### Columbia

COLUMBIA purports to refurbish its entire list of dance band, vocal and instrumental recording artists. Look at the latest contracts made by this enterprising and completely rejuvenated company:

Rudy Vallée and his Connecticut Yankees and Harry Richman, Broadway's premier night club singer, signed Columbia dotted lines recently. Joe Haymes and his Orches-



President Ward, Columbia, signs up Rudy

tra and Frances Langford and the Four New Yorkers are now making records at 55 Fifth Avenue. Columbia's new series of Radio Records feature these popular and highly capable entertainers. Last but by no means the proverbial least are The Three Keys. The Three Keys, vocalists and instrumentalists of inimi-

The Three Keys, vocalists and instrumentalists of inimitable charm, were recently knockouts via the radio. As I write this the Three Keys are the feature of the Capital Theatre's stage show. No words can describe their business of making songs sit up and take notice in an entirely different way. They are not like the Mills fraternity; unlike the Boswell sisters certainly. Their vocalizations are a huge treat—get next to their first disc, No. 2706D—Mood Indigo and Somebody Loses—Somebody Wins. Richman's first Columbia is a most realistic recording of that popular It Was So Beautiful (No. 2701D) coupled with I Love a Parade. Rudy plays and sings I Guess I'll Have to Change My Plan and Maori (No. 2700D).

Watch Columbia announcements during the next few months. The policies of this company are going to assist the dealer to go places with records.

#### Brunswick Scoops with "Show Boat"

 $\mathbf{E}_{abridged}$  "Show Boat." A four-disc album set of the high spot numbers from what many critics consider America's greatest musical comedy. These 12-inchers feature (*Please turn to page 50*) NEW

Radio-Records

### RELEASED SEPTEMBER 15

mbia

r10

on

No. 2700-D 10-inch 75c

I GUESS I'LL HAVE TO CHANGE MY PLAN (The Bive Pajamas Song) MAORI (A Samoan Song) Fox-Trots Rudy Vallee and His Connecticut Yankees

Columbia's first presentation of the famous Rudy. Millions hear him every week on the air; a tremendous demand for this disc is assured.

No. 2701-D 10-inch 75c

IT WAS SO BEAUTIFUL I LOVE A PARADE Vocals Harry Richman

A pair of today's most popular hits. Thousands of radio-fan letters have requested Harry Richman to sing the "Parade" number. Here it is on a record, staged and directed by Harry himself.

No. 2696-D 10-inch 75c

I CAN'T BELIEVE IT'S TRUE HAVING A GOOD TIME, WISH YOU WERE HERE Vocals Frances Langford and the Four New Yorkers

Frances Langford sings two good tunes in a way all her own, accompanied by the Four New Yorkers Quartet and orchestra.

#### RELEASED SEPTEMBER 30

No. 2702-D	10-inch	75c
STRANGE INTERLUDE	Fox-Tr	ot
SAME OLD MOON (Same Old Rudy	27	onnecticut Yankees
"Strange Interlude" is the hit b	y Phil Baker and	d Ben Bernie. On

"Strange Interlude" is the hit by Phil Baker and Ben Bernie. On the other side is the sub-theme song in Rudy's radio hour. Freddy Martin and his Marine Roof Orchestra, Joe Haymes and his

Freddy Martin and his Marine Roof Orchestra, Joe Haymes and his Orchestra, and the Three Keys (radio vocalists) are other neucomers to Columbia in the September 30 release. Be sure to hear them.

# \* RUDY VALLEE \* HARRY RICHMAN \* FRANCES LANGFORD

tars

HERE'S another step in Columbia progress, another fulfilment of Columbia's promises. Our program for restoring recorded music to its rightful place, you remember, included signing up the best talent in the field. And here are three outstanding artists listed on Columbia's roster.

They need no introduction. Rudy Vallee, Harry Richman, and Frances Langford are known to every radiolistener and theatergoer. Now, on Columbia Radio-Records, they come into the home right in character, offering popular hits. Look over these feature records, released September 15 and 30. And keep your eyes open for further Columbia activities. Columbia Phonograph Co., Inc., 55 Fifth Avenue, New York, N. Y.

Watch for the important announcement by Columbia. It's coming soon!

# Marathon Discs Popular

#### (Continued from page 48)

Helen Morgan, Paul Robeson, Countess Olga Albani, James Melton, Frank Munn, the Show Boat chorus and the Brunswick Concert Orchestra, all under the direction of Victor Young, exclusive Brunswick conductor. What greater attraction could a record manufacturer offer the general musical public? This ancient observer's answer is—none.

The appeal of this set cannot help but stimulate disc sales in every department of recorded music. Brunswick's "Show Boat" will open the eyes of many to the possibilities of the somewhat neglected phonograph. It's the kind of a release calculated to attract people who haven't placed a needle in a pick-up or sound box for years. Most important, an abbreviated "Show Boat" has been actually in demand for some while. Utilizing such a cast as the above, the album set—attractively bound to correspond with the Harms' sheet music jackets and displaying photographs of the principals and the whole wrapped in cellophane—won't need much effort on your part for a sale. And don't forget to demonstrate the highly realistic reproduction to all combination prospects. Here's a wager that Old Man River, Bill, Can't Help Lovin' That Man and You Are Love and the scintillating overture will open many a future phonograph user's ears and pocketbook.

Victor Young, highly talented Brunswick music director, has confected an entirely new orchestration of Jerome Kern's unforgettable music which captures our complete admiration. Too much emphasis cannot be laid on the effective concentration and ever-pleasing continuity with which these themes and songs are presented and accompanied; to say nothing of the admirably colored instrumentation and splendid pieces of unusual microphone technique.

Side one is an overture in which are unfolded the delicious tunes, now universally famous. Paul Robeson's unparalleled Old Man River possesses a new charm as it is disengaged from side two; in itself this rendition is worth the price of the complete album. His deep, rich, stirring, resonant tones are mirrored with a rare phonographic fidelity. Inimitable indeed are Helen Morgan's Bill and Can't Help Lovin' That Man which follow. Every atom of this singer's unique personality is projected with uncanny realism—the adroit accomplishments, ranging from a whispering piano to throbbing trumpets, do credit to Victor Young's virtuosity. Not content with the above, Brunswick procured the convince of a mean which conjurce radio endorses.

Not content with the above, Brunswick procured the services of a name which conjures radio audiences: James Melton. The famous tenor sings, irresistibly, the favorites, You Are Love and Make Believe. And Countess Albani and Frank Munn duet in Why Do I Love You? A stirring orchestral finale concludes this prize packet; before the very end the strains of Old Man River bring back Robeson's deep voice and a background by the Show Boat chorus. All of the above cannot be heard to better advantage in the Casino theatre itself.

# Skipper Ellis of Rockville

### (Continued from page 21)

the home it seldom comes back to the shop.

THE 127 set record in 197 days gains in significance when it is realized that not a single current model is sold at less than the established list price. Ellis learned early in his radio experience that the sale of even the best set inevitably involves some unforeseen expense that cannot readily be charged to the customer. Through all the years he has guarded his reputation jealously and has allowed nothing to stand in the way of satisfying even the most unreasonable customer. To take care of these unexpected expenses, satisfy the customers, pay all bills promptly and still have something left for a profit, so Mr. Ellis figured, requires every cent of the margin allowed by the manufacturer.

Furthermore this dealer does not authorize excessive allowances on old sets. He knows that he is operating in a market that is 87 per cent saturated, which means that the majority of sales involve a trade-in. This means that unless he is very careful, he will have all his profits tied up in second-hand and obsolete sets. So when a trade-in is made, the allowance is such that the set can be scrapped while the business makes a profit on the sale of the new set. Only a few months ago Sam Ellis, from the basement of his store, supplied the "makings"-50-odd second hand sets-for a high-class bonfire in one of the town's empty lots. Many of the sets burned, and many now on hand for the next bonfire, are perfectly good and with little expense could be fixed up for considerable service but Mr. Ellis does not believe in cluttering up his market for new sets with the second-hand variety, so down the basement they go until it is time for the match.

J UST how accurately Mr. Ellis has been able to select from his list of over 4,000 customers, the names of those who should be ready for a new set, is not only proven by his sales record but also by the actual condition found to have been the reason for succeeding in making a sale. Over half of the 127 new sets sold, went into homes where the so-called follow-up call developed that the set then being used really needed extensive repairs or was completely out of commission. The same people might have bought a new car because some salesman came along and sold them the idea that they needed it. They had abandoned interest in radio, because the old set did not work right and nobody had come along to sell them a new one.

Of the balance of new-set sales, over 40 per cent were made by giving the customer a chance to compare the performance of the latest models with that of the old set. With many of the old sets obsolete, tubes in bad shape, loud speakers poor, such comparisons were found exceptionally effective in creating genuine interest in a new set.

It will be seen, that this intensive concentration of sales effort upon a selected list of prospects has been productive of results that perhaps could not have been obtained in any other way. In addition this method of selective selling has effected substantial savings in selling costs. Practically no money is being spent in general sales promotion or attempts to get new prospects but instead sales are developed out of the list of 4,000 residents who at one time or other have been customers. The salesman does not waste time or burn gasoline calling on doubtful prospects. Every call is a well planned attack on a known prospect. In this fact lies the real advantage of practicing selective selling under prevailing economic conditions.

The market for new radio sets has been materially reduced because the income of the average householder has shrunk. In many communities a high point of saturation has been reached, as for instance in Rockville Center, thus curtailing the opportunities of the dealer. Distress stocks and cut-price competition have made inroads that it has been difficult for the legitimate dealer to overcome. The procedure of selective selling, which has enabled Sam Ellis to make a creditable record under severe conditions, can readily be followed by other radio dealers.

# The CENTRALAB Quality Triumvirate

Three products carry the CENTRALAB banner of Quality. Even in this frantic competitive era Centralab products are designed for highest quality, regardless of cost. Attractively low prices result from large volume production ... not from shoddy design.

CENTRAL RADIO LABORATORIES, MILWAUKEE, WIS.



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 re-ducing spark noises. Write for de-scriptive buoklet.







**Readrite Resistance Tester** The new Readrite continu-ity, capacity, and resistance tester. No more chassis pull-ing! Free with a small pur-chase of tubes.



**Oscillator and Output Meter** The only way to service super hets properly! Absolute necessity for modern servic-ing. Free with small puring. Free with chase of tubes.



**Readrite Tube Tester** 

Here's a valuable tester! Easily carried, convenient. An illuminated dial enables you to read tests even in the darkest corners! Send for it redevi today!



**Two Service Manuals** 

Here are two instructive, valuable service manuals written by John F, Rider-Vol. i over 2,000 diagrams on voltages, color codings, etc. Vol. 2 over 700 pages. Reslst-ance data making possible operations of tester above.

No other maker of radio tubes offers more to help the service man and the dealer

**R**ADIO men everywhere are telling us what National Union means to them. All appreciate that National Union helps the service man to help himself.

And the reason why is that National Union understands and does something about the service man's problems-

First....National Union sells him only High Quality Tubes. Second..National Union offers him FREE the finest, most efficient shop equipment.

Third... National Union gives the latest and correct data on all radio equipment.

Fourth .. National Union assures him a real profit . . because there is no price cutting.

Just look at all the valuable free equipment in this advertisement. Decide today to tie up with National Union for profit. Mail coupon below!



#### NEW! NEW! NEW! **Revolutionary Tube Tester!**

Above is the new, sensational Unameter. Now offered to service men for the first time! It is very easy to operate. Turn the selector, then place tube in the socket, watch the reading on the meter in and English.

It is a compact, easily carried, sturdy meter. An aluminum chassis, with all panels made of bakelite. And attractively finished in gold, red and black. This Unameter is undoubtedly one of the finest pieces of radio equipment ever offered to service men. So don't miss this opportu-nity. It is yours with a moderate pur-chase of tubes and a small deposit.

FREE! Tube Base Layout Chart complied by John F. Rider. No obliga-tion. Write for one!

ASK YOUR JOBBER'S SALESMEN

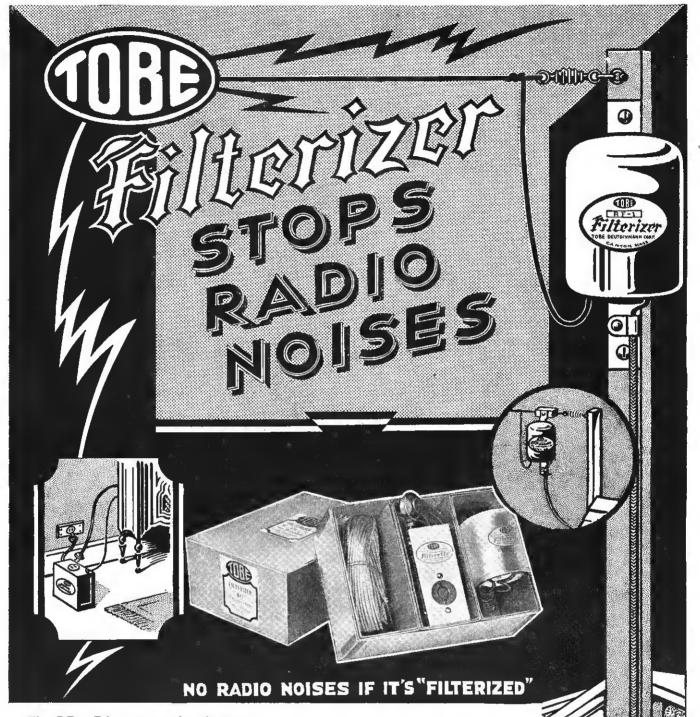
STATE ......

NATIONAL UNION RADIO CORPORATION 400 MADISON AVENUE NEW YORK CITY

Dear Straz I am checking the equipment in which I am interested: READRITE TUBE TESTER O OSCILLATOR AND OUTPUT METER VOL. I VOL. II RESISTANCE TESTER UNAMETER

CITY-

Radio Retailing, A McGraw-Hill Publication



The RF-1 Filterette at the Antenna. The RF-2 Line Filterette at the Receiver. 75 Feet of Filterizer Shielded Lead-in —

## OUT GOES THE RADIO NOISE

The FILTERIZER Kit enables you to "spike" competition from the so-called "noiseless" receiver and makes it easier to sell your own.

No matter what make of set, and regardless of conditions, the FILTERIZER will afford relief. It is not a "gadget" but one of our developments after years of experience in "noise" elimination. The FILTERIZER may be used with any receiver OLD or NEW. Paul C. Heyer, Filterette Service Station, Erie, Pa. writes, "Installed the FILTERIZER. It does all you claim for it."

Louis M. Strauss, Newark Electric Company, Chicago, wired, "FILTERIZER O.K. Should be 'hot' number. Rush fifty."

Take advantage of the present market, and be able to supply this unit NOW. List, 9.75 complete.

TOBE DEUTSCHMANN CORPORATION, Filterette Division, CANTON, MASS. 136 Liberty St., New York The Acknowledged Authority on Radio Interference—Makers of FILTERETTES, the Accepted Remedy 4 months from now you'll be glad you read and acted on this advertisement

SALES RESISTANCE RESISTANCE Resistor Market OHIOHM Advantages State Stat

Resistor Market"

It Isn't how much you sell, that counts, but how much money you have made at the end of the year...

• WHEN you come to review your 1932 business and to consider where you're headed for '33 consider from where your profit—your REAL profit—has come.

In nine cases out of ten you'll find it's the item that has been made easy for you to sell without having to cut price, that is profitable.

Ohiohm Resistors — in the First-Aid Kit, in the Server for counter use, in the jobber cabinet — in every form — are highly profitable. And, we can prove it to you if you'll give us the chance.

THE OHIO CARBON CO. 12508 BEREA ROAD :: CLEVELAND, OHIO Ohiohm Resistors are made in Canada by C.C. Meredith & Co., Ltd. :: 67 Bay St. Toranta

First Aid Kit for

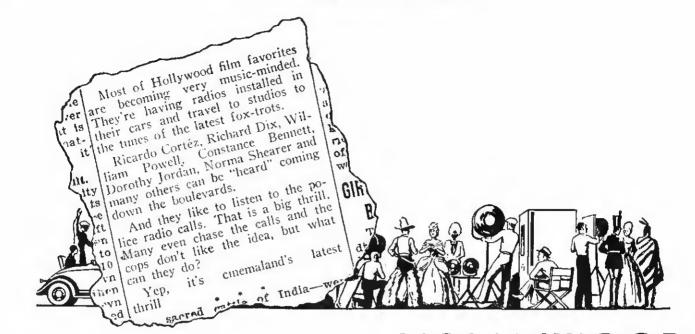
Service Men

Ohiohm Spark Suppressor Sets for Eliminating Ignition Interference on



C SHOOL SHOULD BE SHOULD B

Ohm Diat and Service Labels furnished Free with initial order.

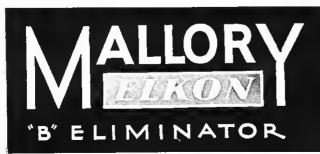


# ...and HOLLYWOOD isn't alone...all America is taking to AUTOMOBILE RADIO...and

AUTOMOBILE radio is a big business right now — yet a business in which the surface, of the real market, has scarcely been scratched. A consideration of the fact that the cars on the road greatly outnumber the radio sets in America's homes will enable you to appreciate the tremendous possibilities that this new and already profitable business offers. A study of the Mallory-Elkon "B' Eliminator and the Mallory-Elkonode will convince you of the important part played by them in the transition of automobile radio from an interesting experiment to a substantial rapidly growing business.

The tried and proven Mallory-Elkonode is the heart of the Mallory-Elkon "B" Eliminator which offers the car owner these decided advantages;

- 1. Provides an unvarying source of power which insures uniform, dependable radio reception.
- 2. Universal Application suitable for all popular brands of standard automobile radio sets.
- 3. Safe-cannot damage radio set.
- 4. Compact-size 10" x 7" x 3¼". Fits many places in the car.
- 5. No rotary parts. No oiling, No attention. Nothing to fix. Does not set up interference.
- 6. Dry-no water to add.
- 7. Complete-nothing else to buy.
- 8. Guaranteed-under R. M. A. standards.
- 9. Easily installed-can be placed in any position.
- 10. Tested and Proven over a two-year period by an experienced manufacturer.



MALLORY is largely responsible for this nation-wide activity



Nearly 50,000 Mallory-Elkon "B" Eliminators are now in useand the demand is growing greater every day. Get after your share of the immediate business—and make your plans for the future.

## P. R. MALLORY & CO., INCORPORATED Indianapolis, Indiana

# COME ON! Take your winnings.

TWENTY-FIVE times a General Electric Radio has been pitted against the very best radio sets produced—in shoulder-to-shoulder tone-tests staged in a dozen different states.

And twenty-five times it has come in a winner! It has won the best-tone vote of thousands. But what is more important—it has won the coveted place of *best* in the minds of thousands who have heard the news of these victories.

Right now, the minds of thousands are made up. Thousands have decided which radio they will buy when they are ready to do their buying. And a host of them are ready *now*.

Come on . . . take your winnings! And we say your winnings because every tonetest General Electric wins—every person General Electric convinces of its superiority—is a *win* for the dealer who handles the General Electric line.

The old snow-ball of public preference for G-E Radio is rolling along and getting bigger every day. And it's fairly easy to understand why. No other radio in existence has a selling story so potent as G-E's famous 'Believe your own ears!'' No other radio is being put before the public with such irrefutable proof of its superiority. Month-aftermonth a consistent push of advertising has been put behind it. And there's plenty more coming!

The dealers today who have taken on or who are taking on the G-E line are sitting right up front—and sitting pretty! They have the bulge on them all! The wind is with them—and three big months are right ahead of them. Plenty of people have their minds made up to buy a G-E Radio. And a lot of them are going to buy within the next few months.

Will they buy from you—or will some other dealer get the call? The answer to that can be written on the coupon below.

The G-E Circle—a program of special interest to women—is on the air every weekday (except Saturday) at 5:45 P. M., Eastern Standard Time.

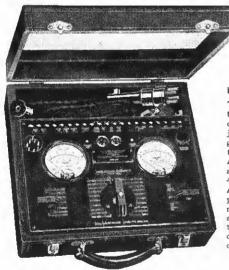
Section R-6810, GENERAL ELECTRIC CO., Merchandise Dept., Bridgeport, Conn.
Without obligation, kindly send me further in- formation about the General Electric Radio dealer franchise.
Name
Address
CityState





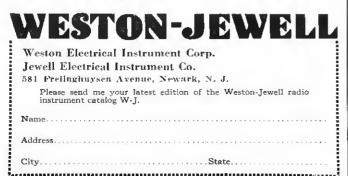
This new low priced Tube-Seller marks another important forward step in tube merchandising. Now, the proven successful features of Weston-Jewell Tube-Sellers are available at a cost so low that no dealer can afford to be inadequately equipped. The Weston Model 677 has the famous three-color direct reading tube performance meter, exclusive zero-reset test circuit, a new high voltage shorttest circuit, and provision for testing 4, 5, 6, and 7-prong tubes. Write for details.

# Jewell Pattern 444 Set Analyzer



Dealers equipped with Weston-Jewell ServiceInstruments get more service work, better profits, and create customer confidence that builds set sales.

The improved Jewell Pattern 444 Set Analyzer is complete for every service job- yet so carefully engineered that it simplifies the most difficult work. All necessary socket tests are provided for sets using 4, 5, 6, and 7-prong tubes. A.C., D.C., receiver out, put, and resistance measuring ranges are available for independent testing of every receiver component. Write for complete information.



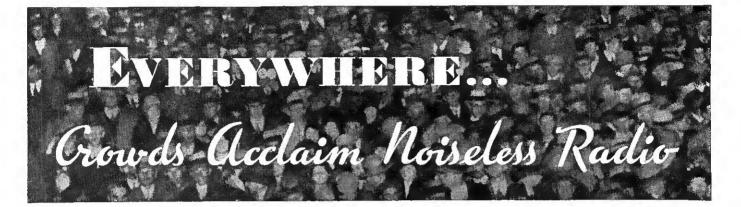


# 401 A.C. TUBES are PROFITABLE for DEALERS and JOBBERS

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. Clear-TONE Sets-110. And the first A.C. models of the following: Bell, Walbert, Wurlitzer, Pathe, Shamrock, Bush & Lane, Minerva, Crusader, Liberty, Metro, Supervox and Case.

Write Dept. 62 for name and address of nearest jobber







Kolster's famous model K-130 — The fastest moving set in the hundred dollar field. Neon tuning beacon, nine tube superheterodyne. With the famous rejectostatic circuit (pat. pend.). Price with 9 radiotrons latest type, \$102.00. Other models \$61.00, \$76.30, \$148.00. New! Air cell battery receiver. 9 tube switomatic volume control superheterodyne. Price \$71.25 with radiotrons.

# LISTENERS MARVEL AT KOLSTER PERFORMING PERFECTLY IN PRESENCE OF STATIC CREATORS THAT "*KILL*" ORDINARY SETS

• • •

"Kolster HAS Something This Year." Everyone is saying so. Competitors say their sets will equal Kolster performance. We say, compare...test...and draw your own conclusions. Remember the Kolster Rejectostatic System is an exclusive Kolster Feature.

It's easier to sell the Kolster International Rejectostatic Radio than to compete against it. It's a Kolster Year.

Ask for a copy of this book. Completely describes the Kolster Rejectostatic System. Gives details of installation. Valuable!



### Kolster Radio Inc.

 Kolster Radio Inc. is affiliated with Mackay Radio and Telegraph Company and other units of the International System.
 New York Office: International Telephone and Telegraph Building 67 Broad Street, New York City
 Factory: 360 Thomas Street, Newark, New Jersey



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Name ..... Street Address ..... City ..... State.....



City ......

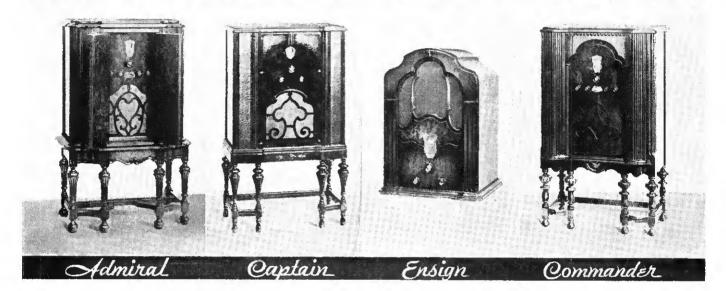
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www.americanradiohistory.com







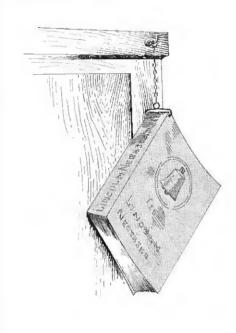
# **32 VOLT** SUPERHETERODYNE ALL ELECTRIC • FOR FARM LIGHT PLANTS

Here is the big Radio opportunity of 1932 a sensational Receiver that enables you to profitably sell the Farm Light Plant Owner market. This rich virgin market is quick to accept the L. Tatro 32 Volt Superheterodyne — it offers the Farm Light Plant Owner the first opportunity to obtain modern Radio reception. Jobbers and dealers throughout the country are rapidly realizing the tremendous possibilities of the L. Tatro. We have a unique proposition for you — one that will enable you to build sales volume and profits. Wire or write today for complete details. Investigate the L. Tatro — America's Radio Sensation.

All Electric — No Batteries . . . Multi-Tube . . . All Latest Tubes . . . Duo-Diode Detection — Unsurpassed Tone . . . Automatic Volume Control — No Fading

# L. TATRO PRODUCTS CORPORATION DECORAH · IOWA





# Radio Retailing

-a McGraw-Hill publication

# As Necessary and Handy as the 'Phone Book

WHAT days these are for radio dealers and distributors! Something new breaking all the time —new models, new prices, new policies, new companies—always something else that must be learnt about. Was there ever as fast moving or as troublesome an industry as this radio and home entertainment industry of ours?

To make things just a little easier for the radio dealer and distributor—that seems to be the function of *Radio Retailing*. Take this October issue, that you're reading now. It contains our annual radio set specifications directory, covering broadcast receivers, combinations, auto radio and short-wave receivers. Its purpose is to give the dealer and distributor in one handy volume the whole story on the 1932-1933 lines of receivers.

But fortunately for the radio man, *Radio Retailing's* service does not cease here. Each future issue will bring him news and selling help that he sorely needs to keep abreast of developments.

Because radio men—23,000 of them—find *Radio Retailing* as necessary and as handy as the telephone directory, wise manufacturers of radio sets, tubes, accessories, parts, allied home entertainment merchandise and electrical appliances are monthly putting their sales story in this magazine. Theirs is the comforting knowledge that *Radio Retailing's* advertising pages are read as carefully as its editorial section. Radio Retailing, October, 1932

# 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 classifica-tions, 10 cents a word, minimum charge \$2.00.

Proposals, 40 cents a line an inserton,

SALESMEN WANTED

BRAND new opportunity for salesmen with ears call on radio dealers, service men and jobbers. Popular low-priced specialty every service man needs and wants. Men now making \$25 to \$40 workly as sideline. Write today, Give details and territory you can cover, SW-164, Radio Retailing, 330 West 42d St., New York.

REPAIRING

GUARANTEED microphone repairs—any make ¬r model, 24-hour service. Stretched dis,bragm double button repairs, \$7.50, Others, \$3.00. Single button repairs, \$1.50. Write for 1933 Catalog with diagrams. Universal Microphone Co., Ltd., Inglewood, California.

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

HUGE SAVINGS IN USED PUBLIC ADDRESS EQUIPMENT Send for bargain lists. Motion Picture and Sound Systems. SALES ON SOUND CORP. Dept. RR, 1600 Broadway, New York



INFORMATION:

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 inser-tions of undisplayed ads (not including proposals).

#### 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 pub-Extreme care will be exercised by the pub-lishers 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 de-scribed and must be available on order.



# Building, Testing and Repairing all kinds of Radio Receivers

The three volumes of this Library cover the entire field of building, repairing and "trouble-shooting" on modern radio receivers. The Library is up-to-the-minute in every respect and is based on the very latest developments in the design and

manufacture of equipment. The rapidly growing interest in short-wave and tele-vision reception is thoroughly covered in a complete section which deals with the construction of this type of apparatus.

# CONSTRUCTION RADIO

Volume 1. **Practical Radio.** 410 pages, 236 illustrations and diagrams. Presents the fundamental principles of radio so clearly and simply that anyone of average training will be able to understand and apply them. Deals with recent developments in television, including devices for its practical application. The latest types of photo-electric cells and neon glow tubes for television services and the difficulties of "seaming" are fully explained. Contains full information needed to understand never types of receiving tubes especially those for operating with alternating current.

Volume 2. Practical Radio Construction and Repairing. 386 page 179 illustrations and diagrams. Discusses fully all the elemental pri-ciples of radio construction and repair. Includes such subjects a Sources of electricity for radio tubes—Audio frequency amplifiers—Co-struction of impedance coupled and "Universal" four type receiving sets. Short-wave receiver—The television receiver—and many others. s as: -Con-

Short-wave receiver—The television receiver—and many others. Volume 3. Radio Receiving Tubes. 323 pages. More than 203 illustrations and diagrams. Clearly explains the essential principles underlying the operation of vacuum tubes. Includes complete informa-tion on the newest types of radio tubes and improvements which have been made in tubes already in general use. Gives complete descriptions of apparatus required for radio receiving sets and for industrial equip-ment; also of devices utilizing radio receiving tubes as essential parts, particularly in the field of radio surgery, where applications of the radio needle have met with success.

Including Construction of Short-Wave and Television Sets By MOYER & WOSTREL

3 Volumes, 1087 pages, 6 x 9, 605 illustrations

#### Free examination-easy terms

Send this coupon				
McGraw-Hill Book Co., Inc., 330 West 42d Street, New York. Gentlemen:—Send me the RADIO CONSTRUCTION LIBRARY, all charges prepaid, 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 at your expense.				
Name				
Home Address				
City and State				
Name of Company				
Occupation				

DISPLAYED-RATE PER INCH:

DEALERS-SERVICEMEN

1.000

61

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Get into the Talk-ing Picture Busi-ness. Install and Equipment: Wholesale prices on Projectors, Sound on Film. Amplificrs, Photo-cells. Microphones, etc.

Write at Once.

Mellaphone

Corp.

Rochester, N. Y.

SEARCHLIGHT SECTION

October, 1932 Radio Retailing

# LIVE WIRE BARGAINS **A PAGE of PROFITS FOR DEALERS**

# **"ROUND THE WORLD RECEPTION"**

WITH THE "POWERTONE" SHORTWAVE BATTERY OPERATED RECEIVER 15-200 METERS

**TWO VOLT** [Air Cell] TUBES Set of Tubes...... \$2.50

Amazing results on this set have con-vinced us that we have reached the utmost in the reception of short waves with a battery operated receiver.

The use of the new two-volt tubes greatly increases reception sensitivity, and selectivity, and at the same time current consumption is kept at a minimum. A 232 screen grid tube, and a 233 power pentode amplifier tube is used with remarkable results.

The set is provided with a rheostat to permit the use of two dry cells.

An added feature is the use of a Hammarlund condenser for tuning purposes, which personifies the best for short





Complete set of 4 coils included. \$7.95 OUR PRICE

# **FARRAND INDUCTOR DYNAMICS**

ductor dynamic the finest speakavailable anywhere for A.C., D.C., or battery op-

Will take as much power and reproduce in tone and quality as the finest dy-namic speaker will. Absolutely will not blast or rattle. Please state type of

power or power tubes when ordering. 9 inch model..... \$4.50 12 inch model..... \$5.00

**R.C.A. VICTOR HAND** MICROPHONE

This microphone is furnished with the latest model Radi-ola 86 Home recording Su-per-Heterodyne Receiver and Amplifier. Do not confuse this microphone with the "toy" type as it can be used for many professional and commercial uses. It is a single button "mike" with a gun metal finish. Its total length is  $64_{2}^{\prime\prime}$  and has as standard equipment a four foot cord.

OUR PRICE \$1.50



An ad-electric A.C. development incor-orating all the features and advantages of the direct-coupled Lottin-White ampli-her principle. THE AMPLIFIER IS A HIGH QUALITY TWO STAGE JOB HAY-NAVING SOME RADICALLY NEW UPEAS IN AUDIO FREQUENCY AMPLIFICA-TION and employing 1-27, 1-45 power used with a microphone, no additional multication is necessary. This is due to white directive and the contracter white directive and the contracter white directive and the contracter of OPERATE FROM TWO TO THREE ADDIGNAL SPEAKERS, COMPLETE ADDIGNAL



All Merchandise Guaranteed in Perfect Condition



Set of Full Sized Batteries \$2.25

wave reception. The parts are sturdily mounted on a metal base, which in turn is placed into a beautifully crackle finished metal cabinet to completely shield its contents.

The beautiful vernier dial gives the set a strictly modernistic finish, and at the same time greatly improves the ease of tuning.

Install one in your store, or "lab," and get your share of increase in business which this low priced short wave set will surely bring.

With the set of four plug-in coils furnished with the above receiver, the wave lengths from 14-200 meters are covered.



October, 1932 Radio Retailing



# No matter which **Party wins** . . you always win

# with Federated

The voters of this country will go to the polls on November 8th and elect the next President of the United States. They do that once every four years.

But some twenty thousand radio dealers and servicemen thruout the country choose the house they do business with every day-and invariably it's FEDERATED PURCHASER.



No matter which party will be in power for the next four years, the radio dealers and servicemen of the country will profit most by buying their replacement parts from FEDERATED-an old organization, which

will stay in business for many Presidential elections to come.

The October-November issue of "RADIO BARGAIN NEWS," just off the press, features amplifiers with outputs ranging from 3 to 30 watts and designed to meet every type of sound installation. A large section of this 106 page catalog is devoted to Public Ad-



dress Equipment, including a full line of **Universal Microphones, Wright-DeCoster and Rola Speakers, Acratone Amplifiers, Acratest** Products, Frost Products, RCA, Cunningham and Arcturus Tubes, Clarostat and Electrad

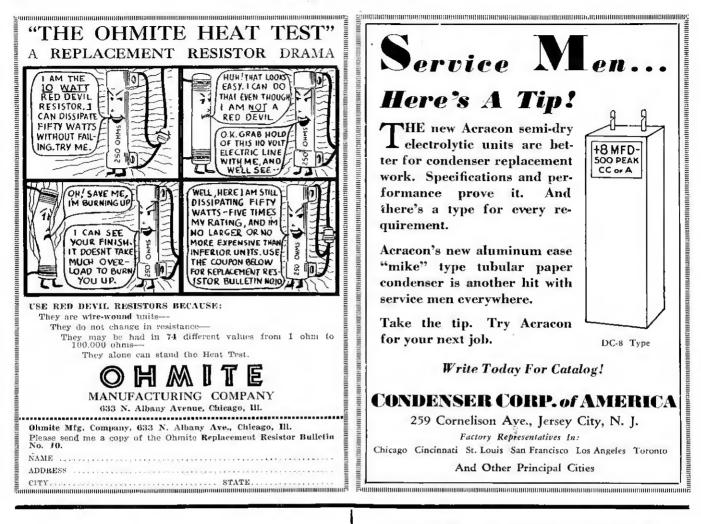
> **Resistors**, Weston, Jewell and Readrite meters. And remember RADIO BARGAIN **NEWS** is the "Radio Dealers' Servicemen's Buying and Guide" and contains over 3,000 items including replacement parts for every standard radio receiver.

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our main office at once for a Free copy of Radio Bargain News.			
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# The -C-R-O-S-L-E-Y TEMPERATOR

# A Thermostatically Controlled Heater for Winter A High Speed Fan for Summer



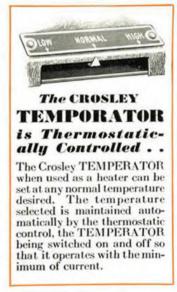
A HEATER, the Crosley TEMPERATOR functions more effectively than any heater has ever done. In it is incorporated a thermostat which maintains an even temperature. This is particularly desirable when the TEMPERATOR is used in the bathroom to maintain a higher temperature than that of the rest of the house. Because of its light weight and convenient size, the Crosley TEMPER-ATOR is readily moved from room to room. While it is not claimed that it alone will supply sufficient heat to warm an entire house, it will aid materially in making comfortable and cozy that room which is otherwise hard to heat. Remember that in a small room or bathroom the TEMPERATOR will add the warmth necessary to complete comfort and maintain the temperature constantly

at whatever degree the inbuilt thermostat has been set.

Unlike the ordinary "hot-spot" type of heater which warms itself to incandescence and reflects heat directly to the front only, the Crosley TEMPERA-TOR is equipped with an electric fan which revolves very slowly, circulating all of the heated air, using every bit of the heat generated, and warming the whole room to a uniform temperature.



Other types of heaters must be stored away during the summer, having no use other than as a heater. Not so with the TEMPERATOR! When the days get warm, a touch of the switch causes the TEM-PERATOR to become a highly efficient electric fan. The heating element is cut off, the fan speeds up and whirls merrily, stirring the air and bringing refreshing coolness.



### The New Crosley Radio Line

The new Crosley radio line covers the entire field of radio—superheterodynes for both A. C. and D. C. combination short and long wave superheterodyne receivers—battery operated superheterodyne receivers a superheterodyne for automobiles and water craft. Both table and console models of unusual beauty and exceptional value, some equipped with dual speakers, cause the line to be most complete. A four tube table model superheterodyne at \$26.00—a five tube table model superheterodyne at \$29.95—a six tube superheterodyne table model at \$39.95—a nine tube table model superheterodyne with full class "B" amplification using the mercury vapor tube at only \$55.00—a twelve tube console with full class "B" amplification and meter tuning at only \$99.50—a ten tube short and long wave table model superheterodyne at \$75.00 these are some of the feature sets of the line.

All prices complete with tubes, tax paid. Western prices slightly higher.

## **Crosley** *Electric* Refrigerators

The Crosley FULL SIZE Electric Refrigerators at amazingly low prices and with modern, up-to-date refrigeration features have from their very introduction attained outstanding success. Housewives and apartment owners everywhere have been high in their praise of the Crosley models which meet every refrigeration need and sell at astonishingly low prices.

They are made in the three sizes in greatest demand. Model C-35:  $3\frac{1}{2}$  cu. ft. NET Capacity. 7 sq. ft. Shelf Area. Dimensions: 52'' high,  $24\frac{3}{4}''$  wide, 20''deep. \$89.50, F. O. B. Factories, Tax Extra. Model C-45:  $4\frac{1}{2}$  cu. ft. NET Capacity. 9 sq. ft. Shelf Area. Dimensions:  $58\frac{1}{2}''$  high,  $25\frac{3}{4}''$  wide, 21'' deep. \$99.50, F. O. B. Factories, Tax Extra. Model C-55:  $5\frac{1}{2}$  cu. ft. NET Capacity.  $10\frac{1}{4}$  sq. ft. Shelf Area. Dimensions:  $58\frac{1}{2}''$  high,  $31\frac{3}{4}''$  wide,  $21\frac{3}{4}''$  deep. \$139.50, F. O. B. Factories, Tax Extra.

THE CROSLEY RADIO CORPORATION Powel Crosley, Jr., President CINCINNATI Home of "the Nation's Station"-WLW





# HERE'S THE HOTTEST SALES IDEA YET— STATUETTES OF FAMOUS RADIO STARS!

PEP up your Radiotron sales with this newest smash-hit sales aid. Bring tube-testing customers a-flocking. Capitalize the human instinct of hero worship that makes millions for the broadcasting and moving picture industries. Six live subjects available, in addition to President Hoover and Governor Roosevelt. Get your distributor salesman to show you the complete Master Key Plan presentation. The statuettes are indorsed by the radio stars and broadcasting officials.

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