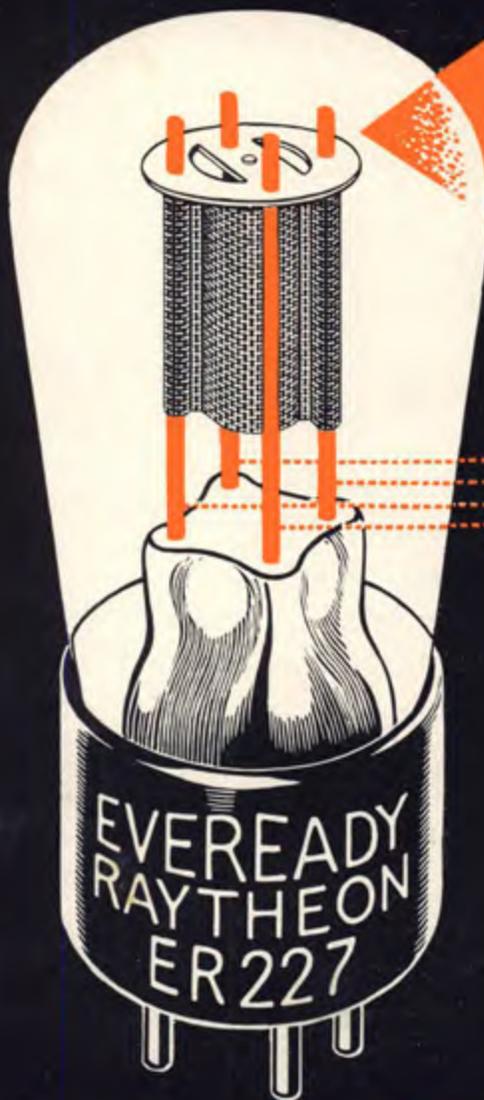


# RADIO RETAILING

HOME ENTERTAINMENT MERCHANDISING

**HERE IS THE TUBE  
THAT IS REVOLUTIONIZING  
ALL STANDARDS OF RECEPTION**



4-PILLAR CONSTRUCTION is not just an advertising phrase. It is a feature you can SHOW to your customers.

## EVEREADY RAYTHEON

TRADE - MARKS

### 4-PILLAR TUBES

# RADIO GRAM

**THIS MONTH AT THE CHICAGO SHOW  
SPARTON WILL ENHANCE ITS OWN  
PRESTIGE BY IMPROVING YOUR SALES  
OPPORTUNITY**

**S**PARTON'S reputation as a pioneer and trail-blazer in radio has been earned by outstanding achievements over the years.

The 1932 Chicago Show will unfold important new Sparton advancements . . . sure to enhance the prestige of Sparton engineers . . . and improve the sales opportunity of Sparton dealers.

These thrilling new developments have a direct bearing on your profit-opportunity for the next twelve months.

It will pay you to check up on Sparton at Chicago!

Sparton Exhibit at the Chicago Show, Spaces B29 to 33 inclusive, Grand Ball Room, Stevens Hotel; Demonstration Rooms, 504, 505 and 507.

THE **SPARKS-WITHINGTON** COMPANY (Established 1900), JACKSON, MICH., U. S. A.

(808)

## SPARTON RADIO *"Radio's Richest Voice"*

*Only Sparton has the Musical Beauty of Sparton*



Radio



Refrigerator



Home  
Movie-Talkies



Automobile Radio



Tubes



Automobile  
Warning Signals

# RADIO RETAILING

HOME ENTERTAINMENT MERCHANDISING

VOL. 15

No. 5

## Contents for May, 1932

Copyright, 1932, by McGraw-Hill Publishing Company, Inc.

<i>Great News</i> .....	<i>An Editorial</i>	9
<i>The Broadcasters Are Working for You</i> .....		10
<i>New Electronic Musical Instruments</i> .....		13
<i>When They Stop on a Light, He Sells Them an Auto-Radio</i>		14
<i>Four Heads Are Better Than One</i> .....	By E. L. Gruenberg	16
<i>When and Where to Find Shortwave Stations</i> .....		19
<i>Tube Prices Are Too Low</i> .....		20
<i>The Woman's Viewpoint from Both Sides of the Sale</i>	By Mrs. F. B. Murray and Mrs. E. E. Horton	22
<i>When Selling to Minors, Watch Your Step</i>	By Leslie Childs	25
<i>A Collection of Practical Sales Ideas</i> .....		26
<i>Food Mixers and Extractors—A Side Line</i> .....		28
<i>Editorials</i> .....		30
<i>New Tubes</i> .....		32
<i>Service Shortcuts</i> .....		33
<i>Class B Amplification</i> .....	By John P. Allen	35
<i>News of the Month</i> .....		36
<i>Voices from the Marketplace</i> .....		39
<i>New Merchandise</i> .....		40



## Don't Miss JUNE!

This is a reproduction of the first page of an 8-page pictorial section which appeared in the June, 1931, issue of "Radio Retailing." Here new models were seen by many dealers for the first time, coincident with their introduction at the RMA Trade Show.

This valuable "New Model" section is to be repeated *next month*, for dealers who cannot go to Chicago. As a special service to the trade the June number of "Radio Retailing" will be printed a whole week earlier than usual so that it may be mailed the day the show opens.

Watch for your copy . . . with its pictures and prices of new home radios, combinations, automobile sets, shortwave and television equipment. This is one issue *no* radio man can afford to miss!

O. H. CALDWELL, *Editor*

RAY V. SUTLIFFE, *Managing Editor*

W. W. MACDONALD, *Technical Editor*

T. H. PURINTON, *Assistant Editor*

HARRY PHILLIPS, *Art Director*

P. WOOTON, *Washington*

M. E. HERRING, *Publishing Director*

McGRAW-HILL PUBLISHING COMPANY, INC., 330 WEST 42d ST., NEW YORK, N. Y.

CHICAGO . . . 520 North Michigan Avenue    SAN FRANCISCO . . . 883 Mission Street    LONDON, W. C. 2 - Aldwych House, Aldwych  
Cable Address: "McGRAWHILL, N. Y."

JAMES H. MCGRAW, Chairman of the Board	EDGAR KOBAK, Vice-President	NEW YORK, 330 West 42d Street	CLEVELAND, 501 Guardian Building
MALCOLM MUIR, President	H. C. PARMELER, Vice-Pres. and Editorial Director	CHICAGO, 520 North Michigan Avenue	DETROIT, 2-257 General Motors Building
JAMES H. MCGRAW, JR., Vice-Pres. and Treas.	HAROLD W. MCGRAW, Vice-President	SAN FRANCISCO, 883 Mission Street	ST. LOUIS, 1556 Bell Telephone Building
MASON BRITTON, Vice-President	C. H. THOMPSON, Secretary	LONDON, W. C. 2, Aldwych House, Aldwych	BOSTON, 1427 Slatler Building
	Member A.B.P., Member A.B.C.	WASHINGTON, National Press Building	GREENVILLE, S. C., 1301 Woodside Building
		PHILADELPHIA, 1600 Arch Street	LOS ANGELES, 339 Chamber of Commerce Building

Printed U. S. A.

## A MESSAGE FOR *MAY* TO RADIO DEALERS

You are trying, through good sales work and good advertising, to build up prestige for the good lines of merchandise that have earned your confidence and which you want identified with your store in a permanent way.

Haven't you often wished that other dealers handling those same lines in your locality were advertising them to the same extent that you are doing and with the same aims of prestige-building and permanency?

Haven't you often felt that other dealers were benefiting by your advertising investment and that they should be required to advertise in proportion to their sales to the same extent that you are doing?

The Stromberg-Carlson Merchandising Plan is the only plan in the radio industry that accomplishes this result which you have been desiring. The Stromberg-Carlson Merchandising Plan requires every dealer to make an investment in advertising in proportion to his Stromberg-Carlson purchases. If any dealer fails to make that advertising investment the Stromberg-Carlson Company makes the investment in his stead in additional local advertising in that dealer's trade area as nearly as can be done.

Idealistic? Yes, but the plan is working and working effectively.

. . .

*You are invited to visit our exhibit in the Main Ball Room and meet the members of our organization in rooms 2400, 2401 and 2401A at Hotel Stevens, Chicago, during R. M. A. Trade Show, May 23 to 26.*



1894

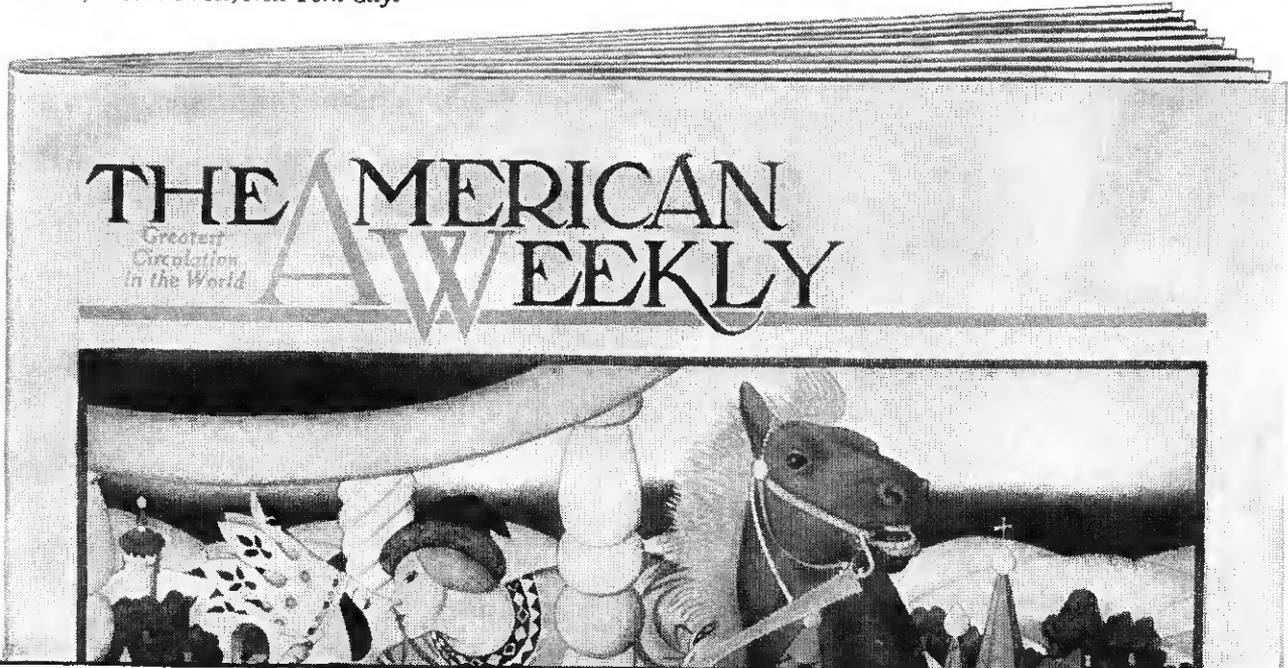
# Stromberg-Carlson

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



1932

Would you like to receive a copy? Write to The American Weekly, 959 Eighth Avenue, at 57th Street, New York City.



## This magazine BUILDS LOCAL TRADE

**W**HEN you see merchandise advertised in THE AMERICAN WEEKLY, arrange counter and window displays to feature that product. Then watch your customers increase their purchases and *your* profits.

THE AMERICAN WEEKLY brings business to retailers because it is a national magazine which is essentially a builder of local trade. It has a circulation of 5,500,000—nearly twice that of any other magazine—and it is sufficiently great to influence the buying habits of one out of every five families in thousands of different communities throughout America.

This is a selling job, a *local* selling job, that no other national publication can approach!

### *What is The American Weekly?*

The American Weekly is the largest magazine in the world. It is distributed through 17 great Sunday Newspapers. In 578 of America's 997 towns and cities of 10,000 population and over, The American Weekly concentrates 70% of its circulation.

In each of 152 cities, it reaches one out of every two families

In 108 more cities, 40 to 50% of the families

In an additional 146 cities, 30 to 40%

In another 172 cities, 20 to 30%

... and, in addition, more than 1,700,000 families in thousands of other communities, large and small, regularly buy and read The American Weekly.

*Edmund Dulac*

With a circulation of 5,500,000 copies, The American Weekly is the largest magazine in the world. It is distributed through 17 great Sunday Newspapers. In 578 of America's 997 towns and cities of 10,000 population and over, The American Weekly concentrates 70% of its circulation. In each of 152 cities, it reaches one out of every two families. In 108 more cities, 40 to 50% of the families. In an additional 146 cities, 30 to 40%. In another 172 cities, 20 to 30%. ... and, in addition, more than 1,700,000 families in thousands of other communities, large and small, regularly buy and read The American Weekly.

# AN OUTSTANDING

A LINE THAT OFFERS *all the features that the public looks for in a High Quality Refrigerator.*

●  
Overpowered—fast freezing unit . . . .

●  
. . . . Automatically lighted food compartment . . . . .

●  
8 Point cold control

●  
. . . Heavy insulation

●  
Stainless, seamless porcelain interior..

●  
. . . . Massive doors  
Rubber valve seal

●  
Two-tone hardware

●  
Automatic closing door latches . . . .

●  
Silent, vibrationless unit . . . . no radio interference . . . . .



# STEWART-WARNER

OVER 30,000,000 SATISFIED OWNERS OF STEWART

# PROFIT OPPORTUNITY NOW... a high grade, quality line of Electric Refrigeration...

Backed by a nationally known—  
nationally advertised name . . .  
at sensationally  
**LOW PRICES**

Stewart-Warner, the largest manufacturer of its kind in the world, has entered the field of electric refrigeration. All the resources—all the experience of this great institution have been devoted to bringing into this field a line of merchandise that would uncover a greater market, because it offered the greatest dollar for dollar value.

Into this line has been built the quality that any product must have to bear the name of Stewart-Warner—and to justify your backing and a place on your floor.

But the quality of the merchandise alone—important though it is—does not tell the whole story of this opportunity. A line of samples on your floor means nothing to you—less to the manufacturer. Stewart-Warner, just as you, is interested only in the delivery of that merchandise to a satisfied buyer. Such an objective requires intelligent selling co-operation between you and the factory. Stewart-Warner offers you the kind of selling help necessary for

With a  
**Red Hot**  
PRICE LEADER  
at only

**\$99<sup>95</sup>**  
F. O. B.  
Factory

A Quality  
4.1 Cu. Ft. Box

you to make money—necessary to produce profitable volume for the manufacturer. You may depend upon Stewart-Warner for this co-operation for its *self-interest depends upon your success.*

If you are interested in selling electric refrigeration at a profit—regardless of whether this is a new field for you—or if you now handle a line that has "grown" to your floor—look into the Stewart-Warner Plan. See this merchandise and tie up with a name that has meant profits to thousands of keen merchants—a name that is backed by 30 million satisfied owners of its products. Write us or use the coupon.



**Apartment**  
MODEL  
5 cu. ft. capacity

**Town House**  
MODEL  
6.4 cu. ft. capacity

**White House**  
MODEL  
8 cu. ft. capacity

## Electric Refrigeration

**WARNER PRODUCTS**

**MAIL THIS COUPON today!**

ELECTRIC REFRIGERATION DIVISION  
STEWART-WARNER CORPORATION  
1826 Diversey Parkway, Chicago

RR-5

Gentlemen: I am interested in knowing more about your Electrical Refrigeration Line, and the Plan that will help me sell it.

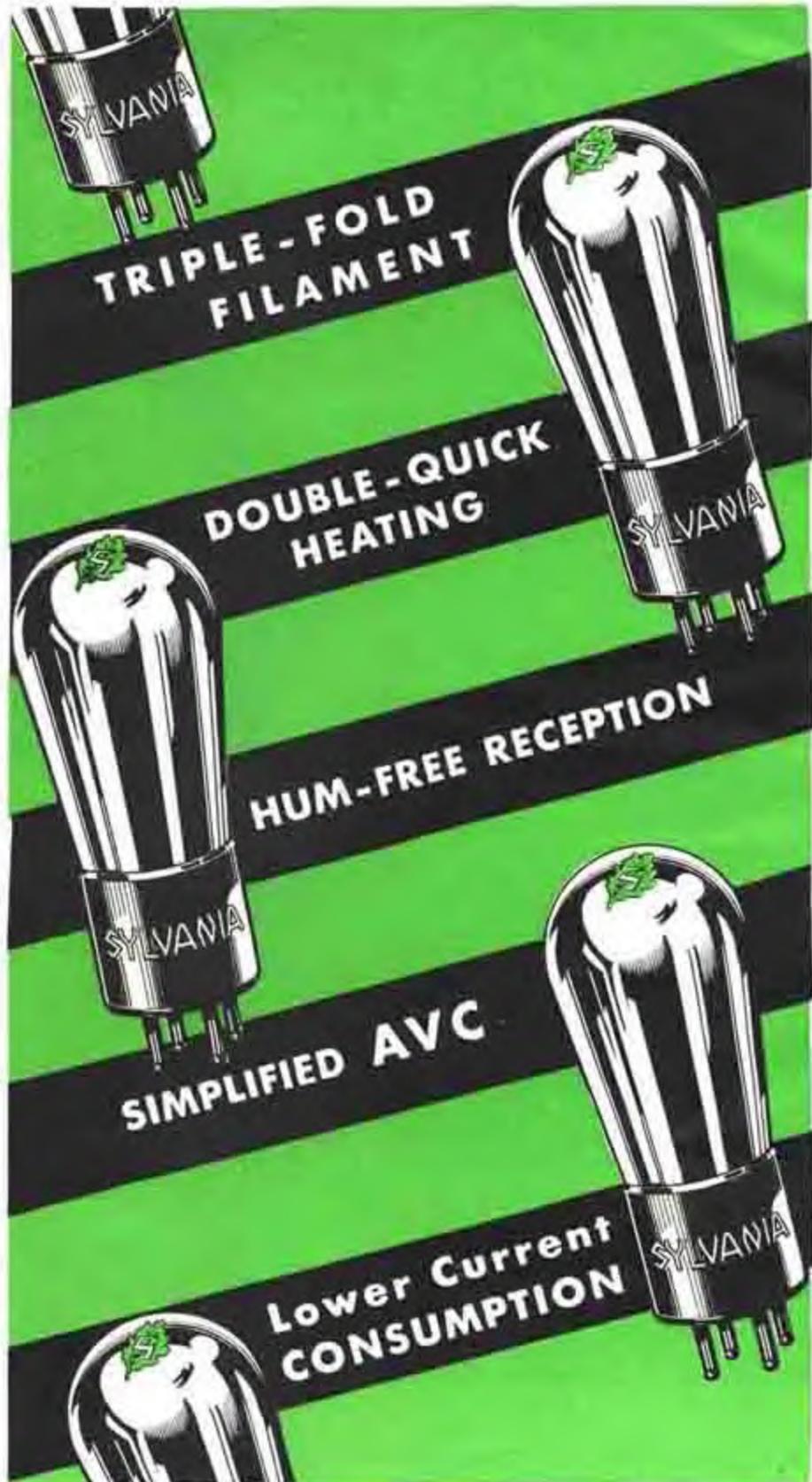
Name

Address

City  State

5

# Features...



● The new all-purpose 6.3 volt tubes feature an exclusive triple-fold filament employing specially coated wire. This filament cuts heating time to half that of the average tube. With it the entire set is in operation within  $8\frac{1}{2}$  seconds after the switch is snapped. Every tube heats in the shortest possible time. There are no lag-gards to slow up set operation.

# that will SELL..

## Sets in 1932

**T**HE TUBES chosen for 1932 will have an important bearing on set sales for 1932. That is why set manufacturers and merchants alike welcome the new 6.3 universal tube group recently announced by the Hygrade Sylvania Corporation, and which has been adapted for all types of receivers other than dry battery operated sets.

The tubes of this new group have many special features. A special triple-fold filament (exclusive with Sylvania) gives double-quick heating and hum-free reception. New types give simplified A V C effect. A lowered filament rating cuts current consumption and the most compact possible tube design allows for smaller sets.

These new tubes are already being manufactured in large quantities. They can be incorporated in present receiver designs without major changes. They have been thoroughly tested, developed and engineered by the Hygrade Sylvania Corporation over a period of 19 months. For information about these tubes and about the new 2½ volt group write on your business letterhead to Department R5, Emporium, Penna.

**TUNE IN** The Sylvania! 40 flying fingers on the pianos at one time! Sunday 7:45 New York Time, Columbia Network.

**STOP AT** The Sylvania Booth, R. M. A. Show, Chicago, May 23, 24, 25, 26.



# Sylvania

REGISTERED U. S. PATENT

## THE SET-TESTED TUBE

# THE FIVE FUNDAMENTAL FACTORS OF RADIO



## No. 1 THE SET

The *New Kolster International* has been manufactured *up* to a definite standard of performance rather than *down* to a low scale of prices. Yet it has been made to sell within the moderate price range.

## No. 2 THE MAKER

Kolster Radio Inc. is affiliated with Mackay Radio and Telegraph Company and other units of the International System.

## No. 3 THE DISTRIBUTOR

The *New Kolster International* is distributed from coast to coast by Westinghouse Electric Supply Company and associated distributors.

## No. 4 THE POLICY

The Kolster policy of controlled distribution and production means safety for the dealer.

## No. 5 THE PROFIT

Kolster list prices and discounts have been established on a basis that will provide a fair profit for dealer, distributor and manufacturer alike.



You are invited to visit the Kolster exhibit at the Radio Manufacturers Association Trade Show, Stevens Hotel, Chicago, May 23-26 inclusive. Booths number 114, 115, 116, 117, 118.

### KOLSTER RADIO INC.

New York Office: International Telephone and Telegraph Building  
67 Broad Street, New York City

Factory: 360 Thomas Street, Newark, New Jersey

*The New*  
**KOLSTER**  
**INTERNATIONAL**

May, 1932

# RADIO RETAILING

HOME ENTERTAINMENT MERCHANDISING  
*Established 1925*

O. H. CALDWELL,  
*Editor*

McGraw-Hill Publishing Company, Inc.

## GREAT NEWS

*for the Listener.... for You*

**D**URING the next three months news events of extraordinary interest will be crowding the air. At tremendous outlays, the broadcasters are making elaborate plans to cover the big events in sport and politics which everyone will want to hear.

Here is the list. Study it carefully yourself. And have everybody on your selling force familiarize themselves with these dates:

KENTUCKY DERBY .....	Louisville	May 7
THE PREAKNESS .....	Pimlico	May 14
REPUBLICAN NATIONAL CONVENTION ..	Chicago	June 14
INTERNATIONAL REGATTA .....	Poughkeepsie	June 20
YALE-HARVARD BOAT RACES .....	New London	June 24
DEMOCRATIC NATIONAL CONVENTION ..	Chicago	June 28
INTERNATIONAL OLYMPIC GAMES.....	Los Angeles	July 28

Let the public in your vicinity know what's ahead on the radio. Use your windows, the newspapers, the telephone, personal calls. Make these dates the entering argument to get servicing jobs, tube replacements, and sales of new sets of modern tone quality.

The months ahead are months of "great news" for radio listeners, —great news for *you*, too.



# The Broadcasters are Working

**I**NVESTIGATIONS made by the editors of *Radio Retailing* indicate that hundreds of thousands of radio sets now in use are in need of overhauling. Many antennas should be reinstalled, tubes should be renewed and vital parts repaired or replaced. Frequently a new set, of better tonal quality, is the only proper answer.

As pointed out in last month's issue, here is a wide field for immediate sales work on the part of radio dealers and radio service men. It means getting out and making *calls*. Calls on all houses in your neighborhood *with* antennas, to see if their sets are working properly. And calls on all houses *without* antennas, to sell them on radio and modern sets.

To speed up this concerted dealer effort to "Rejuvenate Radio Reception" in all parts of the country, *Radio Retailing* has secured the cooperation of the broadcasters, both the national chains and the independent stations, to aid in a country-wide campaign to get the listening public to—

1. Demand high standards of radio reception, freedom from noise, etc.
2. "Call in the Nearest Radio Dealer" to recondition that radio set, in preparation for the important feature and political programs just ahead.

From the broadcasters' point of view this campaign is adding thousands to their "circulation."

For the radio industry it means the employment of service men; increase of profitable sales and service business. Specifically it spells the sale of new sets and of many new parts and tubes.

For the listener it means a better appreciation of just what "tonal quality" really is and a recognition of the value of the newer sets in this respect.

During April, broadcasting stations all over the nation cooperated with 20-word announcements, several times daily, to this effect: "If your radio set is giving trouble see your nearest radio dealer."

**T**WENTY thousand dollars worth of chain-program time was made available by NBC, during March, to the cause of better radio reception. Millions heard the editor of this magazine tell about set troubles, in dramatic presentations. These talks always concluded with the suggestion: "See your radio dealer."

Last month Columbia got behind this campaign. Informative programs were scheduled over its 90 stations. These also tied in with this same theme.

Furthermore many independent stations contributed periods in the interest of better reception. The managing editor of *Radio Retailing* delivered two addresses over WOR, Newark, N. J., on the subject, "Getting the Most from Your Set." And technical editor, MacDonald, spoke over WMCA, New York, taking for his subject, "Recipes for Better Reception."

Even the international air-lanes were charged with the message, "Rejuvenate Radio Reception." The famous round-the-world circuit organized by the General Electric Company's short-wave engineers, in collaboration with stations in Holland, Java and Australia, was on April 13, employed by O. H. Caldwell to carry the slogan of better

*You can tie in with this campaign to*

## “REJUVENATE RADIO RECEPTION”

*by*

Telephoning your customers and prospects, asking them “How’s Your Radio Reception?”

Writing your prospects who have antiquated sets.

Putting cards in your windows announcing “If Your Radio Reception is Not Satisfactory, We Can Fix You Up!”

Starting your service men out on door-to-door calls in your vicinity.

*for* **YOU**

radio clear around the world and back to Schenectady, in the twinkling of one-seventh of a second. Incidentally, the various links in this round-the-world relay hook-up, were able to reach *every nation on the face of the globe*, so that if listeners with short-wave receivers were listening in at any point of the earth’s surface, they were able to hear the message, “Call in your nearest radio dealer.”

In his second WOR address, Mr. Sutcliffe advocated the holding of neighborhood meetings for frank discussion of ways to “get the most from your set by eliminating outside interference. It is embarrassing, he said, to have to tell a neighbor that his electrically-operated oil burner or some other item of electrical equipment is ruining one’s reception of favorite programs. But joint discussion of the hum and clatter problem would bring out, in all friendliness, the right things to do to stop the noise nuisance, or at least to reduce it. The discussion would also demonstrate the fact that the set owner whose programs are being ruined by his neighbor’s electrical appliances, is in turn ruining the reception of others by appliances in his own home.

BROADCASTERS TELL LISTENERS—“SEE YOUR RADIO DEALER”

**J**UST as the constant dropping of water wears away the hardest stone, so the most effective results of the present campaign will come from the constant repetition of the short reminder-messages. The response of the hundreds of independent stations, to our request for 20-word “air time” has been most gratifying. Thousands



*The sensitiveness of one's radio set was shown by broadcasting the electricity of the heart over NBC networks*

of between-program announcements to “Call in your radio dealer and have your set checked up” went on the air last month. And as many more will be broadcast during May.

Why are the broadcasters cooperating so heartily with this plan? The answer is quite simple—up till now, however, it never has been crystallized or translated into action. It is this: sustained listener interest is necessary if the broadcasters’ sponsored programs are to “pull.” To achieve this objective two things are necessary, interesting programs and satisfactory reception. And, apart from the character of the transmissions, there is only one person who can take care of this latter requirement—the radio dealer. In other words the interests of the broadcaster and of the dealer are mutual. They center in “listener interest.”

So, for the first time in the history of radio, the broad-

## *What the Broadcasters Say about Radio Retailing's Campaign to* "REJUVENATE RADIO RECEPTION"

### NBC

The radio industry and the editors of *Radio Retailing* are indeed to be congratulated on the campaign now underway to "call in the nearest radio dealer" to put sets in first-class operating condition this spring, in preparation for the coming political conventions. From the broadcasters' point of view this good work will add many thousands of circulation for the broadcasters.

M. H. AYLESWORTH, *President*

### CBS

The steady advance in the quality of radio programs and their transmission, is lost by those who have antiquated or inferior receiving sets. There are countless sets that should be replaced or should at least be overhauled. The editors of *Radio Retailing* are to be congratulated upon their campaign to influence the public to demand high standards of radio reception.

WILLIAM S. PALEY, *President*

### WOR

We are glad to cooperate in this constructive movement.

J. C. McCOSKER, *General Manager*

### WMCA

I feel the radio audience will be keenly interested in your campaign for better reception by listeners.

DONALD FLAMM, *President*

### KOOS

We congratulate you on your timely effort, and the thorough way you have gone about it.

W. E. BRAINARD, *Manager*

### WGCM

We are glad to cooperate in this nationwide movement.

H. A. GENUNG, *Manager*

### WOW

We have taken your suggestion, which we think is a very good one.

J. J. GILLEN, JR., *Director*

### WOL

We will be happy to cooperate.

F. P. PFAHLER, *Director*

### WDAE

We believe this campaign will be beneficial to all.

L. S. MITCHELL

### KRLD

Your idea is sound, and will do the entire industry good.

A. L. CHILTON

### WMAZ

One of Macon's leading radio repair shops will use your material in their programs.

EDWARD K. CARGILL, *President*

### KBTM

Your campaign is OK.

JAY P. BEARD, *Manager*

### KPQ

We are glad to cooperate; thanks for suggestion.

II. M. FELTIS, *Manager*

### WTIC

Proper education along this line is badly needed by the public.

P. W. MORENCY, *Manager*

### WBMS

We are cooperating with frequent use of the announcements.

W. W. WEST, *Director*

### WMAQ

Every one will benefit from stimulating an interest among set owners to put their sets in shape.

WILLIAM J. HEDGES, *Director*

### WCSH

We are using the announcements frequently.

L. T. PITMAN, *Manager*

### WSPD

We are in hearty sympathy.

DWIGHT NORTHRUP, *Director*

### WRC

We are beginning immediately to make your announcements.

VINCENT CALLAHAN

### WBSO

We will be pleased to cooperate further in the movement to restore radio sets to satisfactory listening condition.

C. A. LOVEWELL, *Manager*

casters have officially recognized this situation and are cooperating with you, Mr. Radio Dealer, in expanding the size and increasing the number of listening hours of the radio audience.

Already ample evidence has accumulated in the files of *Radio Retailing* that this plan, from John Listener's angle, is working out. Many set owners have written that their sets are giving trouble, and request curative suggestions. These letters have been sent to local dealers.

Radio trade associations have gotten behind this plan and have worked out cooperative promotional ideas with their members for taking advantage of the public interest

which has been created by the broadcast addresses and announcements.

And the set makers are enthusiastic. "I commend *Radio Retailing's* plan for "rejuvenating radio reception," says David Sarnoff, president of the Radio Corporation of America. "Radio dealers should pay more attention to this phase of their business."

This puts it up to you, Mr. Dealer.

Are you taking every advantage possible—outside calls, telephone calls, window displays, newspaper advertisements—of this nation-wide movement that is aimed to help you get more business—profitable business?



### *How to Figure . . . .*

**Cost Percentage:** Divide your gross expenses by gross sales.

For example—if sales for the year were \$30,000 and expenses \$5,870, then your percentage of expense would be 19.5.

**The Selling Price:** Add together the percentage of the cost of doing business and the desired percentage of net profit. Deduct this from 100. Divide the result into the cost price.

In determining the selling price of an article, three points must be considered if a correct profit is to be gained: The cost of the article plus the freight and drayage; the cost of doing business, or the overhead expense, and the profit itself.

**Capital Turnover:** From your gross sales for the year

subtract your gross profit. Into this divide the average amount of stock you have been carrying through the year.

**Percentage of Profit:** Never, *never*, figure your percentage of profit on cost. Burn this rule into your brain. It will save loss. It will save worry. It will increase net returns. Profit comes out of the *selling price*, not out of cost.

You buy a tube for a dollar and place it in your stock. You buy it so you can gain a profit. Where are you going to gain this profit—out of the dollar or out of the article itself? It is obvious that you will gain no profit at all from this item until you sell it.

Then you sell it, say for \$1.50. You pay for it and have 50 cents left. This 50 cents is part of the \$1.50 you *get* for the tube—not a part of the dollar you paid for it. The 50 cents represents your gross profit.

# New Musical Instruments

MUSICAL tones of a sweetness and purity never before produced; instruments permitting a range and delicacy of touch to do justice to which a new generation of composers will be required; violins that turn into French horns at the twist of a switch, —these are among the revolutionary new electronic musical instruments now being demonstrated before the public and attracting wide interest among both musicians and laymen. Dr. Walter Damrosch discussed the future of these new instruments from the musician's standpoint at a meeting in New York recently. Dr. Leopold Stokowski has been making use of similar electronic oscillators in his Philadelphia orchestra recitals.

These new electronic oscillators make it possible for the musician to create any wave-form, timbre or tone effect he desires, and they afford a delicacy of control undreamt of with our present instruments.



*This new Miessner instrument can be played as a piano and as an organ, and as the source of tones duplicating those of the flute, French horn, violin, piccolo, music box, etc. Piano strings are used as the source of the vibrations, which are then amplified and recombined electrically, and heard through a loud-speaker*

*Dr. Leopold Stokowski had this keyboard electric oscillator built especially for his Philadelphia Orchestra. It is used to build up rich, deep volume, supplementing the bass viols*



*Professor Leon Theremin and his fingerboard "radio cello." With the left hand, he fingers a contact strip, as he would the strings of a viol, and with the right hand he works the volume lever*



# When they STOP

on a

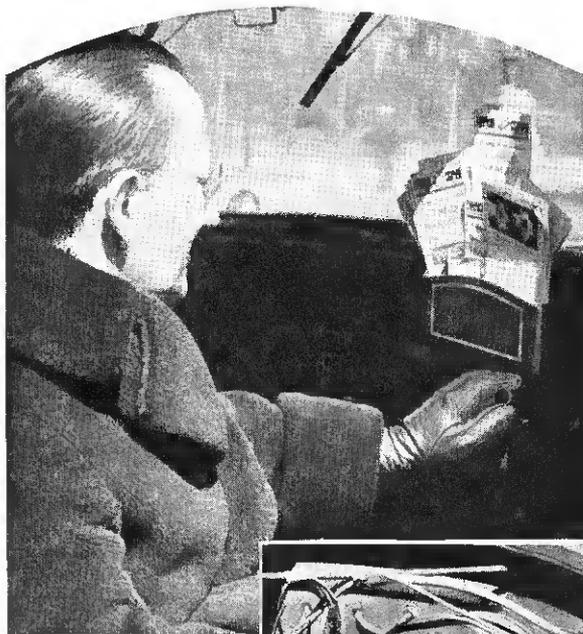
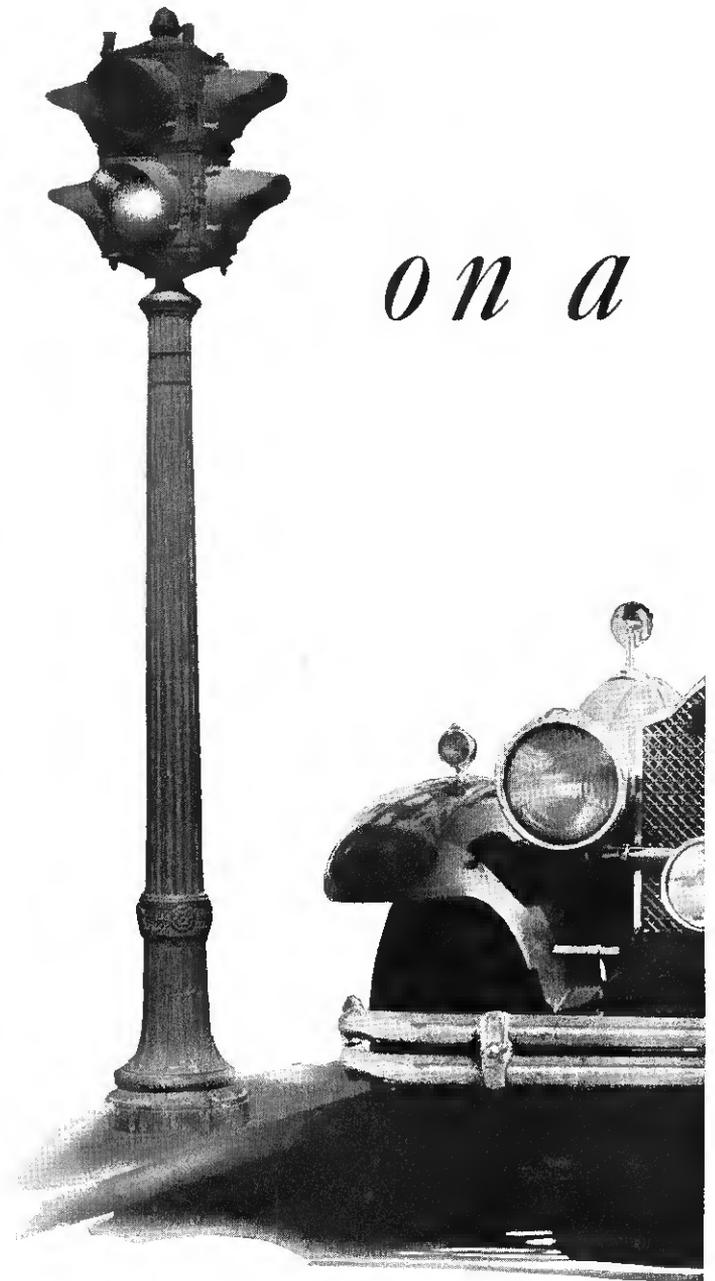
“WHAT kind of a set’s that, Bud?” . . . this from a car pulled up on a traffic light beside Frederick N. Crouch’s radio-equipped Durant.

Krauss Brother’s salesman edges to a window, leans out, passes a circular and business card. “Read this when you get home,” he requests. “Tells all about ‘Transitone’ . . . We sell em, install ‘em and guarantee ‘em . . . call me up when you want one.”

Lights change. The two cars plunge ahead, separate in heavy New York traffic.

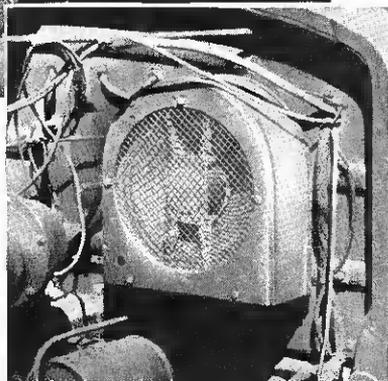
Do prospects so contacted, then released without any attempt to high-pressure, ever come back? They do in the auto-radio business. Forty-seven encountered in just this way (July, 1930 to March, 1931) later brought their cars to 110 West End Avenue for installations. “Curbside” selling, as practiced by Crouch, has proved itself to be completely practical.

For the past eight months this truly “outside” salesman has driven his car daily through Manhattan’s busiest streets in search of business, with his radio



Circulars are carried, ready for the “hand-out,” in a dashboard rack

An auxiliary speaker, mounted under the hood, makes itself heard up and down the street



## Frederick N. Crouch Has Developed

turned full-on and a handful of circulars. “I wait until they smile, or ask about the set before I spring my 60-second talk,” he explains. “Sometimes they ask me to pull over to the curb and get a more extended demonstration. But I have never gone into my act or asked for a phone number without encouragement. Auto-radio is so new, so universally interesting, that cold-canvassing so far has not been necessary. People ask for information. All I have to do is park my car where there is plenty of traffic and let the set do the rest.

“No use going out on this sort of a job early in the morning. I work from 2 p.m. until late in the evening and have occasionally cruised around even as late as 2 a.m. with good results. Theatrical districts, at about 11 p.m., are the best cruising areas. At that time the sporting element, people who value entertainment and have the money to pay for it, are out in force. Expensive cars with ladies in the party are especially good

# He Sells Them LIGHT..... AUTO-RADIO



## a Unique "Curbside" Approach By Which He Sold 47 Sets In 8 Months

prospects. I innocently drive up beside such cars, tune in dance music and wait for somebody to ask questions—as they invariably do."

**A** PLEASING approach is obviously essential in this kind of a business. (Either you have it or you haven't!) Crouch knows just how to please people, comes from an old family of songwriter-actors. (His father wrote "Kathleen Mavourneen.") Other experience—30 years in the automobile business as salesman, sales executive and Norfolk, Va., Ford dealer. Represented Durant in recent years, working with wholesalers. He's 60 years old, but doesn't look 40.

"My auxiliary speaker helps attract attention," he tells us. "It can be heard above ordinary street traffic through radiator and hood louvers. The boys are going to give me a new set this month which will be equipped with a microphone and turntable. I can play records

then when there are no good broadcasts, and the 'mike' will come in handy when a crowd gathers.

"Sometimes I park at the curb and circularize pedestrians. Many of these have cars at home. Across the street from Wurlitzer's on 42nd Street is my favorite stand . . . I got a lot of business out of that spot until the cops jumped me for blocking traffic. People coming out of the music store were good prospects for radio in any form, you know.

"It is not always necessary to go looking for prospects. I had one chase me down Riverside Drive the other day. Imagine me actually running away from a sale! A woman in a Rolls must have heard me as I passed. She instructed her chauffeur to follow and find out how I got such good reception. He trailed me 15 blocks before he could come up and then his madam asked a few questions about the set, fished a card out of her bag and made an appointment on the spot for an installation."

By

E. L. Gruenberg



*He works with his  
the net earnings of*

# 4 HEADS

*are better*



MAX DENOWITZ

*outside sales manager*



SANDE HORDES

*Jackson Avenue store*



A. E. KNOLL

*Union City store*

THE most vital problem the radio dealer faces today is that of getting a better ratio between costs and receipts, reducing overhead expenses without crippling the store's efficiency. The problem is four-fold with us, as we have two stores in Jersey City, one in Union City and one in West New York, N. J.

Last year our sales were 14 per cent under 1930, the best year we ever had. Our overhead expenses, however, were cut one third. And not one employee had his salary cut (a 10 per cent reduction was effected in January, 1932). However, everybody worked harder and covered more ground.

Economizing in a business is like surgery. You have to be very careful to cut out the dead tissue, without destroying the living. It's a job of constantly watching, weighing and working. We have found that many of the things we did several years ago at a profit are unprofitable today. And some of the things we are now doing to trim costs never occurred to us before, because we didn't *have* to cut corners.

Take automobile expense. There was a time when we had four delivery cars. Now, by planning routes more carefully, and also because sets are smaller and easier to handle, we require only two. Our service men deliver all midgets. The store used to pay all bills for service cars—gas, oil, tires, repairs. Now we allow our men \$25 a month for auto maintenance—on the old basis it used to cost us \$50 a month per car. It's surprising how much more careful a driver becomes under this plan. He'll drive more cautiously, change his own tires and shut off the engine when he parks.

Under "transportation," in other words, we have eliminated the wages of two men, and the cost of running a truck and a sedan—which totalled \$4,200 a year—not counting the \$600 now saved on operating costs of the remaining two trucks. In the month of December, we also saved several hundred dollars by hiring a man who has his own truck to take care of extra holiday deliveries, instead of renting a car for the busy season at a

*managers to increase  
his four radio stores*

*than* **1**

cost of 11 cents a mile as we did in December, 1930.

We now have two service men instead of three, saving an additional \$1,560 per year. One man handles the work of the two stores in the north end of the county while the other takes care of the Jersey City stores. This is accomplished partly by spreading out the work more evenly. And where we used to consider it necessary to service every set immediately we now give instant service only where it is absolutely essential. We also take advantage of distributors' guarantees on new sets, having them do shop repair work when our men are busy. Formerly, we did this work ourselves to save time and bother.

Savings on incidentals alone ran into several thousand dollars. For example, we cut down on display materials. We borrowed "props" from other stores instead of buying them and made greater use of manufacturers' free display pieces. Every month I go over all expense items and compare them with the previous month and the corresponding month of the year before. If the lighting bill runs high at one store, I find out why. If the telephone bills exceed the usual amount, I find out whether the increase was due to business or to some employee's private use. Our electric bill has been cut \$400.

**I** HAVE to get everybody's cooperation on things like this; my employees have to work with me. When we found that our store at Union City needed painting inside, we all pitched in and did it ourselves, using \$13.64 worth of paint and some borrowed ladders. Otherwise it would have cost at least \$75. Two years ago, we would have said, "Our job is selling, get some one else to do it."

Advertising cost \$8,500 less in 1931, but the amount of space used was about the same as the preceding year, largely due to better manufacturers' allowances. In May, I let four window-cleaners go. This alone saves \$40 a month, \$480 a year. We all jump in every morning now and spend a half hour cleaning up the store. We polish

## Some 1932 Economies

• *Our outside selling costs have steadily risen, from 8 to 17 per cent . . . so we try to sell more sets from the store*

• *We put a \$10 finance charge on sets listing below \$50 and only 6 per cent on receivers retailing above \$100 . . . this gives us more margin where we need it*

• *The company used to pay car maintenance expenses directly, now we make employees do it out of a \$25 monthly allowance . . . they save us \$50 a month*

• *We use more manufacturer's display material in our windows . . . and borrow "props" from other stores*

• *More careful routing of calls and delivery of all midgets by servicemen, enabled us to cut out two trucks, and two drivers . . . saving \$4,200 last year*

the floors, clean the windows, arrange the stock. Every item counts.

We have a little nook in the wall used for displaying appliances. This used to use two 200 watt lamps, burning 13 hours a day, or 2,600 watts. We have lined this display niche with silver paper that reflects a lot of light and makes the merchandise stand out without special bulbs.

We don't cut for the sake of cutting—it has to be a net saving. We still pay a window-trimmer to handle the windows in each store at \$7 a job, because he can do it better. We have to make our selling more efficient, too. We don't put so much emphasis on out-of-the-store selling as we used to—it costs us more today. In the old days, cold-turkey selling cost us only six per cent, plus overhead expenses of the stores. Today it runs much higher. First the cost went up to 8 per cent, 10, then 17, and that's when we cut out cold turkey. Now, we follow up leads, and concentrate on selling a bigger percentage of the people who come into the store.

It costs just as much to sell a cheap set as a good one, so we step up the sale whenever possible, by placing higher financing charges on the small set than on the big set. We have a \$10 minimum financing charge on \$50 midgets, a ten per cent charge on midgets above \$62 and six per cent on sets above \$100. The \$10 charge helps us make a profit on the cheap set, if we do sell it, and if we don't, helps step up the sale. This makes for economy in selling. A \$2 a week prospect might just as well pay

his \$2 a week on a \$150 set as on a \$50 set, it's just as painless, only it lasts longer. Following this plan last year, our sales were 200 per cent ahead on a line where the cheapest model sold at \$150. Our average unit of sale in 1931 was a little over \$100. We don't want low-unit, cash trade; convert such customers into credit buyers.

Getting people back to the store frequently paves the way to sell them something else. We have sold 1,200 cleaners (G.E.) in our four stores. We have sold 75 electric refrigerators, at an average cost of \$220 each, since the fall of 1930, and 50 washers since the spring of 1930. This requires no more rent, sales help or service. These sidelines help take care of overhead. Incidentally, our refrigerators are delivered by a local hauler, who charges \$2 to \$4, which is much cheaper than if we made permanent provision to handle our own deliveries on this class of merchandise.

We managed to effect some reductions in selling expense. There were several crews out plugging radios and washers in 1930. We used to pay each man \$1 a day drawing account, plus commission. Therefore if we compare sales of 1930—our peak year—with sales of 1931, we don't get quite the full picture, for part of that volume in 1930 was secured at high selling expense. We found that the most profitable way to sell a lot of radios last year was by theatrical exploitation. With the cooperation of local theatres we were able to sell many at an extra cost of 4½ per cent, with no salesmen's commissions to be paid out.

We used the theatrical exploitation idea four times last year. The costs for a typical event of this kind ran as follows:

Printing 10,000 numbered, perforated tickets.....	\$20
Two display signs, 6 by 10 feet each.....	10
6,000 "bonds" printed in two colors.....	36
6,000 envelopes .....	20
6,000 letterheads .....	9
Multigraphing .....	9
Postage .....	120

Total      \$224

Compiling of lists, filling-in of names and addresses, and stuffing the envelopes was done by our employees. Results of this event were 44 radio sales, most of them at \$108.60, a few of them being higher priced sets.

This method of selling is just as economical in 1932 as it was last year. March would have been a very poor month without it. As it was, we could not complain. Through theatrical exploitation we sold 24 *extra* sets that we never would have sold otherwise, and it was good, clean business, too. Our 10 per cent rebate check brought in a bigger percentage of cash buyers, and after all, the customer might as well have this 10 per cent as an outside salesman, particularly if you get extra business without trouble or risk.

The answer to whether or not such a policy pays is best revealed by a comparison of our figures for January, 1931 and January, 1932.

	Jan., 1931	Jan., 1932
Sales .....	\$28,000	\$20,000
Expenses .....	9,500	5,000

These figures are not to be paralleled every month, but they do drive home one powerful fact: After all, it is only the *net* that counts!

### "Are You Getting W Y Z"

"ALL selling is pretty much the same. If a man knows the fundamentals of salesmanship, he can sell anything."

When we hear that whiskered fallacy, as we do rather often, we think of a radio dealer down in Philadelphia. A couple of years ago, he decided to go out after business by house-to-house canvassing.

"What I need," he said, "is some good specialty salesman. All house-to-house canvassing is just about alike."

So he advertised for men with experience selling electric refrigeration and oil burners.

In the course of three months, he had eleven of these specialty men. The longest any man lasted was three weeks. Not one of them earned a living wage.

They knew selling, all right. They'd had a lot of good hard experience in many kinds of canvassing. "But somehow they couldn't seem to sell radio sets." So this dealer gave up the idea of house-to-house selling.

ABOUT the same time, a radio dealer up in Massachusetts was tackling the same problem. But it didn't occur to him to look for any easy path to wealth by hiring some ready-made selling ability. Instead, he called in his service man.

"Joe," he said, "you and I are going to call on a lot of people and see if we can interest 'em in buying new sets. I don't know how we're going to do it, but mebbe we can find out."

When the dealer came back to the store that afternoon, the service man was still out. But pretty soon in he came, with an old table set under his arm.

"Thought I sent you out to sell new sets, not to pick up repair jobs," said the dealer.

"Yeah, I know," said Joe. "But I didn't seem to get anywhere talking about buying new sets. So I tried something else."

"I rang the bell at the Bronson house, down on Caldwell Street, and said I was a service man checking up on reception. Asked Mrs. Bronson if she was having any trouble getting W Y Z. She said yes, she was—like most people around here—so I said if she wanted me to I'd look at her set and see what was wrong."

"I looked over the set and found she wasn't getting very good reception. So I asked her if I could bring the set in to the shop and test it."

"WHAT'S that got to do with selling her a new set?" asked the dealer.

"Well," said Joe, "she'll be in here tomorrow afternoon to see what's wrong with her old set. And it struck me that if we got her to listen to one of the new Sparklers and compare it with the old set, mebbe we might sell her the Sparkler."

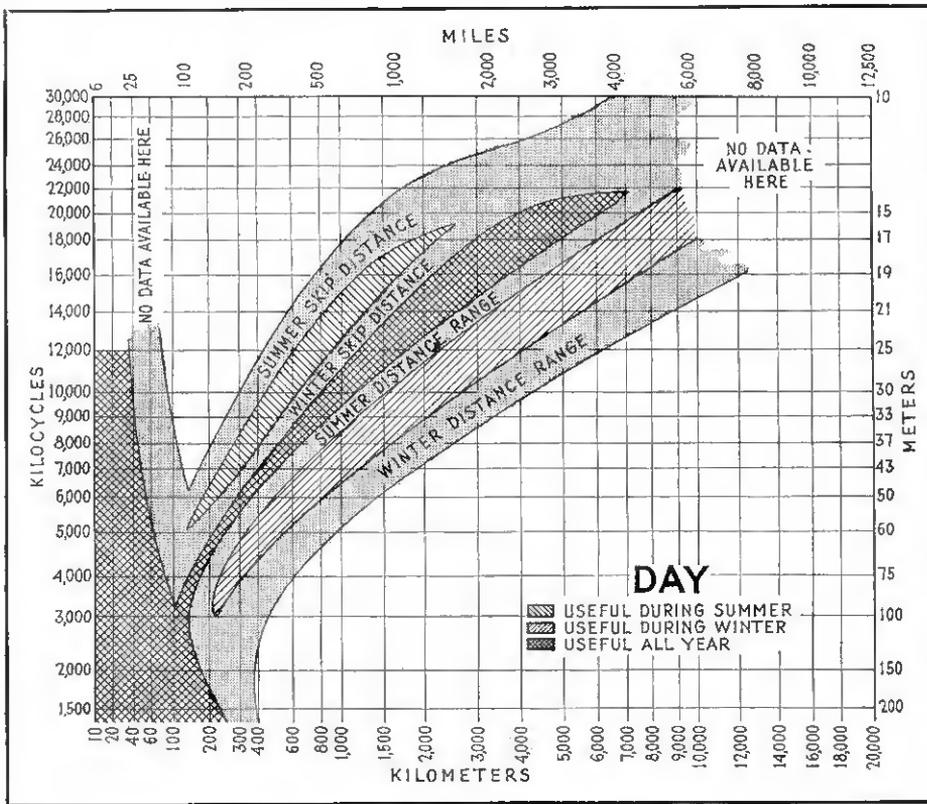
For about two years, now, that method of selling radio sets has been producing nearly four sales a week for Joe's store.

And the point is that this method didn't come out of any mythical storehouse of specialty salesmanship. It came right out of the radio business itself.

*The above article is reprinted from a pamphlet, "The Executive Viewpoint," published by Trade-Ways, Inc., New York.*

# Shortwave DX

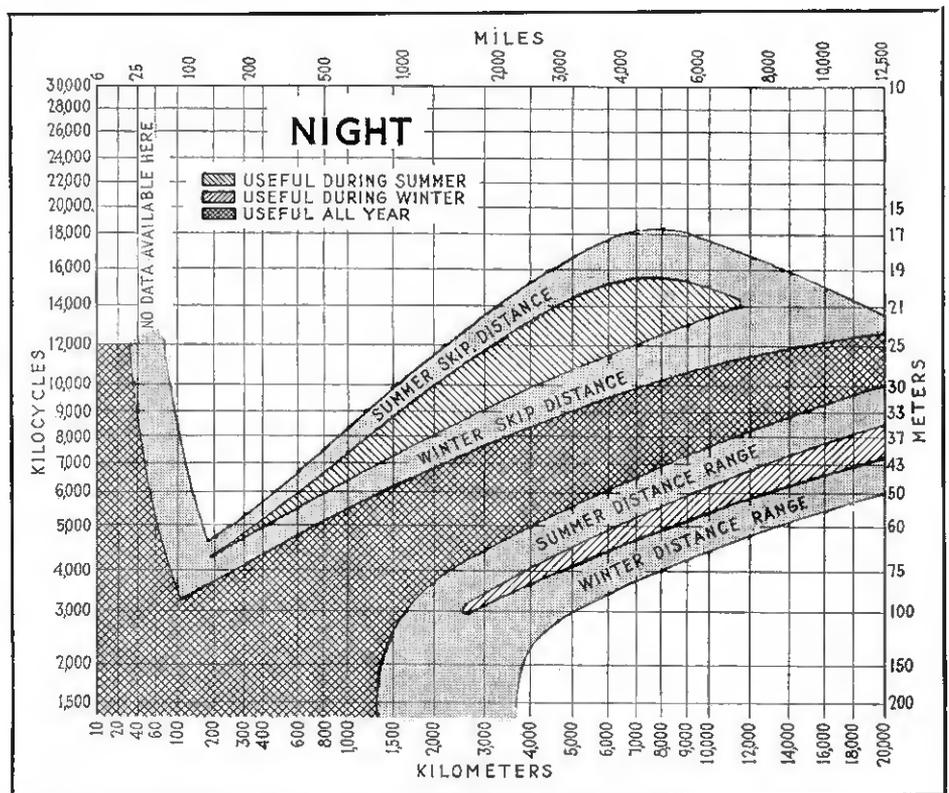
*When and Where  
to  
Tune for It*



THERE are shortwaves which are useful at night and shortwaves which are useful in daytime—neither adapting themselves particularly well to extreme distance under reversed conditions. It is usually futile, for example, to tune for a 60-meter station 3,000 miles or more away when the area between transmitter and receiver is in daylight, or to look for a distant 20-meter station when the intervening area is dark.

Shortwave transmission has a habit of ignoring rules at times but the charts which appear on this page, arranged from data compiled by the Radio Division, U. S. Department of Commerce, indicate what may ordinarily be expected in the way of dx between 10 and 200 meters, summer and winter, in daylight and in darkness. We recommend that those interested in shortwaves take the time to study these valuable charts carefully for they explain many of the so-called transmission "freaks" which occur "below 200". It should be noted that "Night" conditions apply where most of the area between transmitter and receiver is dark, "Day" conditions where most of the intervening area is light. International time-conversion tables and station wavelengths are available elsewhere. (RRNov31)

Shortwave signals "skip" over local areas. Thus stations which are supplying programs to points on the other side of the world may be inaudible to listeners only a few miles away. This interesting phenomena . . .



which, incidentally, is responsible for the great dx achieved by shortwave signals . . . is also charted. On the "Night" chart, follow the horizontal line marking 37 meters (8,000 kc.) from left to right. A station transmitting on this wavelength in the summer would probably be audible up to about 27 miles, then "skip," to be heard again only at 750 miles and beyond.

In general, stations operating above 30 meters (below 10,000 kc.) should be tuned for when the intervening area is mostly in darkness and stations operating below 30 meters (above 10,000 kc.) when the area is light.

# Tube Prices

## *Declare DEALERS*

### Survey Substantiates "Radio Retailing's" Frank

**H**OW do dealers and jobbers view the tube situation? What do they want? During March we questioned 500 tradesmen on these matters. Their replies were surprisingly similar.

Eighty per cent declared that there was no worthwhile profit—no special incentive—in pushing tubes at present price levels. A majority thought that today's adjustment policies were too lenient.

"What should be done to rectify matters?" *Radio Retailing* asked.

"Stabilize prices at former levels," 91 per cent replied, in effect. Even those dealers reporting a profit from tubes preferred to do business at higher lists.

Despite the fact that liberal replacement policies can be made to operate in favor of the dealer, 65 per cent of all returns implied that stricter guarantees and replacements would be mutually beneficial.

We asked also for constructive suggestions. For example: "What are the possibilities of selling the tube replacement market by the house-to-house canvass?"

Here again, present low price schedules were named as the deterrent—by a majority of 74 per cent.

But let the actual replies speak for themselves. Here are typical examples:

#### Price Schedules

"Prices are too low. Dealers can buy nationally known tubes as cheaply as we jobbers can. The incentive to sell has been killed."

"Handling cost too high on defective, or supposedly defective, tubes in proportion to volume of sales."

"It is a shame as so much business could be obtained in tubes if the manufacturers would but price their merchandise as it should be."

"Can anyone explain the colossal stupidity of (XYZ) in lowering the list prices on tubes the latter part of last year? There certainly has been no wild scramble by the public to buy tubes because prices have come down to the level of Mazda lamps."

"Can now just break even. Have low overhead in small town, otherwise would lose money."

"Profit can be made at any price providing: 1. Prices become stabilized and uniform; 2. Likewise discounts; 3. Special offers be eliminated or made throughout the trade at same time; 4. Prices are sufficiently low to discourage price cutting."

"Prices are not too low if tubes are sold everywhere at list prices and jobbers sell only to radio dealers."

"We are not distributing tubes now. When conditions stabilize we will start them again."

"Our tube volume was over \$1,000 per month before the price drops. Now it is only about \$350, and we work harder for that."

"Can still make some money, by working twice as hard and getting greater volume."

"Okeh! Because we handle a line over which we have direct control on dealer discounts and list prices."

#### Suggested Remedies

"Price tubes so that there is a margin of profit for the dealer and jobber. Appoint legitimate outlets. Suggest discounts which the trade will recognize. Control production."

"Tube sales should be final; no replacements being made on tubes which, when sold, test up satisfactorily."

"Raise prices 50 per cent. People will buy just as many tubes as they do now. We dealers should give up free testing except in the store, make a service charge for house calls. Hold warranty to 30 days."

"A standard, workable replacement policy. The average dealer would gladly adhere to any organized constructive effort of the tube makers."

"Eliminate 'second' tubes and special concessions to large buyers. While this business may seem very attractive at the time, can't the tube manufacturer realize that it is taken only at the loss of his regular, year-in-and-year-out dealers?"

"Eliminate all guarantees and charge for replacing tubes." (This, from a dealer.)

#### House-to-House and Replacement Selling

"At a \$3 list dealers would sell house-to-house and move millions of tubes for replacements that, otherwise, would never be sold. Cannot now afford to test tubes free in the home."

"The possibilities of selling tubes, in the home, were, and should be, good. Under existing price conditions, however, they now are poor."

"Could sell in home except for tight money. Handle only standard brands and carry portable tester."

"Tube canvassing must be considered only in the light of its relation to leading to greater sales in some other

# Too Low

and JOBBERS

## Editorial in April Issue on Tube Situation

products carried by the dealer. As such it still is worthwhile."

"The manufacturers have done a good job advertising the need for replacing tubes. If customer's confidence is restored in one price for all and unfair competition is eliminated, the dealer can still earn a good profit."

"When tubes sold for \$2.50 to \$3.50 it paid the service man to make special sales calls to replace tubes. But now, even with a service charge, this does not apply."

"With two new tube testing outfits well located in the store, with a special clerk, and with special effort to sell a complete replacement kit—based on new low prices—we have increased volume."

**B**UT, it may be argued, the dealer is a natural pessimist; these replies are not typical of the true situation. Answering this contention, it should be pointed out that the "run-of-the-mill" dealer constitutes the primary outlet for the tube manufacturer's replacement business. And that the viewpoints presented in the preceding excerpts certainly do represent a true cross-section of radio's present retail structure.

Another interesting feature of the tube situation is that the tube executives themselves, with few exceptions, hold the same viewpoints. For example—commenting on *Radio Retailing's* leading editorial in last month's issue: "TUBES . . . Volume Greater, but Profits Vanish"—the president of one well-known tube concern writes:

"Your editorial is well written and, in the main, quite true. Several items you mention are of great interest in cleaning up the tube business and putting it on a firmer basis."

The president of another tube company says:

"We are thoroughly in accord with your ideas (the editorial in the March issue). The things you propose are definitely constructive. We need a 'Will Hays' in the radio industry. We hold ourselves in readiness, Mr. Sutcliffe, to cooperate in every way possible."

And this, from one of the largest tube corporations in the country:

"I am heartily in sympathy with any practical measures the industry can take to improve conditions. The four points you mention offer a pretty big job, frankly, a difficult one to accomplish. I do not agree that overproduction is the cause of present conditions. Excess competition is much more to blame. You have my sup-

port in anything that you can do to improve matters."

"You are on the right track," writes another manufacturer.

**W**ITH the dealers, jobbers and tube makers practically in agreement as to the causes behind today's state of affairs, and with each pledging support to any constructive, cooperative movement, what stands in the way of putting these measures into effect? The answer is, self-interest. This springs mainly from lack of a broader vision, from the financial expediencies of the moment and from the merchandising tactics of the cut price retailers and jobbers.

The situation cannot be corrected overnight. But, with the causes and remedies so clearly outlined, and so universally accepted by all parties involved, surely a start can be made. And the Chicago convention offers a logical focal point from which to begin.

91% want

"Stabilized Tube Prices at Former Levels"

65% want

"Stricter Guarantee and Replacement Policies"

50% want

"Special Offers to Job Lot Outlets Discontinued"

# The Woman's Viewpoint *from* Both Sides

“I TRIED every store in town but just couldn't help giving Mrs. Horton my order,” said Mrs. Murray to the writer the other day. (This is not a fictitious interview.)

“Why?” I asked her.

Here are her reasons:

“Frankly I started out to shop for price and terms but somehow I seemed to lose confidence in most of the salesmen I talked to. They were over-eager to make a sale. They offered me too much and were too full of promises. The man who offered me \$15 for my old set but who came up to \$30 when he saw I was leaving the store alienated my affections then and there. I felt that he had been trying to take advantage of me in the first place.

“One store where I applied insisted on running down the set I inquired about and praising his own. I got the impression that he was not sincere about it, either, but was merely trying to get rid of what he had in stock. In another store they took me up in one of these hand-run elevators to a floor where the salesman and I were alone and he wouldn't let me escape. I felt shut in and hunted, and I wouldn't have bought of him for anything.

“I resented the people who desperately wanted to sell me something. I don't believe the stores realize how much housewives have to suffer from the book agent type of salesmen at their front doors and how much they rebel against such tactics, wherever they come across them.

“One of my grievances against all of the stores was that they kept demonstrating to me and talking about programs I wasn't even faintly interested in—mostly jazz, which I find positively painful. Our family likes the radio for lectures, news events, good singing and athletics. Not one of the salesmen, until I came to the saleswoman I bought from, asked me anything about what I liked or tried to find out why I was giving up the old set for a new one.

“I don't know if other women think as I do, but I believe there are a great many who would prefer to pay in a shorter time than most dealers suggest. I know *(Please turn to next page)*



*Why I Bought My Set from* Mrs. Horton

By Mrs. F. B. Murray

# of the SALE



**T**HIS is a woman's viewpoint on the retail selling of radio. As the wife of a successful radio dealer, and as one who has contributed a good idea now and then to her spouse's selling plans, I believe I have the formula behind the feminine appeal in the selling of the modern radio receiver.

Selling radios is like selling anything else: it requires that you know and believe in your goods, and that you understand your customer.

In the first place, my husband and I believe radio to be the most wonderful of modern inventions for providing home entertainment and genuine happiness. I think because we have so much confidence in our belief that we have been successful in making women customers appreciate radio.

When I say that radio is one of the greatest social comforts, I mean that every radio retailer should understand it in exactly that fashion. The radio dealer should understand that the set he is selling will bring every variety of wholesome entertainment and worthwhile information into the home. If he feels these fundamental things and uses their appeal with convincing arguments, he can sell any prospect.

Remember that women are the great buying factor in the radio industry. You must find out why a woman will buy a radio or influence her husband to buy one.

She will buy a radio because she knows that the installation of a good set in her home, office or club will bring happiness, yes, and an occasional tear. We women enjoy a dash of sadness now and then in order to appreciate the happiness that radio brings.

To me, and I am sure to every other woman (and this goes for the men, too), it is a pleasure to listen to good music, wonderful speeches, and the true blue efforts of the children who are frequently heard doing their little bits on the air. And these things mean so much. Ellis (my husband) tries to be hardboiled about these matters, but I can pin him down any time I care to and prove that he enjoys these same sentimental and heart-warming things the radio brings us. *(Please turn to next page)*

*Why Mrs. Murray Gave Me Her Order*

*By Mrs. E. E. Horton*

## *Why I Bought My Set from Mrs. Horton . . . By Mrs. Murray*

(Continued from page 22)

some people who are paying on half a dozen things at once, but I think most of us buy one thing at a time and want to get it over with as soon as possible. What I did finally was to pay half down and the rest within the next three months. I signed a note, but there was no interest charge.

"Another thing I liked about Horton's was that they seemed to know all about radio. Mrs. Horton explained about the various sets so even I could understand. I felt really intelligent. She didn't seem merely standing up for the different makes because she carried them. I felt that she really was giving me the benefit of her judgment, that she was on my side, somehow, trying to help me get the best for my money.

"Mrs. Horton seemed to know the business, too; had a schedule of prices for old sets which she consulted and I got the impression that there was a reason for setting this price, that this was what my old set really was worth and that I needn't try to get any more. Incidentally, the allowance was fairly generous, but by no means the most I was offered.

"I felt that the store was in good sound condition—that it was there to stay, a fact which made a difference in my decision. The dealer who offered me most for my old set and who promised most all around was, I felt, likely to go out of business any time, leaving me without anyone to take care of my set. I had heard about Horton's service from friends and knew they took care of you. This dealer's wife was friendly and genuinely interested and she was the only one who came out to see me.

"Did I buy the set I was originally interested in? No, I was satisfied with it until Mrs. Horton persuaded me I wanted one a little better. Yes, I know, that is what I resented from the other salespersons, but this was different somehow. This woman actually took the trouble to find out about my house and what I wanted to do with the new set (part of my reason for getting it is because Junior is so crazy about hearing distant cities). She convinced me that the set I first inquired about wouldn't meet my needs much better than the old one. The one I bought looks better with my furniture, too."

## *Why Mrs. Murray Gave Me Her Order . . . By Mrs. Horton*

(Continued from page 23)

And now for some of the things that help sell sets: In the first place the display rooms should be attractive. The salesmen should be courteous, obliging and neat (ask any woman, she knows).

When a prospect calls, put on your biggest smile. Be friendly but be clever about it. By this I mean there are different types of customers and you must use some ordinary psychology to handle them properly.

Remember the customer means business. She may be the shopping kind, but even if she is only looking around she is a potential buyer. Good salesmanship turns many shoppers into buyers.

Take the case of Mrs. Murray, who shopped every store in town before she came here. Now Mrs. Murray

had some well fixed ideas about what she wanted and how much she would pay.

The first thing I did was to gain her confidence. I asked her about her home, what kind of radio music she liked, why she wanted a new set and what terms she would prefer. Then I told her about our store and explained the relation between a reasonable profit and maintaining a year-after-year service department to trade-in allowances and the ability to sell quality merchandise.

Mrs. Murray was hard to sell—but she bought from us, and paid for her set within three months. After all, aren't frankness and taking a personal interest the big things when selling to women?

### *This Woman Customer*

#### *Did Not Like*

Bargaining about trade-in  
Criticism of other makes  
Too-eager salesmanship  
Unkept promises  
Lack of interest  
Lack of technical knowledge  
Demonstration of programs  
in which she was not interested  
Up-stairs salesroom

#### *Did Like*

Being allowed to fix her own terms  
Salesman with knowledge of radio  
Impartial and helpful information  
One price for trade-in,  
based on resale value  
Evidence of good business methods  
Follow-up by salesman  
Absence of high-pressure methods  
Intelligent study of her particular needs

# When

## Selling to Minors

---

# WATCH YOUR STEP

---

By Leslie Childs

ONE of the easiest ways to load one's books with doubtful accounts is to have business dealings with minors. This is because the contracts of a minor may be voided at his option, leaving the other party holding the sack. No doubt the majority of radio dealers are familiar with this rule of law. Yet, the subject is of so much importance, a brief review of its salient danger will not be amiss.

Illustrating the judicial reasoning on this subject is the Connecticut case of *Shutter vs. Fudge*, 143 Atl. 896. In this case the plaintiff, a radio dealer, sold the defendant sets and parts to the value of \$415. The defendant assembled this merchandise and sold the sets to different parties collecting therefor. Defendant, however, failed to pay the plaintiff in full, and the latter brought action to collect a balance of \$213.

The defendant did not deny owing the money but in defense set up that he was not of age; in other words a minor. From which it was contended the plaintiff had no legal right to enforce payment, even though defendant had not returned any of the merchandise but sold it to third parties.

In reply to this, plaintiff took the position that since the defendant had sold and collected for the sets, and therefore could not return them, he should not be allowed to plead minority as a defense to the action. The trial court took this view of the matter, and gave plaintiff judgment. From this the defendant appealed and the higher court in stating the question before it, in part said:

“THE question whether an infant is bound to return the consideration he received or restore the adverse party to the status quo, as a condition of avoiding his contract is one about which it has been found extremely difficult to evolve a general rule, to operate fairly between the infant and the other party to the transaction.

“It is evident that if the infant is, in every case, bound to return the consideration which he received, or its equivalent, in order to avoid or rescind his contract, the

protection accorded to him, as such infant, is seriously impaired and may often be destroyed, for it is precisely because he is supposed to be improvident, and likely to misuse and squander what he receives that his contracts are made voidable. On the other hand, if the question be answered unqualifiedly in the negative, the infant may make the law the means of inflicting injustice, or even fraud, on one who has trusted him.”

FOLLOWING this statement, the court stated the general rule as follows:

“The rule now adopted by an overwhelming preponderance of authority is that ‘if the infant, when he seeks to avoid, has in his possession the specific consideration which came to him under the contract, or any part of it, he must return it as a prerequisite to avoiding the contract, but, if he has squandered or lost the property which came to him, he can avoid his obligation under the contract without putting the other party in status quo. The language of the authorities is that he must return or restore whatever of the consideration he then has; not that he is to pay to the party with whom he made the contract an equivalent for that which he received.’”

In applying the above rule to the facts of the instant case, the court used the following language:

“It is conceded that the merchandise which was the consideration passing from the plaintiff to the defendant has been converted into completed radio sets and sold by the defendant, so that it could not now be returned; the only restoration which could be made would be by accounting for its value. This is not required, in order to render infancy available to the defendant as a shield against liability under the contract of purchase. Enter judgment for the defendant.”

So, that was that, and the plaintiff was handed a lesson on the danger and risk in selling an infant, or minor, to the tune of \$213. In other words, the defendant being a minor, and having made up and sold these radio sets, and consequently not being in a position to return them, was not liable for their price.

# Here's How!



A ROOM APART FOR MOVIES

*A New England dealer maintains this room, partitioned off from the main showroom, to demonstrate both silent and talking home movie machines. In it, perfect demos can be made, the curtain excluding both light and noise*

\* \* \*

## "We Like Telephone Selling"

"OLD customers are the best bet for new sales today," according to E. C. Wisham, manager of the Wells Music Company radio department at Denver, Colo. "House-to-house canvass has lost much of its effectiveness, newspaper advertising does not pull as well as it used to but direct contact with users still produces sales."

A recent telephone solicitation program carried on by this firm proved the most effective sales producer in months. Upwards of 11,000 old customers were contacted, calls being made by a group of office girls. Each girl telephoned from 15 to 20 prospects a day, a woman-to-woman appeal being the keynote of the campaign. "In almost every case a woman answered our telephone call," says Wisham, "and our employee immediately told her connection, inquiring whether the radio purchased from us was giving satisfactory service. 'We are checking up on the service given by our sets' was the opening sentence used.

"If the answer to our leading question was in the affirmative the set owner was reminded of the age of her receiver and asked whether or not she had considered a more up-to-date model. If the prospect said she was having difficulty with her radio a service job was solicited. Owners of obsolete sets often declared their intention of buying and a large number of prospects we consider live are now being followed up."

## A Collection of Practical SALES IDEAS

### Name Please!

L. G. GILBERT of Pomona, California, has a unique method of getting prospects' names, when they appear "cagey" about telling who they are for fear of being annoyed by high-pressure salesmen. "When I run into such a case I excuse myself for a moment and get another salesman, introducing him as a man who knows more about the particular set in which the prospect is most interested. In order to introduce the salesman I must naturally have the prospect's name, so I ask for it . . . quite innocently. Usually it comes rolling out.

"To get house numbers we point out, in the course of our sales talk, that certain sections of the city are troubled with interference . . . is the prospect in one of these sections? Names and addresses can also be obtained by consulting the automobile bureau's records, if the customer is driving a car."

\* \* \*



A REAL ACTION WINDOW

*Hadley's of Bridgeport, Conn., staged a broadcast from its show window to publicize a special set sale. When the program was over the orchestra played a 90-minute encore inside the store . . . 200 people coming in off the street in response to the leader's invitation to hear it. Eighteen sales were made that night as a direct result of the stunt and salesmen are still working on leads*



## WHATS UNDER THE HOOD?

Is your radio all hood and no engine? This is what Buckley-Newhall's New York store asks prospects, through an effective display. By showing the "innards" of two radios, one a camouflaged bargain and the other a standard set of good workmanship, this firm combats "gyp" advertising and sells up

### 3 Out of 10 Buy New Tubes

WHEN a customer of O'Loughlins, Inc., Salt Lake City, has had his set 6 months the company serviceman automatically telephones and arranges to inspect it. O'Loughlin's service department averages from 15 to 18 such calls daily and its records show that 3 out of 10 people purchase new tubes.

"This regular routine not only assures us that our sets are giving satisfaction and brings in many new prospects recommended to us by customers but also increases accessory sales," says the service manager. "We find that the average set develops a need for minor adjustments or a new tube or two in about 6 months of the purchase date."

### Refrigerator-Selling Questions

WHEN Furst & Jones of Redlands, California, first started selling electric refrigerators they hired two college boys to work after school and on Saturdays canvassing the town. These are the questions they put to people:

- Have you an electric refrigerator?
- Do you contemplate purchasing one this year or next?
- What make will you probably buy?
- Have you read advertisements on (the make carried by F. & J.)?

They did not ask the name of the householder but jotted down the address and later looked it up in the city directory. At a total cost of \$40, seven hundred names were collected in this manner, which, added to radio and music customer lists, made up a live prospect file for solicitation.

### Selling in a Suburb

"THE only advantage in trading with a neighborhood dealer is the convenience of it, plus personal liking for the owner," says F. J. Bobsene of Santa Monica, Calif. "So I devote my entire advertising appropriation to publication of a little weekly broadcast paper that people in this district must come to the store to obtain.

About 200 are regular 'subscribers' and many of these I count good personal friends of mine.

"I take an active part in civic affairs and regard the expense of dues in several luncheon clubs as legitimate selling expenses. My year's business totaled \$76,000 gross and this I attribute entirely to my policy of 'making friends to make sales'."

\*\*\*

**THE RADIO YOU BUY MUST HAVE THESE NECESSARY FEATURES—**

**CHECK EACH ONE**

- Is it a current 1932 Model?
- Is it a Superheterodyne?
- Is it approved by the Fire Underwriters?
- Does the Dealer and Factory Guarantee it?
- Does it have Vari Mu and Pentode Tubes?
- Does it have Tone Control?
- Last—Is It Priced Right?

### THIS CARD BRINGS 'EM BACK

Every shopper who asks about radios but leaves a large Western department store without buying is given one of these cards. By inducing such prospects to look for specific modern features in competitor's sets it helps steer them away from cheap, inferior equipment

\*\*\*

### "Sold Half the Clubs in Freeport"

CLUBS are an excellent place for any dealer's radios . . . so many people see sets installed in these places. So Hornberger's Radio Company of Freeport, Ill., went out after this class of trade in 1931 and succeeded in selling about half the institutions in town.

"If you have difficulty getting into clubs at the start induce some member to intercede for you. This usually works out. I confidentially expect to have my sets in practically all of them in town before this year is over and if that don't produce business for me I certainly will be surprised," says Frank Hornberger.

# FOOD

*Her'e a Summertime*



**L**IKE the electric clock, food mixers have now "caught on." After years of quiet but persistent promotional effort, all of a sudden, within the past year, women are *demanding* an electric whipper and beater. They now consider this device almost as indispensable as the kitchen sink.

And this is not surprising for the mixing and beating of foods and the making of fruit juice drinks constitute much of woman's work in the kitchen. Few, indeed, are the recipes that do not say: "Beat well" and it now is recognized that mechanical means for accomplishing this produce results not attainable by hand methods.

At the present time there are about fifteen food-preparing devices on the market, not to mention fruit juice extractors and those which are drink mixers only. These affairs vary greatly in size, price and accomplishments. They range from \$10 to \$200. The larger ones,

with a multiplicity of attachments for doing almost everything except rocking the baby to sleep, are best sold by an experienced demonstrator. But most mixers can be intelligently presented by the average salesman. As such they are well suited to the radio dealer, rounding out his store display and adding gross volume with but little capital investment or selling cost required.

While mixers are a steady, year 'round item they should not merely be stocked and placed on the shelf or display table. The quickest and best way to create enthusiasm and confidence on the part of the person whose job it will be to push this device is to see to it that he or she owns one and actually tests out its many possibilities in his own home.

The accompanying table will assist dealers who desire to investigate further the merits of this ideal complementary line.

# MIXERS

*Suggestion to Round Out Your Line*

## Electric Food Mixers and Extractors

MANUFACTURER	TRADE NAME	MODEL	FUNCTION	WGT.	PRICE
American Mfg. Co. <i>Dayton, Ohio</i>	Pantry Pet	Pantry Pet	Grind, beat, mix, stir, extract, squeeze, chop	14	\$69.50
Brewer Mfg. & Sales Co. <i>20th St. and Colorado Ave., Santa Monica, Calif.</i>	Brewer	Kitchen Helper	Mix, beat, extract, grind, whip, mix drinks, mash	.....	79.50
California Fruit Growers Exchange <i>900 N. Franklin St., Chicago</i>	Sunkist, Jr.	Sunkist, Jr.	Extract	.....	11.95
Chicago Flexible Shaft Co. <i>Roosevelt Rd. &amp; Central Ave., Chicago</i>	Sunbeam	M 4 F Mixmaster	Mash, mix, extract, whip, beat, mix drinks	.....	18.75
Dawn Mfg. Co. <i>2811 Ashland Ave., Chicago</i>	Dawn	32	Mix, beat, mash, extract	16	14.95
Dormeyer Mfg. Co. <i>2640 Greenview Ave., Chicago, Ill.</i>	Dormeyer	Royal 1 Royal 2	Mix, beat, mash, whip, mix drinks, extract Food mixer only	..... .....	18.75 16.50
Doughnut Machine Corp. <i>1170 Broadway, New York</i>	D M C	D M C	Whip, beat, chop, grind, slice, extract, mash	38	87.50
Fitzgerald Mfg. Co. <i>Torrington, Conn.</i>	Star-rite	Magic Maid	Mix, beat, extract, mix drinks, mash, whip	24	19.50
A. C. Gilbert Co. <i>New Haven, Conn.</i>	Sunkist, Jr., Kraft, Gilbert	B 121 Sunkist	Juice Extractor	10 $\frac{1}{4}$	12.95
		B 120 Sunkist	Juice Extractor	10 $\frac{1}{4}$	11.95
		B 122 Rotary Beater	Beat, extract	14	18.95
		B 88 Junior	Drink mixer	3 $\frac{3}{4}$	4.95
		B 89 Senior	Drink mixer	6	7.50
		B 80 Kraft	Drink mixer	6	5.95
		B 85 Beater B 86 Beater	Beat light mixtures Beat, mash	7 $\frac{1}{2}$ 7 $\frac{3}{4}$	9.95 10.95
Hamilton Beach Mfg. Co. <i>Racine, Wis.</i>	Hamilton Beach	Combination Standard	Mix, beat, whip, chop, extract Mix, beat, whip, chop	..... .....	21.50 14.95
Kitchenaid Mfg. Co. <i>Troy, Ohio</i>	Kitchenaid	F	Mix, beat, whip, mash. Ice chipper, vegetable slicer, ice cream freezer etc. attachments available	.....	89.80
		G	Mix, whip, beat. Has dough hook, pastry knife, pouring chute. Special attachments available	.....	129.80
Landers, Frary & Clark <i>New Britain, Conn.</i>	Universal	E 770	Mix, beat, extract, mix drinks	15	18.75
Made-Rite Mfg. Co. <i>Sandusky, Ohio</i>	Made-Rite	250	Drink mixer	7 $\frac{1}{2}$	13.50
		200	Drink mixer	9	20.00
Manning Bowman & Co. <i>Meriden, Conn.</i>	Manning Bowman	1	Mix, whip, beat, mash, extract	.....	18.75
Merryway Co. <i>Poughkeepsie, N. Y.</i>	Merryway	Table Wall	Mash, whip, beat, mix Mash, whip, beat, mix	56 59 $\frac{1}{4}$	69.50 75.00
		Speedway Mfg. Co. <i>1834 S. 52nd St., Chicago</i>	Speedway	Wife Saver B Model A	Mix, whip, beat, mash. Has brush to scour kitchen pans Same as above plus cake mixer
United Electric Mfg. Co. <i>Adrian, Mich.</i>	Eskimo Mechanic	200 Kitchen Mechanic	Mix light batter, mayonnaise, drinks	8	7.00
		Juice Extract.	Extract fruit juice	10	10.95
		Twin Mixer	Beat egg and light batter, whip, mix	9	8.95

# CHICAGO.....

## Next Month's Job

**N**EXT month the radio industry meets in Chicago. What is the underlying purpose of this gathering? To view new models? Certainly. To talk shop? Of course. But beyond these functions should be a greater objective.

If the radio leaders of this country appreciate fully this opportunity they will use it to *find themselves*—to agree on certain simple, fundamental policies. And these policies *must* be instituted if radio products are to continue to be merchandised through existing trade channels. They are:

### 1. Protect the Dealer

The dealer must be assured of a permanent relationship with his supplier. Territories should be defined. Sets must not be sold to competition on better terms.

### 2. Price Products to Assure a Profit

Adjust prices so that quality can be maintained and profit for all made possible.

### 3. Consider Field Conditions

Price and model changes should be established and timed to conform to the needs of the dealer and consumer, rather than to those of the factory.

### 4. Revise Tube Practices

A large majority of dealers and jobbers declare that the present price scale is too low. Tube prices should be raised and too liberal replacement policies abolished.

Obvious as these principles are, and as often as they have been presented, yet they have been violated so frequently as to make necessary their re-statement at this opportune time. They constitute the demands of practically every worthwhile radio merchant in the industry.

Now is the time for these common sense merchandising axioms to be frankly assumed, definitely announced—and rigidly adhered to.

## Re-establish Radio

**T**HE coming trade show and convention should not be limited to inter-industry activities. Radio needs to be *re-established* with the public—and a move in that direction should be made at Chicago.

We must dispell the impression that perfect, or

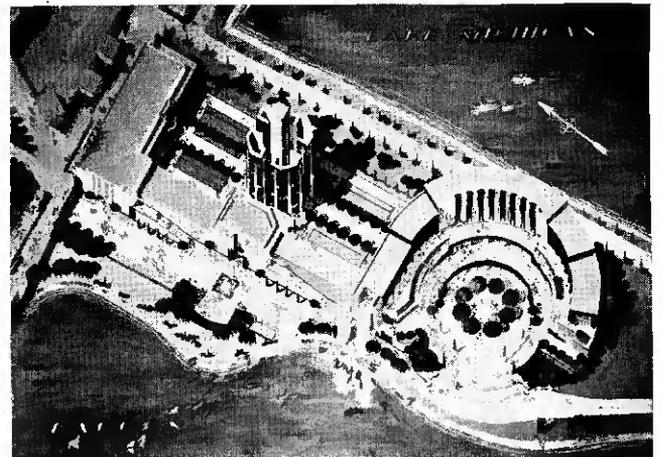
## Other Comment

even “good enough,” reception is to be had from sets in the low price range brackets. In other words we must educate the prospect that “dollars do make a difference” when buying a radio set; that the console is, or should be, a musical instrument, and that when it does not reproduce musical tones with all their original brilliancy it ceases to be anything at all—it is neither fish nor fowl. Further if it is that kind of a set it is a poor investment no matter how little it costs.

How may this thought be launched at Chicago? Primarily in the convention speeches and the policies adopted and, then, through the effectiveness with which these sentiments are released to the public by the newspapers. An alert press department can do much to give radio a fresh start.

## Short, or “Shorter” Waves?

**B**ECAUSE it is easy to produce such sets at low cost a number of manufacturers have brought out broadcast receivers which, by the flip of a switch, tune down to 75 meters. These oper-



## Radio's Home at World's Fair

Architect's conception of the Electrical Group, fifth structure of Chicago's 1933 World's Fair, now being erected on Northerly Island. The building unit on the extreme left will house the exhibits of radio. The three-quarter circular unit on the right will portray the generation, distribution and utilization of electricity.

White, red, yellow, gold, blue and silver will be the colors used to decorate these modern buildings. The structure will be embellished with hanging gardens, electric cascades, fountains and gold-finished pylons

# an Opportunity

by the Editors

ate quite satisfactorily within their intended frequency limits and as police calls, which constitute one of the most interesting services "below 200" may be consistently received, will undoubtedly sell.

Manufacturers and dealers should be particularly careful, however, that advertisements featuring these sets do not lead the consumer to believe that they are the 20 meter variety which receive distant foreign stations . . . the public has come to associate the word "shortwave" with equipment capable of operating on these "shorter" wavelengths, where the extreme dx is found.

## Grounds for Optimism

**T**HERE is one bright spot on the horizon which cannot fail to exert a beneficial effect upon summer and fall radio business . . . *the coming presidential campaign!* Though months separate us from the great party conventions the public already senses an impending battle—prohibition looms as a major issue with unprecedented appeal. And when candidates finally swing into their stride the man in the street will rapidly develop an insatiable appetite for news, an appetite that broadcast stations and newspapers will be called upon to satisfy.

That a presidential campaign can have a tremendous influence on our business was demonstrated four years ago. Here is a record of retail sales, month by month, for '27 and '28. Note the increase during June, September and October, '28 . . . months in which nominations were made and pre-election drives gotten under way:

	1927 Sales Per Cent	1928 Sales Per Cent
January.....	12.5	7
February.....	8.5	6
March.....	6	5
April.....	5	4
May.....	4	5
<b>June.....</b>	<b>4</b>	<b>7</b>
July.....	4	3
August.....	5.5	6
<b>September.....</b>	<b>8.5</b>	<b>13</b>
<b>October.....</b>	<b>12.5</b>	<b>18</b>
November.....	13.5	12
December.....	16	14
	<hr/>	<hr/>
	100	100



Other industries may be vitally concerned with the continuation of the present administration, or a possible change to the democratic regime. The radio business, on the other hand, cares little which way the wind blows. For no matter who is nominated, or ultimately elected, the public will want to listen to thier speeches.

## They Spell RADIO

**W**E ARE indebted to the J. H. Burke Company, a well known Boston distributor, for the following constructive suggestions:

Due to changed economic conditions every radio merchant is confronted with new merchandising problems that must be solved before he can do business on a profitable basis. Many of the practices followed by radio dealers, before the world went broke, are now unsound. They must be discarded or revised to meet present conditions.

The following recommendations—which spell RADIO—are therefore suggested:

- Restore your own confidence
- Adopt economic management
- Defend profitable sales
- Ignore competition
- Oppose price cutting

"Do you realize," concludes Burke, in Bulletin No. 175 to its dealers, "that approximately 3,000,000 sets will be sold this year? This still is *big business*. Our dealers will get their profitable share of this volume if they will combine energetic salesmanship with economic planning."

## President of RMA Approves

Dear Mr. Caldwell:

I certainly wish to congratulate "Radio Retailing" on its splendid broadcasting campaign. I know that all radio manufacturers, jobbers and dealers will be materially helped by the work you are doing on their behalf.

J. CLARKE COIT, *President,*  
Radio Manufacturers Association

# New

# Tubes

SPRING is here . . . and with it a new litter of tubes. Among late arrivals we note the "Wunderlich" (Arcturus) and the 46, 56, 57, 58 and 82 (RCA licensed), none of which are interchangeable with existing types. What are these six "bottles"; when and how will they be used? One question at a time brothers . . .

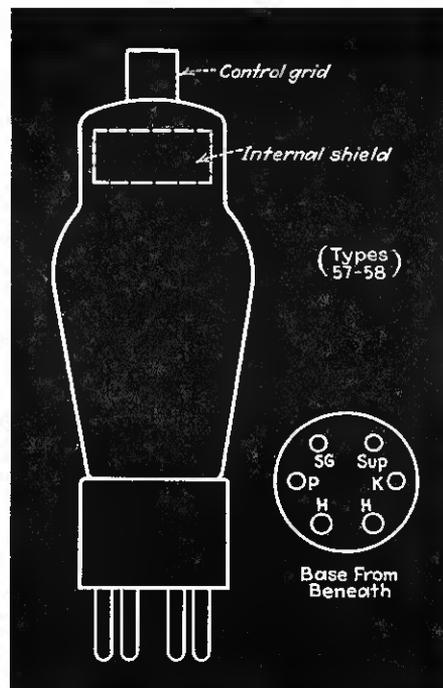
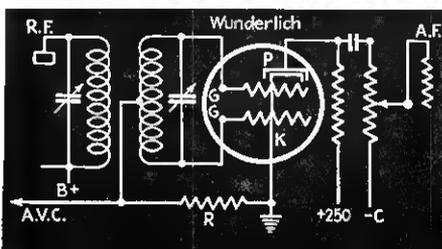
## WUNDERLICH

This colorful entry (blue glass bulb and red base) is a full-wave grid detector, audio-frequency amplifier and source of automatic volume control voltage all in the one package. It has two input grids symmetrically arranged in co-cylindrical fashion around a standard heater and cathode, and a plate.

Full-wave "diode" detection takes place between alternate grids and the cathode, rectification of the incoming a.c. signal being accomplished on the non-linear grid-cathode characteristic. A d.c. voltage modulated at an audio rate ready for a.f. amplification, thus appears across the load resistor "R" which completes the grid-cathode detection circuit through a center-tapped input coil. The tube, insofar as a.f. amplification is concerned, then functions as an ordinary triode, a.f. currents flowing through the resistor being applied to its input circuit with both grids operating as one, in parallel.

Automatic volume control bias voltage for r.f. tubes is obtained from this same resistor "R." The amount of d.c. flowing through it depends upon the strength of the carrier impressed on the detector input. When the carrier is strong the current through the resistor is high, the voltage drop is great and the grid end (also the r.f. tube grids connected to it) becomes more negative with respect to ground. R.F. stage gain is consequently reduced, this "governor" action preventing detector overloads.

The tube is made in the new, small size (RRJan32) first introduced for automotive sets, with either a five-prong base and cathode cap connection or with a 6-prong base. It is available with a 2.5 volt (1 amp.) a.c. heater or a 6.3 volt (0.4 amp.) d.c. heater. Amplification factor is 10 to 12, mutual conductance 1,000 to 1,200



ohms., plate resistance 10,000 to 12,000 ohms and normal plate drain under 2 mils. Circuits using it will probably omit individual r.f. stage bias resistors as circuit "hiss" actuates the automatic bias, or a.v.c., system sufficiently to produce suitable minimum bias. Detectors will probably be unshielded.

"Will afford better tone at low volume levels and automatic volume control not affected by ordinary static or percentage modulation as well as production cost savings," says the maker. List, \$3.

## TYPE 56

This is one of "three musketeers" (types 56, 57, 58 will probably supersede the '27, '24 and '35 respectively) destined for wide general use. The 56 is a general-purpose triode of the heater (2.5 volt, 1 amp., a.c. or d.c.) type with a "midget" bulb and 5-pin base . . . connections same as a '27. (RRFeb32)

These are some of the uses to which set makers may put it: Transformer coupled amplifier, 250 volts plate at 5 ma. drain, with 13.5 volts negative bias, giving average  $\mu$  of 13.8, mutual of 1,450 mhos. and 9,500 ohms plate resistance. Resistance-coupled amplifier, 250 volts plate at 1 to 2 ma. drain with 9 volts bias and a 50,000 to 100,000 ohm load resistance. Grid-coupling resistor, in this case, would be about 1 megohm. As a biased detector, 250 volts plate and 20 volts negative bias with plate drain adjusted to 0.2 ma. at no signal input. Grid-leak detector, 45 volts plate using a .00025 mfd. condenser and 1 to 5 megohm leak. Oscillator, 90 volts plate with zero bias. Some set makers may also use the 56 as a diode detector, tying plate and cathode together.

## TYPE 57

A triple-grid design of the heater type (2.5 volts, 1 amp., a.c. or d.c.) introduced especially for use as a biased detector but also suitable as a low signal input screen-grid amplifier or a.v.c. tube. Has a control-

grid, a screen-grid and suppressor-grid which is not connected internally to the cathode but brought out to a separate base pin so that the tube may be used in a variety of ways. (Special uses will probably crop up at the Chicago Show.) A small 6-pin base is used and connections are shown in the accompanying diagram.

The 57's small bulb is radically different in appearance, having a "dome" on top to accommodate an internal shield which is permanently connected to the cathode. Shield cans used in connection with it will have a "collar" fitting closely over the glass dome, close proximity of internal shield to can lowering grid-plate capacity (.010 mmf.) appreciably. So shielded, the tube is said to be particularly suitable for shortwaves down to about 5 meters as the output capacity (6.8 mmf.) is also low.

Average characteristics of the tube when used as an amplifier are: with 250 volts (2 ma. drain) on the plate, 3 volts negative grid bias and 100 volts screen potential the plate resistance will be greater than 1.5 megohms, amplification factor more than 1,500 and mutual conductance 1,225 mhos. When used as a detector plate voltage will be under 250, bias about 6 volts negative and screen about 100 volts. Load will be about 250,000 ohms, perhaps choke shunted by a 0.25 megohm resistor.

The 57 is a high-gain device and so resistance-capacity filters will be used in leads to r.f. stages using it in many designs to avoid interstage coupling through wiring. Complete shielding of all stage components will no doubt be necessary, especially where the tube is used as a detector. In some cases set makers may include some sort of acoustic shielding to prevent microphonic feedback from built-in speakers affecting such sensitive detectors. It is not recommended that the 57 be used as a dynatron oscillator and while it may be employed as a 1st detector in supers the manufacturers point out that the super-control 58 is superior.

## TYPE 58

Physically, this tube is similar to the 57 in all respects save control-grid structure. It is, however, a super-control (variable- $\mu$ ) pentode especially designed for use as an r.f. or i.f. amplifier. It is also ok as a 1st detector for supers, where it aids volume control, but is not recommended either as a dynatron oscillator or grid-bias detector.

The suppressor-grid, when connected externally to the cathode, eliminates the secondary emission which limits permissible grid-swing in ordinary screen-grid tubes. This makes possible its use as an r.f. amplifier with screen voltages at, above or slightly lower than plate potential. Where the suppressor is not connected to the cathode it may be fed a variable, negative

bias to modify the a.c. resistance of the tube. This provides a means of reducing selectivity in order to aid tonal response when receiving strong local signals, without the aid of a local-dx switch. Variation of control grid bias will probably be used as a means of controlling volume without introducing distortion, as the tube's grid-voltage plate-current curve, in common with earlier multi- $\mu$  types, is quite flat over a considerable portion.

When used as an amplifier plate voltage will be about 250 and drain 8.2 ma., screen 100 volts at 3 ma. and about 3 volts negative grid bias. Under such conditions amplification factor is 1,280, plate resistance 800,000 ohms and mutual conductance 1,600 mhos. When the 58 is used as a 1st detector in supers plate voltage will be about 250 with 100 volts on the screen and minus 10 bias.

## TYPE 46

"Class B" amplification (see page 35) looms big this year. Here is a tube especially designed for it, but also convertible for use in the more common "Class A." The 46, in a bulb the size of the well-known '45, has a filament (2.5 volts a.c., 1.75 amp.), plate and two grids. When used as a "push-push" amplifier both grids are connected together, giving the required *high* amplification factor. When Class A operation is intended the grid nearest the plate is connected to it, while the other is used alone as the control element, giving a *low* amplification factor.

When two 46's are used as a final Class B, or push-push, stage maximum recommended plate potential is 400 volts, at 6 ma. steady drain (no grid bias is required). With each tube working into a 1,450 ohm load resistance 20 watts of useful power is available for continuous operation. As high as 26 watts may be obtained if the amplifier operates intermittently. Such an output stage may properly be driven by a '27, '45 or 46 Class A stage, these "driver" tubes operating singly or in push-pull. Maximum input voltage to the output stage grids may not exceed 41 volts r.m.s. however.

When two 46's are used in the more conventional Class A, push-pull system 250 volts plate, at 22 ma., and 33 volts negative grid bias will be usual. Amplification factor under such conditions is 5.6, plate resistance 2,380 ohms and mutual conductance 2,350 mhos. A 6,400 ohm load resistance is recommended for maximum u.p.o. if this is the final stage. 12,800 ohms is desirable if it is used as a driver stage for final Class B 46's. Maximum u.p.o. of 46's in push-pull is slightly less than that of two '45's but only half the grid-swing is required to achieve it.

The tube uses a standard 5-prong socket. Filament prongs and plate pin are in the usual position while the grid closest to the plate is carried to the pin normally used for cathode connection in heater-type tubes.

## TYPE 82

A full-wave, hot-cathode, mercury-vapor filled rectifier (RRJan32) which, because of its excellent regulation (approximately 15 volts drop independent of load) is particularly suitable for use in sets using Class B amplification. Without the 82 or some similar device, in fact, push-push

amplification could not be employed in a.c. receivers because of the intermittent plate drain inherent in such systems.

Characteristics of the rectifier are as follows: Filament voltage 2.5, current 3 amps., maximum a.c. per plate, 500 volts r.m.s., maximum peak-inverse voltage 1,400, maximum continuous d.c. output 125 ma., maximum peak plate current 400 ma. An envelope about the size of a '27 is used, pin connections being identical with those of the older '80.

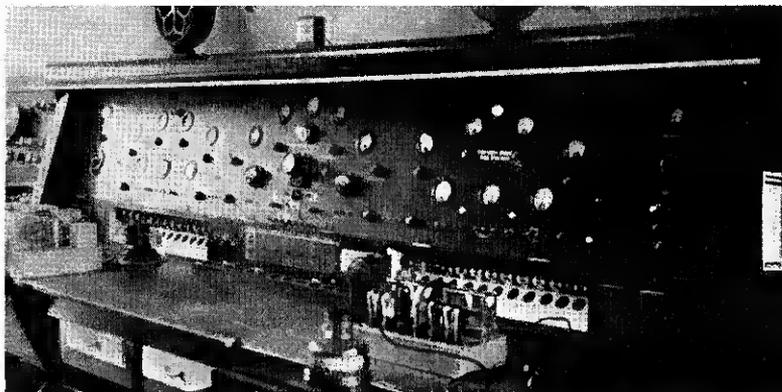
Because its filament draws considerable current socket prong and wiring resistance must be kept low. Under-voltage filament operation is particularly damaging. Because of the low internal resistance of the tube it will, if accidentally shorted, pass very high currents. *This makes it advisable to include a fuse in the primary of the power transformer* (one having a rat-

ing 50 per cent in excess of normal drain is recommended) to avoid accidental transformer and choke burnouts.

Choke, rather than condenser input to filters, will probably be used by most set makers adopting this tube as maximum d.c. output is obtained in this manner. The rectifiers will also be equipped with shields, and small r.f. chokes (1 millihenry or more) in their plate leads in some instances to avoid interference with sensitive detectors. In mercury-vapor devices, d.c. plate current does not start to flow until the plate has reached a critical positive voltage, producing surges which constitute r.f. interference unless proper provision is made to confine them to the tube.

Don't worry about the ghost-like color of the first 82 you run across. They are supposed to glow like the old Tungars—a pretty, pale blue!

# SERVICE SHORTCUTS



This is the excellent shop layout maintained by the Radio Service & Supply Company of Colorado Springs

## Two Shop Kinks

By M. A. Rolph

A piece of heavy carpet tacked securely to one end of the bench protects up-ended cabinets, particularly midgets, from damage while shop work is in process. An old adding machine stand, equipped with four legs and castors, is a handy thing to have around as it can be used when working on chassis and easily rolled out of the way.

## Positive "A" Grounds

By R. A. Sawyer

Now and then on auto installations, we come across cases where the positive side of the battery is grounded to the chassis instead of the negative. This occurs most often on old or on expensive cars. Naturally, if the "A" lead of the radio set is connected to ground as usual, the polarity will be reversed and either the set will not operate at all or will operate poorly.

To remedy this condition reverse the leads to the "A" battery and also reverse those to the generator. The latter is important and cannot be overlooked, otherwise the generator will quickly ruin the battery.

## Universal Speaker Adapter

By J. R. Kearns

It is often desirable to test a set with a speaker other than the one included in the cabinet. Most sets now use standard tube socket connectors to permit this, but where the cable termination is not standard an adapter can be constructed from an old tube base with "Fahnestock" clips mounted to correspond to each of the prongs and wired to them.

When this adapter is used a socket is arranged with short flexible leads. The speaker is plugged into this socket and the adapter plug into the set. The leads from the socket are then inserted in the proper clips. It is necessary to make both four and five prong sockets to take care of all

cases. They can naturally be used in any combination although sometimes it is necessary to use jumper wires between clips. Any speaker can then be used with any set provided it has the proper field resistance and has the correct output transformer.

## Volume Level Indicator

By W. T. Golson

A volume level indicator for public address and centralized radio systems which is also useful as an output meter when aligning receivers can be easily constructed of four parts available to servicemen at low cost. These parts are: A section or two of dry-disc rectifier out of an old Elkon, Kuprox or Westinghouse charger (some 110 volt, a.c. dynamic speakers are also equipped with them), a 0-25 mil. d.c. meter, a 0-50,000 ohm variable resistor and a "bell-ringing" transformer having a 110-volt primary and a 6-8 volt secondary.

Connect these four parts as shown in the

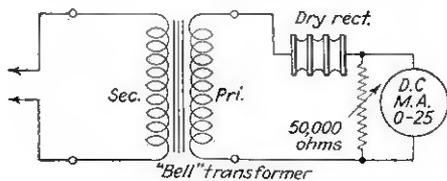
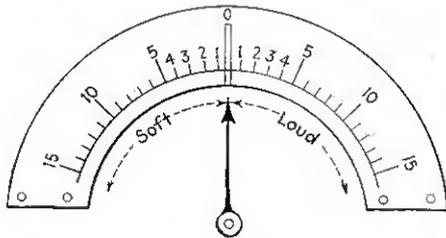


diagram and then glue a new scale, drawn on thin, white cardboard or some other durable material, over the original meter



scale. Mount the completed instrument on the amplifier panel, on a separate rack, or in its own individual cabinet.

To adjust it, connect the input terminals (transformer secondary) across the amplifier output terminals and run up the amplifier gain control until natural or desired normal volume is obtained from the speakers. If the meter needle operates backwards reverse the connections. Then adjust the variable resistor of the volume indicator until the needle reads zero on the new scale, in the center of the dial. When tuning up the system each time it is placed in operation it is now merely necessary to adjust the gain control to make the meter read in this same position, leaving the 0-50,000 ohm resistor at the original setting.

## Transformer-Coupled Extra Speaker

By S. Rider

I hook up extra magnetics to sets using dynamic speakers through a 1 to 1 output transformer instead of through blocking condensers and get excellent results. The

auxiliary magnetic is connected in series with new transformer secondary and a variable high resistance used as a volume control. The primary of the transformer is connected in parallel with the primary of the output transformer already in the set.

The extra transformer selected should have primary and secondary impedances somewhere near the impedance of the magnetic speaker. When the device is hooked up it will affect the volume and tone of the dynamic slightly but subsequent changes in the auxiliary volume control will not cause further changes.

## R.F. Coil Electrolysis

By H. W. Spangler

Frying noise sometimes accompanied by signal fading is often traceable to electrolysis in the primary winding of an r.f. coil. This does not necessarily occur at the terminals and is often somewhere near the center of the coil.

Such trouble can be quickly located by applying 300 volts or more across each coil (for an instant). When a defective winding is so treated it will either go completely open or arc visibly. This trouble has been detected in both a.c. and battery receivers and is ordinarily a sticker for servicemen as it will not show up when testing with an analyzer.

## Cone Apex Repair

By Sam F. Kyburz, Jr.

When the apex of a cone speaker diaphragm becomes soft and flexible, destroying quality and volume, paint it with orange shallac, allow it to dry thoroughly and apply a second coat. This will restore the necessary stiffness.

## More About "Air Cells"

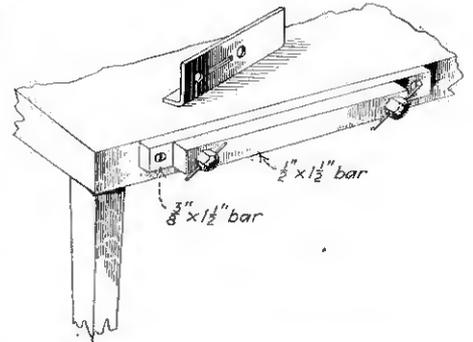
Following is the partial text of a letter from E. E. Horine of the National Carbon Company: "The short article entitled 'Boosting Air Cell Voltage,' by Dana B. Hebner which appeared in the Shortcut section, April issue, is, I fear, impractical. When the voltage of an Air Cell battery declines in service to 2.0 volts, the receiver usually ceases functioning. Mr. Hebner suggests connecting a six-inch dry cell and a rheostat in series with the dying battery to extract a few more ampere-hours from it.

"The filament consumption of most Air Cell receivers is in the neighborhood of 0.5 ampere. If adding a dry cell to the circuit would result in the combination delivering another 100 hours of service, as Mr. Hebner states, it would mean an additional 50-ampere hours and a six-inch dry cell just cannot deliver that much. The biggest fallacy of all, perhaps, is the assumption that an Air Cell battery which has been run down in service to 2 volts still has 50 ampere-hours left in it. It hasn't."

## Sheet-Bending Vise

By Chas. H. Wiley

A radio service bench can be fitted up with a vise that will make it easy to bend sheet stock such as chassis bases in the manner shown. Secure two pieces of bar



stock, one 3/8 in. by 1 1/2 in. and the other 1/2 in. by 1 1/2 in. Drill the larger piece at each end so that it may be secured to the edge of the bench with large, heavy screws. Then drill both bars so that two large bolts may be passed through them as shown, these holding both "jaws" in place and also providing a means of adjustment.

The adjusting nuts may be tightened with a wrench, or better still, may have a hole drilled through and through the heads to accommodate a pin which will form a handle.

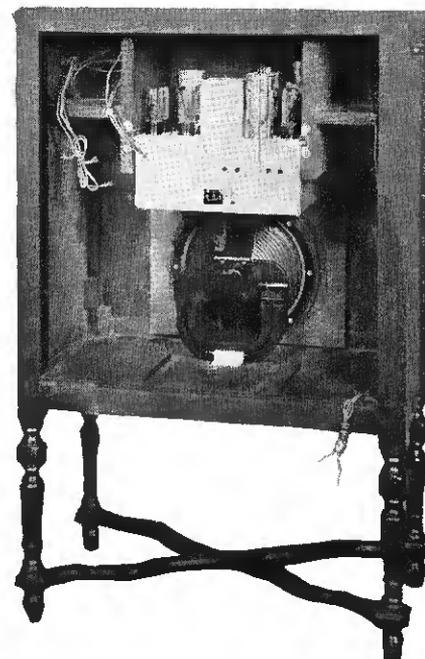
## Car Top Construction and Factory Antenna List

Car	Top Construction		Antenna		Lead-in Location
	Wood Slat	Poultry Screen	Wire	Poultry Screen	
Auburn.....	V				
Buick.....	V				
Cadillac.....	V		V		Front rt. post
Chevrolet.....	V				
Chrysler.....	Imp. 60	All others	Imp. 80	All others	Front rt. post
Cord.....					
DeSoto.....		V		V	Front rt. post
Dodge-6 & 8.....		V		V	Front rt. post
Duesenberg.....			Special	Bodies	
Durant.....		V			
Easex.....	Fabric				
Ford.....		V			
Franklin.....		V		V	Front rt. post
Graham.....	V				
Hudson.....	Fabric	Club Sda.			
Hupmobile.....		V			
Jordan.....		V			
LaSalle.....	V		V		Front rt. post
Lincoln.....		V	Tops are Cleared		
Marmont.....		V		V	Front rt. post
Nash.....		V		V	Front rt. post
Oakland.....	Fabric				
Oldsmobile.....					
Packard.....		V			
Peerless.....		V		V	Front left post
Pierce Arrow.....		V		V	Front rt. post
Plymouth.....		V		V	Front rt. post
Pontiac.....					
Reo.....		V		V	Front rt. post
Rolls Royce.....					
Studebaker.....		V		V	Front rt. post
Stutz.....					
Willys-Knight.....					

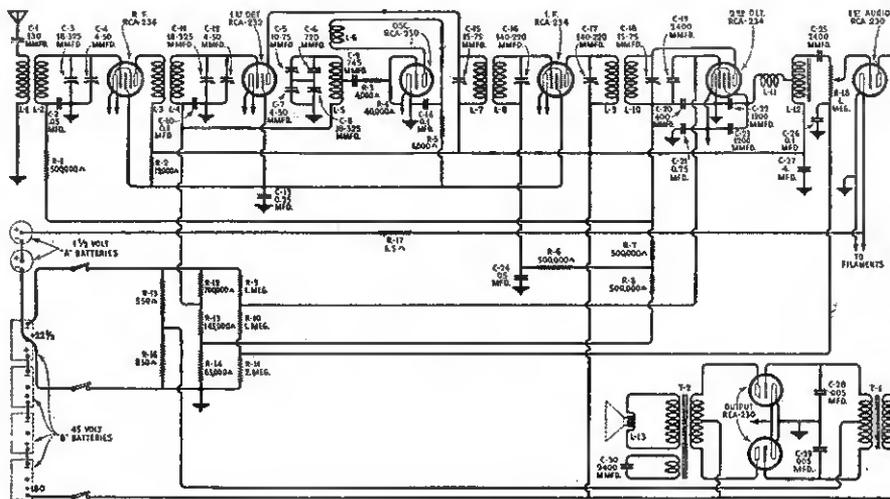
—Compiled by "Transitone"

Radio Retailing, May, 1932

# Class "B" Amplification



A typical battery-type set using Class "B," or "Push-Push," audio



By John P. Allen, RCA-Victor Company

IN the past few months considerable interest has been evinced in the new principle of Class "B" amplification, as applied to broadcast receivers. Class "B" amplification has thus far found application in battery-operated receivers where a high audio output with a minimum current drain is essential. These new battery-operated receivers have proved the solution to the problem of providing economical and efficient broadcast reception, comparable to AC operated receivers, in un electrified farm areas, in automobiles and in the portable suitcase type of radio.

For those dealers and servicemen who are interested in learning something about the operation of Class "B" amplification, this article will attempt to give a brief outline of a subject, the full technical implications of which would require considerably more space.

To begin with, the average receiver may be divided into two main sections. First, the RF end of the set which in the case of a superheterodyne may include an intermediate-frequency amplifier; and second, the detector and audio end of the set which demodulates the RF signal and amplifies it until sufficient power is produced to operate the loudspeaker. At the present stage of radio art, Class "B" amplification is applicable to the audio end of the receiver only.

In order to explain the operation of the Class "B" amplifier, it is first desir-

able to review the Class "A" audio amplifier which practically all radio sets use. Class "A" is a type of amplifier in which a fixed amount of plate current flows through the tubes at all times. Variations of audio component of the tube, caused by a signal, merely produces a slight "ripple" in this current.

In the new Class "B" type amplifier very little plate current flows until a signal is impressed on the grids. The tube is biased so that there is only a very small amount of no-signal plate current drain. A signal impressed upon the grid of the tube causes appreciable current to flow, current which is entirely of an audio character. This gives an economy of operation that is far greater than that of an amplifier in which only a slight variation of current is produced by the signal. The reason for this is that there is a small amount, or no residual current at all used in producing an audio output. A residual current would, of course, be an entire waste. In a Class "B" amplifier, for a given average plate current, we get about four times the output of a similar Class "A" amplifier.

An example of Class "B" operation may be taken from the R-43. In this receiver two type '30s are used in the output stage. Those tubes operate at a plate voltage of 150, and a grid bias voltage of 15. Normally about 0.5 milli-ampere flows in the plate circuit. When a signal is impressed on the input circuit grid, one grid will be positive and the

other negative for a given alternation of the signal current. The tube obtaining the positive charge will draw considerable plate current, the amount depending on the voltage impressed on its grid. The plate current for the other tube, biased almost to the cut-off point, will change only very slightly. On the next alternation of signal voltage, the reverse occurs and the other tube draws plate current. It should be noted that a double tube stage is used to avoid distortion even though only one tube is functioning at any given instant, operation being different than a "push-pull" amplifier in which both tubes to a certain extent aid each other.

It is obvious that with a much greater variation of current such as in the Class "B" amplifier, good regulation of power available for plate supply is necessary. Therefore this type amplification is practicable, at this time, in battery sets only. (Ed. Note: The introduction this month of mercury-vapor rectifier tube type 82 and Class "B" amplifier type 46, described on page 32, leads us to believe that A.C. sets using Class "B" amplifiers will be exhibited at the trade show.) The set illustrated on this page as an example of the type described is an eight-tube superheterodyne with permanent magnet dynamic loudspeaker. Total current drain for the entire set is 15 milliamperes, power output 1.25 watts. This almost equals the output of a single '45.

Our automobile model M-30, also uses Class "B," has approximately two watts output and draws very little plate current. Portable P-31 is another example of this type.

There are many highly technical aspects in the design of the Class "B" amplifier which need not be considered by the service man. It is important to remember that a very small residual plate current will be obtained in the output tube, but this increases greatly if a signal is being fed through the receiver.

## FOUR DAY CONVENTION SCHEDULE

### *Insures Interest of Entire Industry*

The program of the Eighth Annual RMA Convention and Trade Show, to be held at the Stevens Hotel, Chicago, May 23 to 26, has been completed, the association planning business sessions which will be of vital interest to members of the trade attending. Condensed into a four-day period in May, rather than in June, in order to be ahead of the important 1932 political campaign, the convention bids fair to attract dealers, jobbers and manufacturers in large numbers from all points.

The four-day schedule has been laid out as follows:

#### MONDAY, MAY 23.

Arrival and registration of jobbers and dealers, etc.

Meeting, RMA Board of Directors, 11:30 A.M.

RMA Committee meetings.

Trade Show opens at 1 p.m., closes at 10 p.m.

#### TUESDAY, MAY 24.

Open meeting of the radio industry, 10:30 a.m.

Welcome by Mayor Cermak of Chicago and addresses by prominent speakers on important industry problems.

Trade Show hours—1 p.m. to 10 p.m.

RMA Committee meetings.

Meetings of various industry organizations and associations.

Meeting Institute of Radio Service Men, 2:30 p.m.

Meeting Newspaper Radio Editors Ass'n., 2:30 p.m.

#### WEDNESDAY, MAY 25.

RMA Membership meeting, 10 a.m.

Meetings, RMA Committees in the afternoon.

Trade Show hours—1 p.m. to 10 p.m.

#### THURSDAY, MAY 26.

Trade Show opens 10 a.m. to 10 p.m., closing.

RMA Committee meetings.

#### FRIDAY, MAY 27.

RMA Board of Directors meeting, 10:30 a.m.

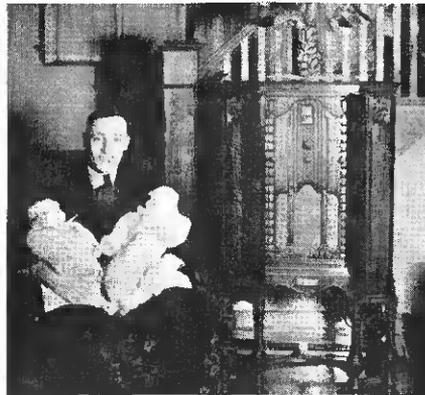
One hundred leading radio manufacturers will exhibit their radio and electrical products, latest reports from the RMA indicate. Over eighty-five per cent of the available exhibit space has already been subscribed for. Admission to the show, as in the past, is to be limited to the trade.

Attendance of many electrical jobbers and dealers, as well as those in the radio business alone, is further assured by recent action of the National Electrical Wholesalers Association, postponing its May convention until next September to avoid conflict with the RMA event.

Coincident with the announcement of the Trade Show and Convention program,

president Clarke Coit made this statement: "Every individual who expects to profit in the selling, engineering or manufacturing of radio cannot afford to miss being present at Chicago. Practically every one of any importance in these branches of the trade will be there. The opportunity offered to view new merchandise, styles and trends, to become posted on manufacturing and technical developments, to make personal contacts, to secure the opinion of those vitally interested in radio is invaluable. At Chicago, it will be possible for an entire selling or buying organization to make business contacts, secure information and do—all in a few days—what would otherwise take many months and at much greater expense."

### *Two Good Reasons*



Two of the reasons why A. A. Meeth, Eason-Meeth Company, Grand Rapids, Mich., won this Stromberg-Carlson in the recent S-C Better Salesmanship contest. "Twins give a man the necessary ambition to win the best prize in any contest," declares Mr. Meeth

### *Columbia Has Longer Playing Records*

The Columbia Phonograph Co., Inc., announces a new series of "Ace" recordings on a longer playing record. These, it is understood, will play on any standard phonograph without the use of any attachment or adapter. They will run practically twice as long as the present standard discs.

The first of these new records to be introduced carries a medley of tunes from "Face the Music." They will be priced only slightly higher than present prices. Each record will feature several musical selections and two or more of Columbia's headline artists.

## AGAINST 3 YEAR GUARANTEE FOR REFRIGERATORS

### *Survey Shows 92 Per Cent of Radio Wholesalers Decry Long Term Service Policy—N.A.R.R. & E.D. Launches Membership Drive*

Ninety-two per cent of the 220 wholesalers who replied to a refrigeration questionnaire, recently sent out by the National Association of Radio, Refrigeration and Electrical Distributors, are against the three-year guarantee. One year is plenty, said 74 per cent who answered. Other practices prevalent between jobbers and electric refrigerator manufacturers were revealed as follows: Advertising expense generally shared on a fifty-fifty basis. Sixty-six per cent think the best pricing policy is to quote completely installed in the home, 25 per cent favor f.o.b. factory.

It is poor business to sell on three-year terms, declare 94 per cent, while 54 per cent think two-year terms okeh.

The question of protection against changes in models and prices revealed that five manufacturers were reported as not giving any protection, while the balance give from 30 to 60 days' notice.

Interesting comments were developed on the question of adoption of the use of electric coin metering devices to promote retail sales. Fourteen per cent of the distributors have used such devices, while 86 per cent have not. In analyzing this question it was found that 20 per cent of those now using the meter plan find it satisfactory; 27 per cent satisfactory in some cases and exercising great care with the proper dealers, while 43 per cent claim that it is a very poor way of merchandising and do not recommend it.

Net jobbing profit, so far, seems to average 4.8 per cent.

### *Membership Campaign*

This organization, formerly the Radio Wholesalers Association, is launching a membership drive based on the need for exact information on the part of the new comers in the refrigeration game. Concerning this need for cooperative, fact-finding action, executive headquarters, 32 West Randolph Street, Chicago, says:

"The country's leading distributors have furnished our executive offices with pertinent answers on 24 very important questions. They represent a true cross-section of the United States, having replied from 120 cities—42 states—representing 17 nationally known manufacturers. The summary of these replies in complete but compact form is the most valuable information you could possibly secure on the refrigeration field. The returns for each individual line represented in the survey have been sum-

# the Trade Show

Condensed for the Busy Reader

New York, N. Y.

marized, thus giving a true picture of individual conditions. In order to respect the confidence of those replying, no names have been used.

"Copies of the complete recapitulation, distributors' comments together with photostatic prints of the individual summaries are available only to members of our association. In order to qualify for membership, you must be a recognized distributor in the refrigeration, electrical or radio fields.

"Simply indicate your desire to affiliate—enclose a check for \$50 covering one full year's dues (effective April 1, 1932) and mail it to our executive offices. If you do not feel that this survey alone is worth more than your membership dues, return it within five days and we will refund your money at your request."

## Aylesworth Now RKO President

A "wedding of radio and movie interests" which cannot fail to produce better entertainment for the numerous devotees of both is indicated in the appointment of Merlin H. Aylesworth to the presidency of the Radio-Keith-Orpheum Corporation, Mr. Aylesworth retaining his radio post.

The appointment came as the result of the first meeting of RKO's directors following its annual meeting of stockholders, being made public April 13 by David Sarnoff, president of RCA and chairman of the RKO Board. Following, appears a statement, in part, issued by Mr. Aylesworth immediately following his election: "The coordination of radio broadcasting, stage and screen entertainment, is logical and highly desirable. They are naturally associated and each will benefit the other. While the NBC and RKO organizations will be entirely separate there is a great opportunity to coordinate these two forces in meeting the demands of the public. Our responsibilities are large but I am confident that the men and women of both companies will bring to the people the finest entertainment that vision, hard work and money can produce."

Hiram S. Brown, who relinquishes the RKO presidency, will continue as a member of its Board and chairman of the Executive Committee. David Sarnoff was re-elected Chairman of the Board. Owen D. Young was elected a member of the executive committee. Gerard Swope, president of G.E., and Andrew W. Robertson, chairman of the Westinghouse board, were elected to the Board and Executive Committee of RKO.

## Simplified Accounting Plan

A simplified accounting plan, designed to meet the requirements of the radio retailer, has been brought out by Stationers Loose Leaf Company, Milwaukee, Wisconsin.

## INDUSTRY TO FIGHT SPECIAL RADIO TAX

### RMA Opposes Discriminatory 5% Levy

At a special Senate Finance Committee meeting, to be held this month, Frank D. Scott, RMA legislative representative, will lodge formal protest of the industry against the special 5 per cent "discriminatory" tax which the House Revenue Bill proposes to levy on manufactured sets. This course was agreed upon by the association at a board meeting held in Hot Springs, Virginia, April 8.

"The radio industry is entirely willing to contribute equally with others to the government's revenue necessities and acquiesced in the House Ways and Means Committee proposal for a general manufacturers sales tax, even to the considerable extent of 2.25 per cent," according to executive secretary Bond Geddes, who advises that representative Scott will stress exemption of newspapers from taxation in presenting the industry's case.

The RMA is now proceeding to enlist the support of all manufacturers, jobbers and dealers to add further weight to its effort to make legislators see the injustice of unduly penalizing radio. Chairman of the association's legislative committees for the various states have expressed their

willingness to assist in the protest to be lodged with the Senate.

"In its widespread service to the public as a great agency of communication, religion, education and daily individual and national development, as well as entertainment, radio cannot be fairly classified as a luxury, semi-luxury or non-essential," states secretary Geddes. "Like the daily newspaper, which is carefully exempted in the House Bill from any additional tax burden, radio is a daily and vital means of communication. Its use is universal and we oppose a special discriminatory tax on this great service to the millions of the American radio public. The classification of radio with cosmetics, candy, etc., as a luxury is absurd.

"Annual reports of three prominent radio companies, reflecting an industry condition which is general, report 1931 losses. The revenue returns expected from the proposed radio tax would be much below the estimate of federal experts. Not \$11,000,000 but \$7,731,750 would be realized even if 1932 sales equalled sales in 1931, which is improbable, especially if a sales tax is added to reduce volume," he concludes.



## Ocean Trip for D. W. May Dealers

On Thursday afternoon, May 26th, a boatload of Philco dealers who do business with distributor D. W. May will leave New York, for Bermuda, on the chartered steamship "Oriente". May plans an interesting program aboard ship including

talks by the manufacturer's representatives, the trade press and members of his own staff. The new Philco line will be on deck, to be examined at leisure during the four and one-half days away from Manhattan. Two solid days in Hamilton are promised, the ship returning to its mother port early Tuesday morning, May 31.

Here's "Cap" May, himself, taken on the occasion of Philco's last Bermuda cruise.

## Welling's "Show Special" to Run Again This Year

Heralded as the largest special train ever to leave the Grand Central Terminal, New York City, Leonard Welling's "Trade Show Special" will pull out Sunday, May 22, at 3 p.m. daylight saving time. It will carry 300 radio men to the R.M.A. Trade Show in Chicago, and will consist of 14 sleeping cars, two diners, a club and observation car.

In order that the New York tradesmen may be kept "intact" from the time they leave New York until they return, on May 27, 300 rooms have been reserved at the Medinah Athletic Club, at special convention rates.

Harold J. Wrape, president of the Benwood-Linse Company and of Trav-Ler Radio and Television Corporation, St. Louis, was elected president of the Missouri Athletic Association the other day.

## Ken Hathaway Organizes Sectional Service Groups

Ken Hathaway, executive secretary of the Institute of Radio Service Men, recently made a tour of the east for the purpose of setting up sectional groups of the technical organizations. Rochester, Albany, Boston, Philadelphia, and Washington were included in the itinerary.

E. S. Browning, installation and service manager for Stromberg-Carlson and Edgar C. Arnold, an independent service man, were appointed chairman and vice chairman of the Rochester Section. J. L. Toombs, the first service man to become a member of the Institute, was appointed chairman of the Albany group. Perry S. Graffam of the Tobe Deutschmann Corp., was appointed chairman of the Boston Section, and Samuel K. Macdonald was selected to head the group in Washington.

These new groups are in addition to the Chicago and New York Sections which have been in operation throughout the winter. All the work connected with the organization of the local groups is handled from the headquarters office at 538 S. Clark St., Chicago.

## Franklin Radio Acquired by Joyce-Cridland

Joyce-Cridland Co. has acquired the assets of the radio instrument division of the Van Horne Tube Co., and will continue the business of both concerns, operating under the name of the Franklin Radio Corp., as a division of the Joyce-Cridland Co., Dayton, Ohio.

The Franklin Corp. will continue to manufacture such items as have been introduced by its predecessors and will announce in the near future additions to its line of radio service instruments. It will also introduce something new in short wave converters and receivers, transmitters and accessories, also in automobile radio sets, in the near future.

## Tracey New "Speed" Executive

No longer a "duo", but a "trio" is the Cable Radio Tube Corporation. E. A. Tracey, who has just become chief executive of the firm, joins J. J. Steinharter and J. J. Grossman, heading that concern. Tracey was at the head of the Northern Manufacturing Company, maker of "Marathon" tubes, until that firm merged with National Union in 1929. He has been with the latter company as executive vice-president in charge of sales and advertising since that time.

## Tobe Training "Interference-Men"

Tobe Deutschmann Corporation of Canton, Mass., reports that it is hard at work training dealers and servicemen all over the country to combat radio interference. Its goal, according to the president, is to set up "interference specialists," one for every 10,000 people, who will help stamp out radio noise . . . and make money doing it. Manufacturers such as Atwater Kent, Stromberg-Carlson, RCA-Victor, Philco and Zenith are directing the attention of their dealers to the agency plan offered by Deutschmann, we are advised.

# DETECTOR LISTENS IN

and hears that . . . .



The Southeast, for Majestic refrigerators, will be covered by Charles R. Klopp, formerly with Pierce-Phelps, Philadelphia.

Leigh Borden, Inc., is the new name selected to replace that of Pacific Wholesale, Ltd., southern California wholesale distributor for Sparton, according to President Leigh C. Borden.

Don C. Wallace, formerly associated with General Motors, has returned to his previous business as a manufacturers' agent. He will make his headquarters in Los Angeles.

George C. Maudslay, formerly affiliated with the National Carbon Co., has become manager in southern California for the Bright Star Battery Co., of New York City, with headquarters in Los Angeles.

W. C. Harter, well known to the trade as sales manager of Polymet Manufacturing Corp., is now in a similar capacity guiding the sales of Solar Manufacturing Corporation. This newly formed firm is specializing in electrolytic and mica condensers, at 601 Broadway, New York City.



A. W. Lloyd now president, Franklin Radio Corporation, Dayton, Ohio. For more complete details, see news item, left-hand column, this page.

From Grigsby-Grunow: W. S. Vivian, until recently v.-p. in charge of public relations for the Middle West Utilities Co., will contact utilities in behalf of Majestic refrigerators. Hewitt Davenport will handle this work on the west coast.

Motorola auto-radio will henceforth be distributed throughout Minnesota by The Heimann Company of Saint Paul, instead of The Northwest Motorola Auto Radio Co.

S. A. Weiss Company, Inc., is factory representative for the Grinnell Washing Machine Corporation for Metropolitan New York territory. Grinnell announces also a new, 5 cu.ft. capacity refrigerator to sell for \$99.50.

Leonard refrigerators should be obtained by southwestern Montana dealers from the Symons Dry Goods Co., of Butte and by the Georgia boys from Gilham Electric, Atlanta.

Columbia Phonograph reports these new distributor appointments: Southern Aluminum Co., New Orleans, for southern Mississippi and most of Louisiana; Jenkins Music, Savannah, for most of Georgia

and Duval and Nassau counties of Florida; Gourlie Music Co., Tampa, Florida east of the Apalachicola with the exception of Duval and Nassau counties and The Wadley Asbestos Co., Dallas, northern Texas and part of Louisiana.

Spence Reese, who will be remembered by the St. Louis trade as former district supervisor on radio for G.E., now represents the company in the Cleveland territory.

From the many recent appointments to executive positions with the United American Bosch Corp., Springfield, Mass., George Stackman emerges as Trade Sales Manager.



Great Britain's radio sales are on the up and up, £20,000,000 for 1930 (\$66,000,000 to you) and £29,750,000 for last year—a 50 per cent increase. 900,000 new licenses were issued during '31 . . . grand total sets in use, 4,329,170 . . . saturation, 50 per cent.

The radio line of Columbia Phonograph Company, Inc., will be well represented in the Pittsburgh territory by the Superior Auto Accessories Co.

Weber Distributing boasts a new home "just around the corner from Latham and Wholesale," 45 East 20th Street, New York.

Ellis Paint Co., Butte, succeeds the Beckwith Co. as Philco distributor in Montana.

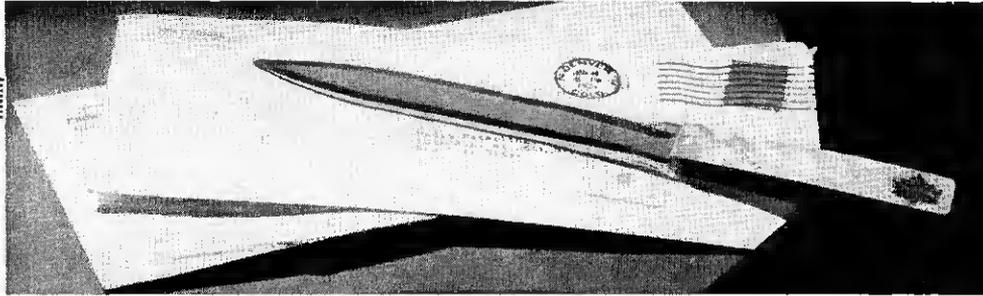
Jacques Tyrol is representing Grigsby-Grunow in the Pacific Coast district—California, Washington, Oregon, Nevada and Arizona.

Sparton interests in Utah are being promoted by Inter-Mountain Electric Co., of Salt Lake City.

Braid Electric Company, operating in Nashville for the past fifty-three years, is now serving middle Tennessee and southern Kentucky as wholesale distributor of Majestic receivers, tubes and refrigerators.

This organization has handled radios since the introduction of factory built home receiving sets and has a complete knowledge of the refrigeration business.

March 3, Braid Electric was host to 100 Majestic dealers from the territory served. This sales conference was held at the Andrew Jackson Hotel.



# VOICES

from the

## MARKET PLACE

### *Offers New Tube Replacement Plan*

Editor, *Voices from the Marketplace*:

**S**PEAKING as the owner of a radio set, I am not in full accord with the advantage of making people tube conscious by advocating wholesale replacements of their tubes once a year. Possibly many tubes do wear out in that time, and certainly some do in a much shorter period. The analogy of the policy of changing oil every five hundred miles is not fair, since a set is not injured by using worn out tubes.

In order to get first hand information the writer took three tubes whose constants showed that they were normal in every way (they did not look new however) to eight dealers for a free test. The test rigs in most cases were elaborate. In three cases the tubes were pronounced NG, in two cases they were pronounced worn out although still operative, and in three tests they were pronounced OK. In the former cases high pressure sales methods were used to sell me new tubes, generally of a make unknown to me.

I made no attempt to discover what kind of a test was applied, but I am certain that no useful "factor" could have been determined. I do not doubt however that a full test could have been made with the rig if the salesman had desired to or known how.

In justice to the public, therefore, I believe the best policy would be to advocate that everybody have at least *one new extra tube of each type on hand at all times*. A spare 227, 224, 245 and 280, or whatever is needed, could be put up in a single container with simple instructions that each tube in the set should be replaced with the spare, one at a time, and reception noted. When improvement is noticed the old tube should be laid aside and a new spare purchased.

I believe that the spare tube kit should be put up in a good looking wooden box with holes into which the tubes hang. Maybe such an outfit is available now but I have not seen one.

Hollis, N. Y.

RALPH K. BATCHER

*Editor's Note: Does anyone know where such a box for "spares" could be obtained?*

### *Strikes a Responsive Chord*

EDITOR, *Radio Retailing*:

**Y**OUR editorial, "Whose Fault Is It?", strikes a responsive chord here. I believe that there are several factors that cause dealers to be ultra-cautious in stocking battery receivers. First, the prices are too high. As nearly as I can determine the same general parts are used in a.c. and battery sets. Why should not the a.c. set with its transformer, filter system and condensers cost more? Less production is the only answer I can think of.

I may be bombarded for saying so, but I find that farmers want long demonstrations and, often-times, long terms at low interest rates.

Another cause is the fact that so many used battery sets are available at very low prices. This encourages the farmer to believe it is unnecessary to spend more than \$5 to \$10 for a radio. I think I am safe in saying that the average farm purchaser is quite satisfied with most anything that will make a noise and get him by with a small outlay.

My idea is that the fault lies with the manufacturer—he must get his price down to \$75, complete.

Speaking of terms brings to mind the difficulty the small dealers are having in finding methods of financing their sales. It seems to me that it behooves the radio manufacturers to form a financing arrangement for the smaller dealers.

So far, all the load of retail credit losses has been upon the dealer; the manufacturer some day may have to assist in bearing this burden.

Mansfield, Ohio.

H. N. UMBARGER

### *Should Learn by Experience*

EDITOR, *Radio Retailing*:

**W**E desire to write and express our great appreciation of the article appearing in *Radio Retailing* under your February, 1932, edition, entitled: "Solve Claremont." The conditions existing in that little town are the very same as exist here in Charleston. It seems as if the manufacturers and distributors will never learn the old saying "We learn by experience".

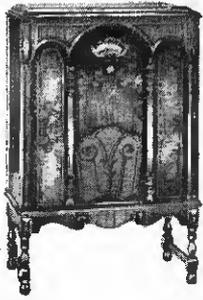
It does appear that in the years this has been going on, the manufacturers would have sense enough to know it is injuring the retail business but their policy seems to be for volume sales only, and the retailer can get along the best he can.

We take a great deal of pleasure in reading your magazine and wish you continued success.

Charleston, S. C.

RUDOLPH SIEGLING, Pres.,  
Siegling Music House.

# NEW MERCHANDISE

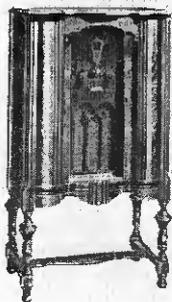


## Gulbransen Air Cell Battery Set

A superheterodyne air-cell battery radio can be obtained from the Gulbransen Co., 816 N. Kedzie Ave., Chicago. It comes in a good-looking, low-boy walnut cabinet, and uses four 222 screen-grids and a 233 pentode. The superhet circuit uses the new compound detector-oscillator circuit, which allows one tube to do the work of two.

The battery equipment includes one Air-Cell A-battery, three 45-volt B-batteries, and a 15-volt C-battery.

If desired, this chassis may be easily changed over for two-volt "A" storage battery operation.—*Radio Retailing*, May, 1932.



Bosch Model 40 II

## Bosch Line

The 8-tube superheterodyne Model 40 Bosch chassis recently announced, has stepless tone control and a new type diode stage, in which the features of automatic volume control and detector are combined in a 227 tube. The 40 chassis is available in four consoles, at the following prices: 40-J, \$78; 40-B, \$89; 40-G, \$89, and 40-L, \$139.50.

Model 91, a 7-tube superhet, has full automatic volume control, variable (stepless) tone control, Line-O-Lite tuning, variable-mu and power pentode tubes.

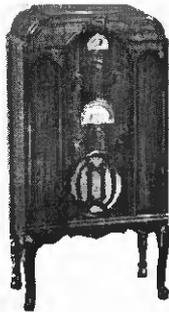
The cabinet is the open-faced style, similar to the former Model 31H. \$65.

Bosch's Personal Radio idea is continued this year in a new 6-tube superheterodyne, Model 36A. The cabinet is made on the same style as the earlier model, and a convenient collapsible zipper carrying case may be obtained at a slightly

additional cost. This set has volume control and full vision electrically-lighted tuning dial. The price is \$45. United American Bosch Corp., Springfield, Mass.—*Radio Retailing*, May, 1932.

## Stewart-Warner Sets

A portable type, armchair console may be found in the new line of the Stewart-Warner Radio Corp., 1326 Diversey Blvd., Chicago. It is mounted on silent, rubber-tired casters and has decorated cast metal handle, permitting easy removal from one room to another. This set has self-contained aerial and ground, and can be plugged in anywhere. The walnut cabinet



S-W French Console

is finished on all sides. It is a superheterodyne with tone control and television terminals. \$67.75 complete.

The Tudor console is a lowboy which may be had as a straight radio at \$65.75, or a combination short- and longwave set for \$87.75. The French console is of unusual design, with rounded top. \$71.75; with short- and longwave set, \$93.75.

The De Luxe console, an open-face lowboy, in early 18th Century period design, is \$82.75; \$104.75 in the duo-wave model.

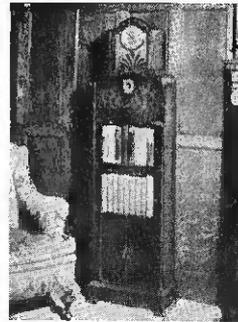
The new radio-phonograph combination has automatic record repeater and stop. \$148.50, which includes long and short-wave receiver.

Stewart-Warner also offers two midgets, one the Metropolitan with a 4-tube t.r.f. chassis, \$34.95; and the apartment model, a superheterodyne, with pentode and multi-mu tubes, full vision dial, tone control, etc., is \$52.95.

The shortwave converter is available as a separate unit in a walnut finished cabinet, 9 1/2 in. by 11 1/2 in. \$23.95 with tubes.—*Radio Retailing*, May, 1932.



S-W DeLuxe Console



Revere Patrician Tower

## Revere Radios

Two striking cabinets are offered in the new line of Revere Radio Corp., Ashland, Ohio.

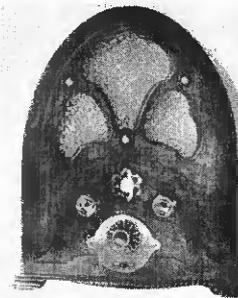
"Patrician Console" has convenient stowaway space below the radio, in addition to the bookshelf. This model is 44 in. high and lists at \$59.95. "Patrician Tower" is 16 in. higher and is topped by a Hammond electric clock. \$74.50.

Other new models include No. 47-S, a table set, \$47.95, and Model 55-S, a console, at \$56.50.

These four superheterodynes are 6-tube jobs, incorporating the perfected autodyne detector circuit.

In addition a 5-tube t.r.f. set is offered in a choice of two cabinets, both table models. \$39.50 for a.c. and \$47.50 for 110-volt d.c.

An auto-radio set is offered in both the battery operated and all electric types. It is a 7-tube superheterodyne with automatic volume control and using the new 236, 237, 238 and 239 tubes. The a.c. model is \$94.50 and the battery operated, \$69.50.—*Radio Retailing*, May, 1932.



## Mark-Time Switch

If rumors come true, several prominent set makers will offer their new models, equipped with the special "Radio Mark-Time" switch, by which the set can be turned off or on at any time within 14 hours. The scale is calibrated in five-minute divisions. This device is designed to form either a part of the chassis or of the cabinet, and contains a compact, rugged mechanism completely housed in bakelite.

Definite information as to which set manufacturers will include this device in their sets, is not available at present. The illustration shows switch on panel. Made by M. H. Rhodes, Inc., Hartford, Conn.—*Radio Retailing*, May, 1932.

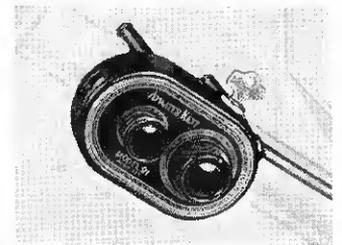
## A-K Model 91 Auto-Radio Set

Three types of a new nine-tube superheterodyne motor car radio have just been announced by the Atwater Kent Mfg. Co., Philadelphia, Pa.

This new set, known as Model 91, has a superheterodyne circuit and this, together with the addition of two tubes, is reported to have materially increased power, sensitivity and selectivity.

Like its predecessor, it is operated by remote control from an assembly attached to the steering column. A new case has been developed for housing of this control mechanism.

Two battery containers, recently developed, combine with the three different types of Model 91 to make five different assemblies that are said to meet any installation necessity. Price with tubes but less batteries and installation, \$69.50.—*Radio Retailing*, May, 1932.



## Connecticut "Mike"

The young people of most any family will become quickly interested in the Connecticut "Mike" made by the Connecticut Telephone & Electric Corp., Meriden, Conn. It is a regular microphone that can be easily attached to any radio set, and used to broadcast entertainment in the home. It affords unlimited opportunity for both young and old to have fun.

This "mike" in no way affects other sets. By making simple attachments from the microphone to the set, programs can be broadcast from any nearby rooms and the radio loudspeaker will reproduce it. This microphone also offers an opportunity for those who desire to do real broadcasting, to practice and perfect themselves.

It is made in three styles—table, floor and hand. The hand mike lists at \$4; the table model at \$5, and the floor style \$7.50.—*Radio Retailing*, May, 1932.





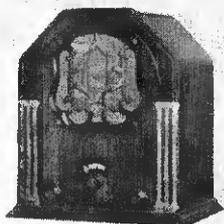
### "Vizer-Tena" Auto-Radio Aerial

An automobile radio aerial that also keeps glare of the sun out of the driver's eyes, is now on the market. This double purpose invention is made by the Vizer-Tena Co., Kansas City, Mo.

It looks like an ordinary vizer and is installed near the roof. A special ball and socket hinge joint allows adjustment to any up or down position or angle, thus protecting the eyes from the side as well as the front.

The Vizer-Tena is made of art leather and may be had in three colors: tan, gray or black. The metal parts are finished in rust-proof nickel plate.

In order to protect the eyes of the passenger in the front seat, these visors are often used in pairs, and are priced at \$5.50 for two.—*Radio Retailing*, May, 1932.



### Remler Model 10

Featuring the Remler twin-rotor condenser, transformers and other Remler parts, the Model 10 six-tube superheterodyne is the latest addition to the line of Remler Co., Ltd., 260 First St., San Francisco, Calif. Cabinetry is smartly new and finished in contrasting woods.

The list price is \$39.50, which includes the following tubes: 1-35, 2-24's, and 1 each of the '27, '47 and '80 types.—*Radio Retailing*, May, 1932.

### New Tubes

Illustrated is the type 57 tube with its radically different glass envelope. It is one of a new series brought out by RCA and licensees, complete information about which will be found on page 32 of this issue.—*Radio Retailing*, May, 1932.

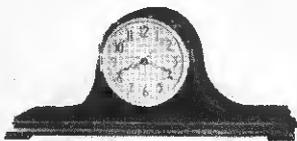


### Sorber Air-Cell Battery Midget

The first air-cell midget brought out by the Sorber Radio Mfg. Co., 1413 Cherry St., Kansas City, Mo., housed the batteries in the bottom of the cabinet but the new model has the three B-batteries and C-batteries separately enclosed in a convenient container, provided with handles, making the set portable. It is only necessary to plug the cable into the battery container, and the connections are made.

The new set employs four 232 screen grids, a 230 first audio and two 231 power tubes. An especially designed electro-magnetic speaker is used. As this set draws .54 of an ampere, and the air-cell battery is rated at 1,000 operating hours at .65 of an ampere, it is claimed the battery will last longer than usual.

The cabinet is designed along regulation midget lines with a Gothic arch. The list price, less accessories, is \$45.55, and complete, \$74.55.—*Radio Retailing*, May, 1932.



### Revere Clock With Chimes

The lowest priced electric Westminster clock in the line of the Revere Clock Company, Cincinnati, Ohio, is the newly announced Sheraton Colonial model which will sell for \$35. It is 8 in. high by 13 in. wide, with case of walnut lacquer finish and raised numeral dial.—*Radio Retailing*, May, 1932.

### Universal Auto-Radio

Five, 6, and 7 tube auto radio receivers are now being made by the Universal Auto Radio Corp., 1223 S. Michigan Ave., Chicago.

Model 50 is the 5-tube set, using two 551's, a 224, a 237 and a 238. \$59.50, complete with accessories, but less batteries and aerial.

Model 60 has 6-tubes—an extra '38. \$69.50.

Model 70, the largest set, has automatic volume control, \$79.50.

Any of these three sets may be obtained for use with B-eliminator, at \$20 additional. Universal's B-eliminator is also available as separate equipment, at \$20.—*Radio Retailing*, May, 1932.

### DeWald Dual Wave Receiver

Pierce-Airo, Inc., 510 Sixth Avenue, New York City, announces its new DeWald dual wave, single dial superhet with shadowgraph tuning. The wave length band ranges from 60 to 600 meters. The tube equipment includes pentodes and variable-mus.

This set is available in chassis or cabinet model, and there will also be models for operations on either a.c. or d.c. The list price is \$49.50 complete.—*Radio Retailing*, May, 1932.



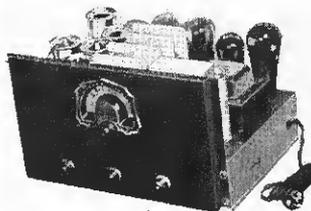
### Federal Remote Control

Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J., has gone into production on a remote control apparatus for radios, either in the home or automobile.

It has no gears or springs to get out of order, and, operating on one wire, with no electrical current, there is no fire hazard. It can be operated independent of the tuning set of the set itself.

When installed in the automobile, it can be mounted anywhere, or need not be mounted at all so that it can be used from any part of the car.

It consists of a control unit, condenser driving unit, flexible driving cable, multiple wire cable and electrical connecting plug. The operating cable drives the tuning condenser of the radio receiver by means of a pulley which is attached to the condenser shaft and which is enclosed in the housing of the condenser driving unit.—*Radio Retailing*, May, 1932.



### Clarion Chassis

Convinced that there is a market for new and modern chassis to replace obsolete sets, the Transformer Corp. of America, 2309 S. Keeler Ave., Chicago, is offering to its dealers a 10-tube chassis and dynamic speaker, equipped with metal panel to simplify installation. Many owners of obsolete chassis refuse to give up their handsome cabinets, even for the advantage of the modern radio, but would like to put in a new set, if they knew it could be done.—*Radio Retailing*, May, 1932.

### Ice-O-Matic Refrigerators

Two new models, L-50 base mounted and the L-50-T top mounted, Ice-O-Matics are now being distributed by the Williams Oil-O-Matic Heating Corp., Bloomington, Ill.

All Ice-O-Matic cabinets have acid-proof porcelain interiors and two exterior finishes—cellulac and porcelain. The cellulac is a cellulose or lacquer product. The evaporator which is included in the refrigerator, is the latest type one piece construction, having removable shelves and is cadmium plated. The porcelain front and temperature control are designed as a single unit.—*Radio Retailing*, May, 1932.

### Globe Television Set in Console

Following announcement in our April issue of the midget sight-and-sound receiver developed by the Glode Television & Phone Corp., Starrett-Lehigh Bldg., New York City, comes word that this equipment is now available in an attractive walnut console. The cabinet houses two complete and distinctly separate receivers for simultaneous television and broadcast reception, permitting the enjoyment of television programs with synchronized sound or with any broadcast program as incidental music.—*Radio Retailing*, May, 1932.



### Magnavox Auto Speaker

New tone quality, new practicality of design—these are the outstanding characteristics of the 1932 improved Magnavox dynamic speaker for automobile-radio made by Magnavox Co., Ltd., 155 E. Ohio St., Chicago, Ill. The single stud mounting makes installation easy on any dash. Bracket mountings are also available.

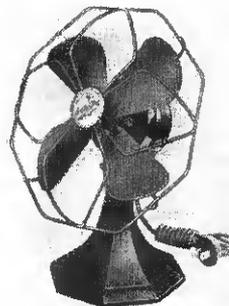
This speaker may be had in a heavy, non-resonant metal housing, circular in shape, or in a covered, wood housing in the square style.—*Radio Retailing*, May, 1932.

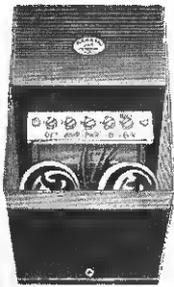
### Arctic-Aire Fan

The specially designed motor and correct blades deliver a maximum volume of air at all times, with the Arctic-Aire electric fans the F. A. Smith Mfg. Co., Rochester, N. Y., has brought out. They are available in a variety of pleasing color combinations, that harmonize with the furnishings of the bedroom, living room, or office.

It is said that it does not creep along the table, despite the speed of the motor, and it does not interfere with radio reception. The motor shaft is mounted on full floating Mahanite bearings, which never need oiling. These fans are guaranteed for one year, and have a list price of \$3.50.

They are of the non-oscillating type with 8 in. blades for use on 110-volt, 60 cycle, a.c.—*Radio Retailing*, May, 1932.

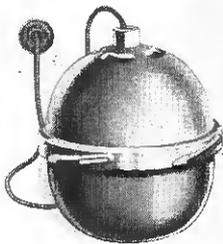




### Karadio B-Eliminator

Karadio "B" eliminators are built in two sizes—No. 1, for use in connection with sets that are designed to operate on a series hook-up consisting of 3 B-batteries, totalling 135 volts. The construction differs only from Size 2, in that it gives less "B" voltage at a minimum "A" battery drain. To take out more voltage from the No. 1 unit, means extra drain on the "A" battery, therefore, size No. 2 is offered, designed for use in connection with sets operating on a series hook-up consisting of four B-batteries, totalling 180 volts. Either unit can be installed in practically all standard and shortwave automobile radio sets.

These "B" eliminators, made by the Karadio Corp., 1635 Hennepin Ave., Minneapolis, Minn., are of the vibrating type and have no revolving parts to wear or give trouble. Two No. 171 tubes are used as rectifiers.—*Radio Retailing*, May, 1932.



### Electric Moth Exterminator

In the automatic electric moth exterminator brought out by the Automatic Washer Co., Newton, Iowa, a way has been discovered to kill the moth larvae as soon as they hatch from the eggs. Warm vapors generated by the exterminator kill them before they start their work of destruction, and destroy the eggs too, it is said.

This device leaves no unpleasant odor and has no moving parts and no adjustments to make. It is simply connected to the electric outlet and the switch turned on. \$3.35. Refills, 50c.

The filler gives approximately two hundred hours continuous operation.—*Radio Retailing*, May, 1932.

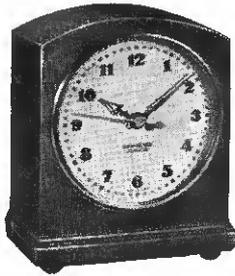
### Lynch Resistor Kit

The "Handipak" resistor assortment which the Lynch Mfg. Co., 1775 Broadway, New York City, is making, solves the problem of economical yet efficient stocking of resistance units for replacement service. This Handipak contains 10 assorted 1- or 2-watt resistors of the metalized type. When a resistance value other than one contained in the Handipak is desired, by using the two formulas contained in each kit, an infinite variety of resistance ranges can be obtained for emergency use.—*Radio Retailing*, May, 1932.

### Hammond "Firefly"

Behind and below the translucent dial of the new Firefly clock made by Hammond Clock Co., 4115 Ravenswood Ave., Chicago, is placed a small 2½-volt lamp which diffuses by reflection an even glow over the entire clock face, which gives maximum visibility in a darkened room, but does not light up the room. A switch permits turning off the lamp in daylight hours. The alarm is of the buzzer type, toned to arouse the sleeper without shattering his nerves.

This clock comes in a molded ebony finish case of modern design. It is 4½ in. high.—*Radio Retailing*, May, 1932.

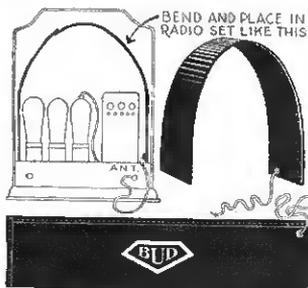


### Bud Universal Aerial

A quickly installed radio aerial is now being made by Bud Radio, Inc., 1923 E. 55th St., Cleveland, Ohio.

It can be used on consoles, midgets, portable and automobile radio sets. To connect, it is necessary only to fasten the brown wire to the aerial post of the radio set. No ground is said to be necessary on the newer sets. For older type sets, if signal is too weak, a ground wire can be run to the black wire on the aerial.

The illustration shows how this device can be installed in a midget. The price is \$1.—*Radio Retailing*, May, 1932.

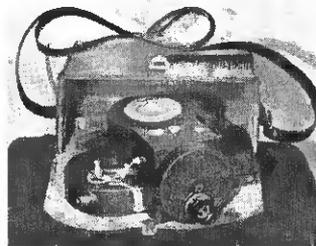


### Sylvania Testers

With the addition of two new tube analyzers, Models 336 and 540, Hygrade Sylvania Corp., Emporium, Pa., is prepared to equip dealers with tube-testing apparatus to suit their needs. The new instruments are brought as a result of the demand from smaller dealers for efficient instruments.

The counter analyzer has an easily-understood dial, indicating satisfactory, doubtful and unsatisfactory tubes. Shorted tubes are shown by a light under a ground glass indicator. Voltage indicating meter and compensating adjustment allow accurate test readings over a wide range of line voltage fluctuations. The tester operates on 110 volt, 60 cycle outlet.

The portable analyzer, Model 540, has all the technical features of the above model, but is compactly built so that it fits into a leatherette-covered case smaller than that of a portable typewriter.—*Radio Retailing*, May, 1932.



### Fleron "Motor-Tenna" Aerial

Complete equipment for automobile aerial installation using a special alloy cable and insulated throughout with indestructible Bakelite, is offered in the "Motor-Tenna" automobile-radio aerial manufactured by M. M. Fleron & Son, Inc., Trenton, N. J. It is easily applied to any make of car. The list price is \$4.—*Radio Retailing*, May, 1932.

### Victor Cameras

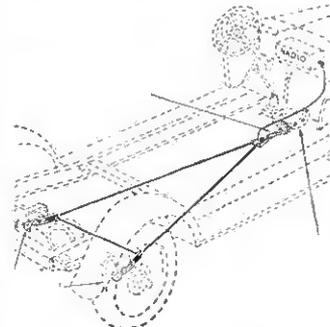
In announcing its new Model 3 and 5 cameras, and its new price policy, the Victor Animatograph Corp., Davenport, Iowa, calls attention to the fact that the new prices are not the result of cheapening or of reducing the completeness of the product.

On Model 5 Victor, there has been a reduction of approximately 22½ per cent in price. All previous features have been retained, and several new features added.

Model 3 is being offered with 20 mm. F 3.5 fixed focus Dallmeyer lens at a price reduction of nearly 35 per cent.

Both models can be supplied with any choice of lens and Kodacolor movies may be made with the proper lens and filter assembly.

Victor also has introduced a pocket titler, for Victor and Filmo cameras. It is available in 20 mm. and 1 in. lens models.—*Radio Retailing*, May, 1932.



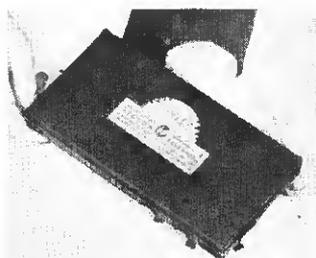
### Dayrad Testers

Type 370 Dayrad direct reading tube tester is designed to show in understandable words the quality of tubes. A line voltage meter and adjustment for uniform voltage insures identical tests regardless of line voltage fluctuations.

Sockets for tubes with similar characteristics are grouped and each group has a distinguishing color. The net price to dealers is \$90 for 60 cycle model, and \$94 for the 25-cycle.

Type 175 test oscillator is designed for all i.f. alignments between 170 to 185, 127 to 133, and 254 to 266 k.c. It is a self-modulated r.f. oscillator which generates signals in the i.f. bands. Harmonics of these signals are utilized when the oscillator is used to align r.f. stages in the broadcast band. The oscillator is provided with a variable output control, governing the amount of r.f. energy to be supplied to the receiver. Shielded dummy antenna and input adapter are supplied. The price is \$19.75 without batteries or tubes.

Type 175-A is same as above except the additional frequency of 465 kilocycles (not variable), is provided. \$22.50. Radio Products Co., Dayton, Ohio.—*Radio Retailing*, May, 1932.

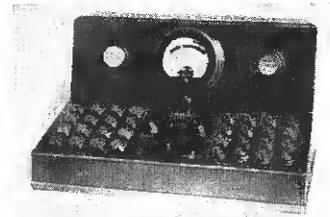


### Storage Cabinet for Service Men

A steel storage cabinet for radio service—designed to save breakage and damage to expensive test instruments and tubes—and to protect against loss and petty thievery, is being made by the Lyon Metal Products, Inc., Aurora, Ill.

It stores an average stock of new tubes, complete set of testing instruments, tools and small parts. The removable tray storage stand (illustrated) for test jobs on the work bench stores 50 tubes.

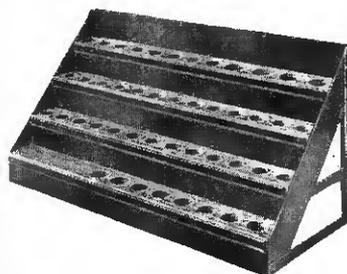
This cabinet is 36 in. wide, 12 in. deep and 84 in. high. The doors lock securely, and are fitted with stock control boards. All shelves have label holders. The cabinet complete with stand is \$58.50. The stand alone costs \$5.70.—*Radio Retailing*, May, 1932.



### Portable Automatic Phonograph Unit

A portable automatic phonograph unit for use with sound distributing systems has just been announced by the Operadio Mfg. Co., St. Charles, Ill. It plays ten records on both sides continuously, without attention, and is incorporated in an attractive crystalline-finished metal carrying case. All hardware is heavily nickel-plated.

This unit is available in several models, adapted to various types of service.—*Radio Retailing*, May, 1932.



ZENITH BELIEVES THAT THE SOONER THE RADIO INDUSTRY...MANUFACTURER, DISTRIBUTOR, DEALER...CASTS ASIDE THE RUINOUS PRACTICE OF OPERATING ON THE BASIS OF "HOW-CHEAP-CAN-I-MAKE" AND "HOW-LOW-CAN-I-SELL," THE SOONER WILL RADIO REGAIN ITS RIGHTFUL POSITION AS A SOUND AND PROFITABLE BUSINESS.

ZENITH RADIO CORPORATION · CHICAGO, ILL.



# Centralab

## DOMINATES



Domination in these competitive days must be based on genuine worth. Centralab Volume Controls and Centralab Fixed Resistors represent standards that meet the most exacting requirements of the engineer and manufacturer. Centralab Replacement parts are now available to service men at greatly reduced prices.

CENTRAL RADIO LABORATORIES, MILWAUKEE, WIS.

Send for these two booklets.

The Baptism of Fire tells the story of how Centralab Fixed Resistors are made. It is FREE. The Volume Control Guide tells how to service all old and new sets with just a few Centralab Replacement Units. Priced at 25c.

# COMPELLING ADVERTISING



## BRINGS THOUSANDS TO SEE **Westinghouse** *Dual-automatic* *Refrigerators*

**N**EW! NEWS! NEWS! First the famous *Dual-automatic* Refrigerator. And now four amazing new improvements . . . and new low prices!

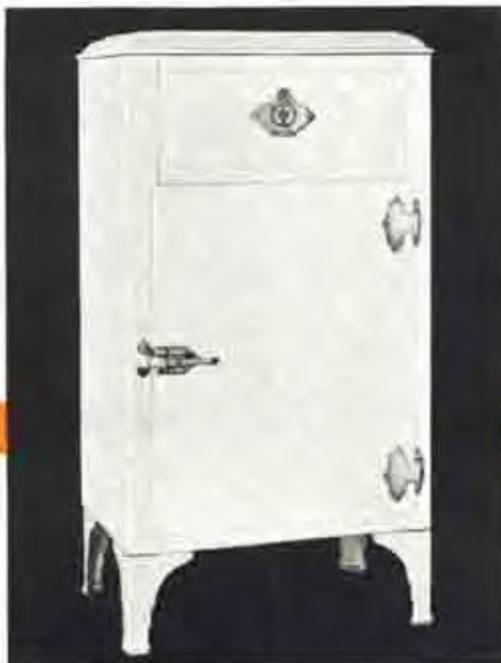
Westinghouse advertising is the news of the day. News that's bringing thousands of unsolicited prospects to showrooms *everywhere*. Salesmen are doing more selling . . . less canvassing. Orders, deliveries, profits are zooming.

Alert merchandisers are cashing in on this advertising. They are demonstrating the Westinghouse *Dual-automatic* Refrigerator to the prospects it is bringing in. And a demonstration is convincing! For only the Westinghouse is *dual-automatic*. It offers *dual-advantages* in every detail. And to merchandisers this means dual-profit opportunities.

Not only that . . . Westinghouse is backing its dealers with the most resultful sales promotion. Merchandising Plans . . . Direct Mail . . . Window Displays . . . all kinds of material is coming from the factory.

There are still more Westinghouse franchise opportunities open. Why not get complete details? Write, wire, or telephone!

WESTINGHOUSE ELECTRIC & MFG. CO.  
Refrigeration Division                      Mansfield, Ohio



More people are mailing coupons from Westinghouse advertising than ever before. These inquiries are promptly delivered to Westinghouse dealers for quick follow-up and sales!

**NEW LOW PRICES**



**THIS COUPON BRINGS FACTS THAT YOU SHOULD KNOW**  
Westinghouse Electric & Manufacturing Co.,  
Mansfield, Ohio. (R.R. 3-22)

Please give me full particulars about new low prices and extra profit from Westinghouse Refrigerators.  
Name.....  
Address.....  
City..... State.....

# RADIO'S SIX RING SEASON



## 1. MAY 23 TO 26

R.M.A. Radio Trade Show opens this Big Season by introducing the new models and launching the new plans.

## 2. JUNE 14 AND JUNE 27

Republican and Democratic Conventions in Chicago broadcasted to an eager and anxious country.

## 3. JULY 31 TO AUGUST 14

Olympic games in California with sport lovers of the entire world listening in.

## 4. AUGUST TO NOVEMBER

Political campaign reverberating from all points with every headliner holding forth behind a battery of microphones until the climax on election night.

## 5. OCTOBER AND NOVEMBER

The old reliable national obsessions — World's Series Baseball and College Football—playing to crowded sidewalks and a close circle in every home.

## 6. FROM MARCH UNTIL JUNE

Radio Retailing's own campaign over the national net work to rejuvenate radio inception.

**WILL BRING BUSINESS TO EVERY  
DEALER DISTRIBUTOR MANUFACTURER**

# IT ALL STARTS WITH THE R.M.A. TRADE SHOW

• Thousands of dealers will travel to Chicago for those four days to see what the big manufacturers have brought out—to compare the new models—to take the dope all home and study it. And thousands more will stay at home and wait for news.

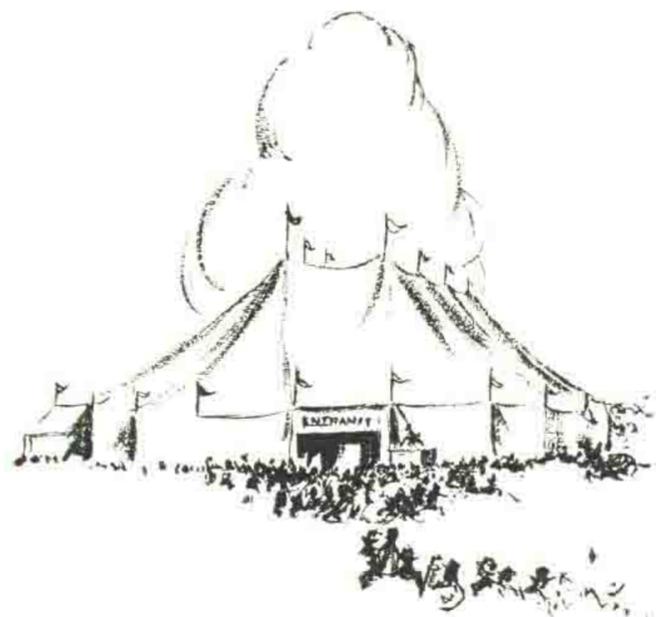
**Radio Retailing's R.M.A. Trade Show Issue**—distributed as the Trade Show opens—will bring to both groups their first complete picture of this year's opportunity for the radio industry. A special eight page section will exhibit all the new models—with trade name, model number, list price and number of tubes. Supporting editorial features will comment on the latest technical developments and the probable future trends that will come out of them.

With it, massed in the advertising section, will be an exhibition of products, more far-reaching than the great display in the Trade Show itself—for it will carry out into the stores of 23,000 readers, located throughout the country, not only the new models but the message of the manufacturer himself. It will embrace not only radio, but those supporting lines of merchandise that every dealer is so interested in today—talking movies, television, refrigerators, clothes washers, clocks, fans and other home equipment.

Watch for this issue. Plan to study it and make the lessons of the Trade Show increase your sales this season. *Radio Retailing* will bring these ideas to you ready to use.

## RADIO RETAILING

**MANUFACTURERS CAN PRESENT THEIR IDEAS AND PRODUCTS IN THIS ISSUE WHETHER THEY EXHIBIT IN THE TRADE SHOW OR NOT. FORMS CLOSE MAY 15.**



# 1932..

a **BIG**  
**BLUE TUBE YEAR**



- Arcturus Blue Tubes were and are used by more set manufacturers than any other tube! We are building for Arcturus Dealers and Jobbers a bigger replacement market than any other tube!—establishing millions of satisfied *blue* tube users who in 1932 will become *blue* tube customers!
- The distinctive *blue* color of Arcturus Tubes gives you a tremendous advantage. It's the only distinctive tube on the market.
- Are you in line to get your share of this vast replacement market and the profits on this fastest-selling tube?
- Thousands of new set owners and millions of Arcturus users are going to demand *blue* tube renewals. Here's a big market you can't afford to overlook.

ARCTURUS RADIO TUBE COMPANY, NEWARK, N. J.



*The* **BLUE TUBE**

# ARCTURUS

*The* **TUBE with the LIFE-LIKE TONE**

# SIMPLIFIED REFRIGERATION SIMPLIFIED SELLING

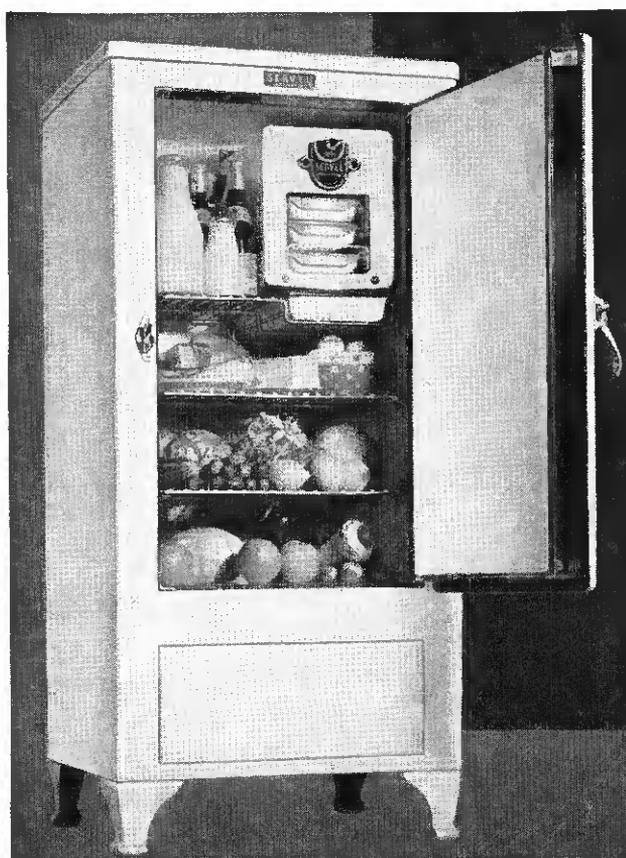
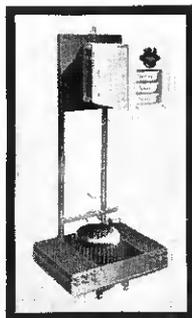
## Do you know that . . .

- Approximately 125,000 more electric refrigerators were sold in 1931 than in 1930?
- The electric refrigeration market is only 17% saturated?
- The Servel Hermetic is the simplest electric refrigerator ever produced?
- It fits right into your business — that you can handle it like any other merchandise?
- It has a list of retail selling points that can't be beaten?
- Servel gives you comprehensive sales and educational helps that assist you in organizing for this rich market?
- You can write Servel TODAY to get their attractive Dealer Plan for 1932, with prices and discounts?
- *And* that you should act NOW to cash in on the profitable spring season?

SERVEL SALES, Inc.  
Evansville, Ind.

*Makers of a complete line of commercial  
and household refrigeration*

Here is the highly simplified refrigerating unit built in one rigid piece. It is hermetically sealed with the few necessary moving parts assembled in the lower portion and located in the base of the refrigerator cabinet.



**EASY TO HANDLE**—*Hermetically sealed unit . . . No kitchen repairs . . . No intricate adjustments . . . No replacement of parts . . . Fewer moving parts . . . No moving parts exposed . . . Handy temperature control . . . More usable shelf space . . . Beautiful, graceful cabinets . . . Flat, usable top . . . No installation problem*

# SERVEL

## HERMETIC

*Simplified Refrigeration*

# *This Radio Line is*



**S**TARTING with the Model 36A Personal Radio which has set an inimitable standard in small radio design and performance, through to the de luxe consoles, American Bosch Radio, in radio dealers' language, "is a hot line"—it sells. The Personal Radio is a new superheterodyne in a solid mahogany case and is just right in size, performance and price for now as well as the summer months to come. The console models are priced right for volume business. Behind this line is long experience in quality manufacture as well as ability to gauge the market. In 1931 American Bosch sold nearly 50% more radio sets than in 1930.

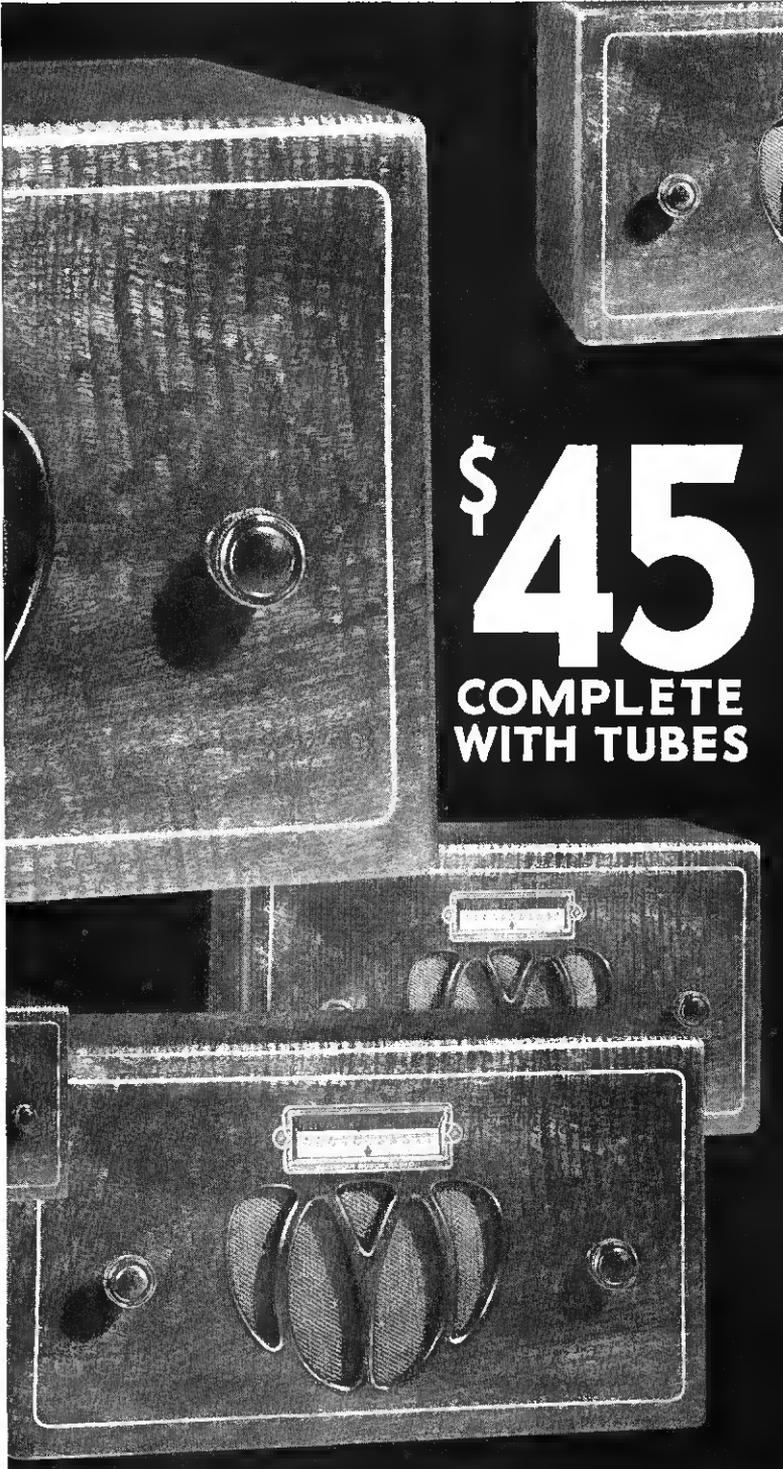
**UNITED AMERICAN BOSCH CORP.**  
**SPRINGFIELD MASS.**

Branches: **NEW YORK CHICAGO DETROIT SAN FRANCISCO**

American Bosch Radio is licensed under patents and applications of R.C.A. Western Prices Slightly Higher.

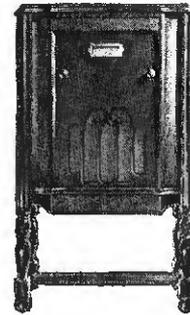
# AMERICAN BOSCH

# Selling now

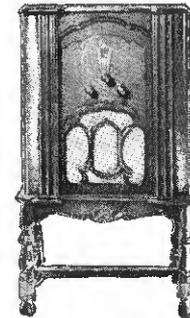


**\$45**  
**COMPLETE WITH TUBES**

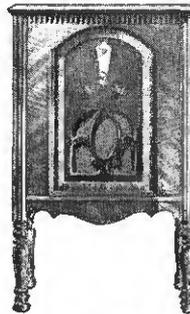
# RADIO



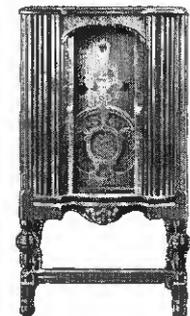
**MODEL 36-B**  
 Console—Six tube superheterodyne. Cabinet of walnut and patterned veneers. Full range tone dynamic speaker. Full vision tuning scale \$56.00



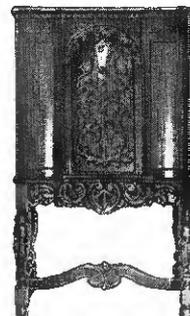
**MODEL 91-H**  
 Console—Seven tube superheterodyne. Full Automatic Volume Control. American and Oriental walnut veneer cabinet. Full range tone control . \$65.00



**MODEL 40-J**  
 Console—Eight tube superheterodyne. Duo-Diode—full Automatic Volume Control. Beautiful cabinet of walnut veneers. Full range tone control . . . \$78.00



**MODEL 40-G**  
 Console—Eight tube superheterodyne. Duo-Diode—full Automatic Volume Control. Full range tone control. Cabinet with sliding doors and walnut veneers . . . \$89.00



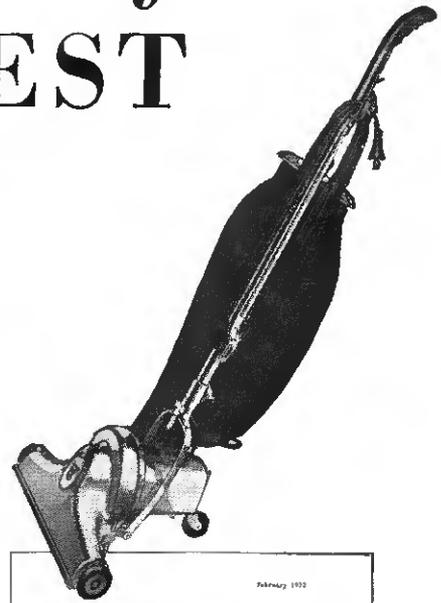
**MODEL 40-L**  
 Console—Eight tube superheterodyne. Duo-Diode—Full Automatic Volume Control. Full range tone control. Beautifully designed sliding door cabinet of burl and striped walnut veneers . \$139.50

If you are interested in today's profits as well as in getting the advantages of steady progress in a well founded progressive program which spells success, turn to American Bosch. Write to learn our plans for your territory. American Bosch is growing steadily and solidly—grow with American Bosch Radio.



Look for the shield of quality

# 3 POINTS of INTEREST



## 1 The cleaner itself

Here's the Graybar Two-Speed Vacuum Cleaner that's proving popular everywhere. Reasons? There are many. But the best ones the women users gave us themselves.

## 2 What women look for in a cleaner

We asked hundreds of women all over the country what they liked about this cleaner. More than 50% immediately voted for the two-speed feature (normal for average cleaning, extra for heavy cleaning). 23% users were enthusiastic about the powerful motor driven brush . . . 21% said they liked Graybar's cleaning efficiency . . . 18% liked its ease of operation. Many others heartily approved the no oiling, nozzle and brush adjustment features.

## 3 How we help you sell them

We're ready to supply you with the right cleaner. And more . . . we're ready to help you sell it. We have an interesting Dealer Poster Plan we can put to work for you. Strong, attractive, window displays, eye-catching posters for wall, delivery truck and store . . . the kind of posters that invite customers to buy. Mail the coupon for full information.

February 1932

SUMMARY OF REPLY'S RECEIVED FROM USERS OF THE TWO-SPEED VACUUM CLEANER No. 40

- Reply rate 94% - 423
- In this appliance satisfactory:
  - 40 - 1st
  - 0 - 2nd (due to improper use)
- What features appeal to you? (Figures show the number of clean each feature was mentioned.)
 

71 - No. Speeds	8 - Easy to Store
71 - Cleaning Efficiency	1 - P.M.
70 - Powerful Suction	1 - Light, Handy, Pull Out Plug Bag
70 - Motor Drive Brush	1 - No. Nozzles
70 - No. Oiling	1 - Bag Clip
70 - Appearance	1 - Roll Cover
70 - Motor	1 - Pusher Power
69 - Brush adjustment	1 - Large Nozzle
57 - Motor Adjustment	1 - Quality of Material
51 - Easy to Operate	1 - Motorless Motor
41 - Roll Feature	1 - Good Balance
17 - Lightness	1 - Pusher has Great Purchase
17 - Rollers Good and Fine	1 - Convenience
15 - Spring Motor	1 - Shortness
9 - Roll Brush Nozzle	1 - Light Construction
8 - Handle Grip	1 - Finish
8 - Convenient Switch	1 - Simplicity
8 - Rolling Feature	1 - Regulation of Suction
7 - Motor Run Wheel	1 - Bag, no Motor Adjustment ad
1 - Quiet Running	11 - 35¢/14 lower
- What would you change?
  - 50 - Nothing

Most of the suggestions offered were trivial, while very few relate directly to the item itself.



# Graybar

OFFICES IN 76 PRINCIPAL CITIES

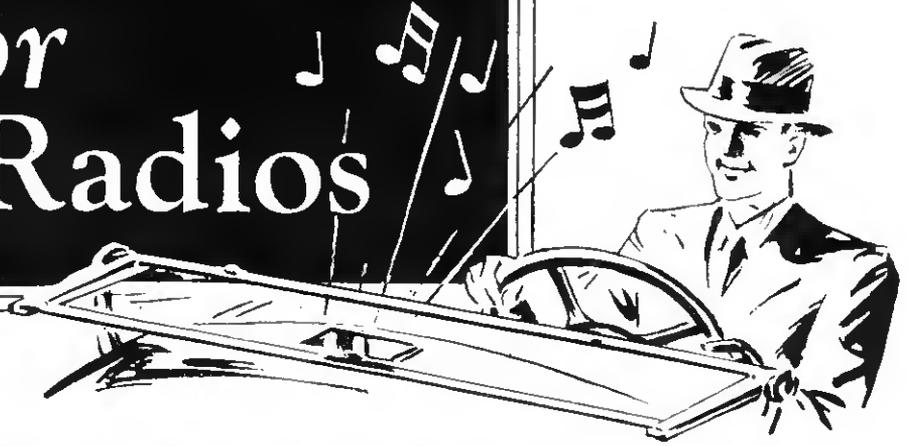
GRAYBAR ELECTRIC COMPANY, Graybar Building, New York, N. Y.

RR 5-32

Gentlemen:—Please send us full details on the new Graybar Two-Speed Vacuum Cleaner. And tell us about the Dealer Poster Plan.

Name ..... Address .....

# New PEP for Auto Radios



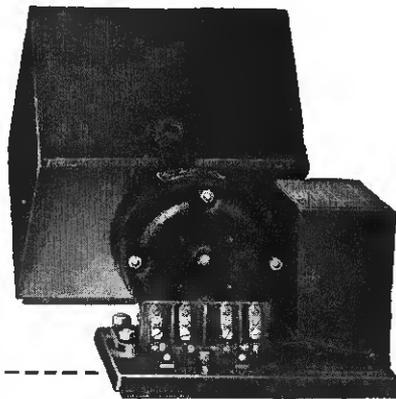
# New PROFITS for YOU

HERE'S a real money-maker for you. It gives the radio fan just what he wants—constant "B" power that he never has to worry about or replace. It improves tone quality and volume, giving always uniform reception comparable to the reception of a home radio. It pays for itself by eliminating "B" batteries. It gives you liberal discounts and a fast-growing demand that means new business and new profits. Cash in on the cream of this business by getting started right now. That's the way to make your store headquarters for the Emerson "B" power unit and pick up the easy sales that always go to the man who gets the jump on competition.

Order a sample today!

## EMERSON "B" POWER UNIT

THE EMERSON ELECTRIC MFG. CO., ST. LOUIS



### Low Power Consumption

Operating from the regular six volt "A" auto battery, the "B" Power Unit delivers 180 volts, 40 M. A. direct current and consumes only 2 amperes of current when the radio set is in operation—the equivalent of a small parking light.

Size 8-7/8" x 7-3/4" x 6"; fits in regular "B" battery compartment.

Made and guaranteed by the makers of Emerson Motors and Fans.

### Write Today! To your Jobber or to

THE EMERSON ELECTRIC MANUFACTURING CO.  
2022 Washington Avenue, Saint Louis, Mo.  
Send me full information and discounts on the Emerson "B" Power Unit.

My principal jobber is \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

My Name \_\_\_\_\_

Address \_\_\_\_\_

# • G-E MAKES

## G-E LEADERSHIP POINTS

- NEW—"Twin-push" Amplification, giving a tremendous increase in undistorted power—many times the power of previous receivers—resulting in the complete elimination of the "blurring" which usually takes place when exclamations or musical crescendos are received.
- NEW—Twelve Tubes—improved tubes of *new* type throughout, giving greater efficiency and purer tone quality.
- NEW—Dual Automatic Volume Control, using 2 tubes instead of 1—overcoming the defects of previous automatic volume controls. It makes possible the reception of all stations—strong and weak—at the same volume without touching the hand-operated volume control, and without distortion.
- NEW—Automatic Lo-tone Compensator, which automatically gives the same full, rich tone whether the set is turned to low volume or high.
- NEW—High-power Dynamic Speaker, completely re-designed to give greater tone fidelity.
- NEW—Special Hand-operated Tone Control to give any shading of tone desired, and eliminating the mushy boominess formerly noticeable when tone controls were turned down.
- NEW—Greatly Improved G-E Tone Equalizers with acoustic orifices of *exclusive G-E design*—making possible further refining of tone and eliminating cabinet resonance.
- IN ADDITION—Other outstanding G-E features, including the famous G-E full-range sensitivity, and selectivity with improved band pass characteristics.

\$139<sup>50</sup> complete with tubes



THE NEW

*Convention Model*

# *Front Page news again*

WITH **7** MAJOR

## ENGINEERING ADVANCES

*that make possible the set that  
beat the sets that won the tone-tests*

HERE'S new proof of what G-E leadership offers the aggressive merchandiser.

The new Convention Model. A highly developed 12-tube super-heterodyne with a realism of tone that surpasses even the famous tone-test winners! Just cast your eye down the list of G-E leadership points that make this great set different—and Twin-Push (Class B) Amplification is only the beginning!

You'll hear a lot about this new set. You'll read a lot about it, too—and so will your customers. 2

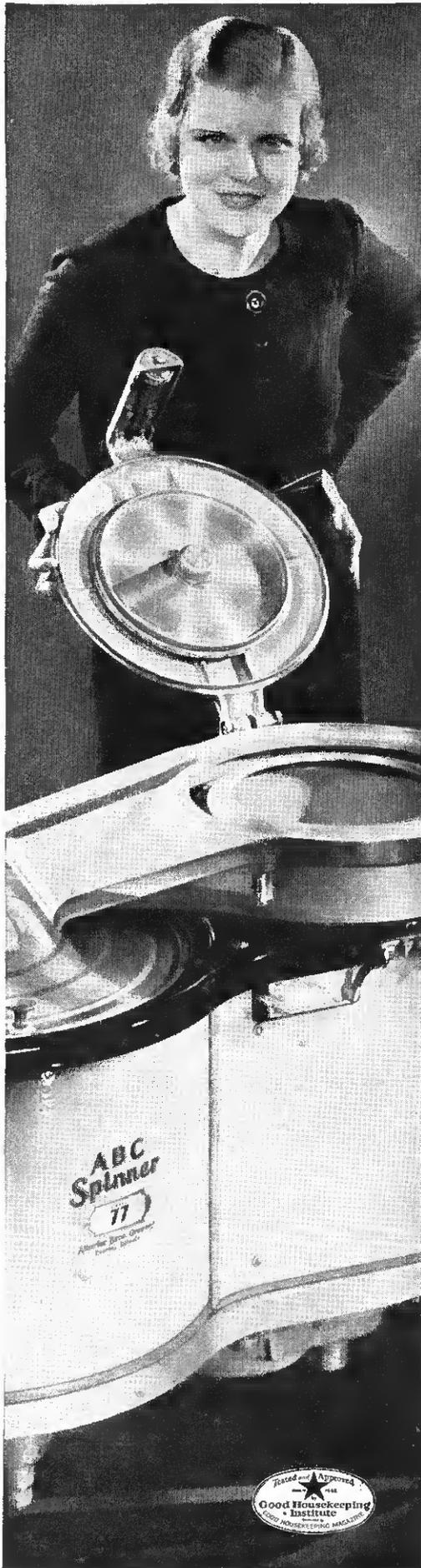
pages facing in the Saturday Evening Post, smashing pages in Collier's, Liberty, and Time about this G-E scoop—the set that beats the tone-test winners.

The G-E Convention Model is the liveliest set you can have on the floor—a real news number. Something to talk about—something to sell. And with it is the complete G-E line, with 7 and 8-tube super-heterodyne table models and consoles below \$100 as well as de luxe sets as high as \$345. A line that, feature for feature, meets competitive prices yet gives you

the backing of a name famous for the quality of its products—a reputation and monogram known to millions who have G-E appliances in their homes.

If you want a line that does not leave the burden of selling entirely up to you—a line with outstanding selling points—investigate the G-E franchise. Do it now. Tie in with G-E Radio and get an early start to an early season. Communicate with your G-E Radio distributor or write General Electric Co., Merchandise Dept., Section R-685, Bridgeport, Conn.

GENERAL  ELECTRIC RADIO



# • HERE IS THE ARITHMETIC OF WASHER SELLING

**ABC dealers know the right answer**

**T**AKE your pencil and figure it out. Every washer you sell must pay its share of your overhead. Every washer costs you time and effort in interesting the prospect, making the demonstration and closing the sale.

The cost of doing business, of making sales, remains fixed. If you sell a cheap washer, you make only a few dollars. Will those few dollars cover the expense—leave you any profit?

Now compare the profit on each cheap washer sale with the profit on each ABC sale. Even on the lowest priced ABC model the increased profit is considerable. On the higher priced models, the additional profit is very large—but from the customer's standpoint the difference in monthly payments is so slight that it requires practically no additional effort to secure this greatly increased profit.

By linking your sales effort to ABC you **MAKE MONEY** and you also **SATISFY THE CUSTOMER**. Every ABC Washer you sell strengthens public confidence in you.

### **ABC offers you planned selling . . . forceful advertising**

If you will look through these magazines—Good Housekeeping, Ladies' Home Journal, McCall's, American, Better Homes and Gardens, Successful Farming—you will see the aggressive advertising that is building sales for the new ABC (1933 World's Fair) Spinner, a really sensational value, and the new ABC Liberty, the lowest-priced ABC wringer washer ever made. This advertising is a part of a new plan of *co-ordinated merchandising* that is lining up important distributors and dealers the country over. If you are interested in hearing the details of this plan, write.

**A L T O R F E R   B R O S .   C O M P A N Y**  
**P E O R I A ,   I L L I N O I S**

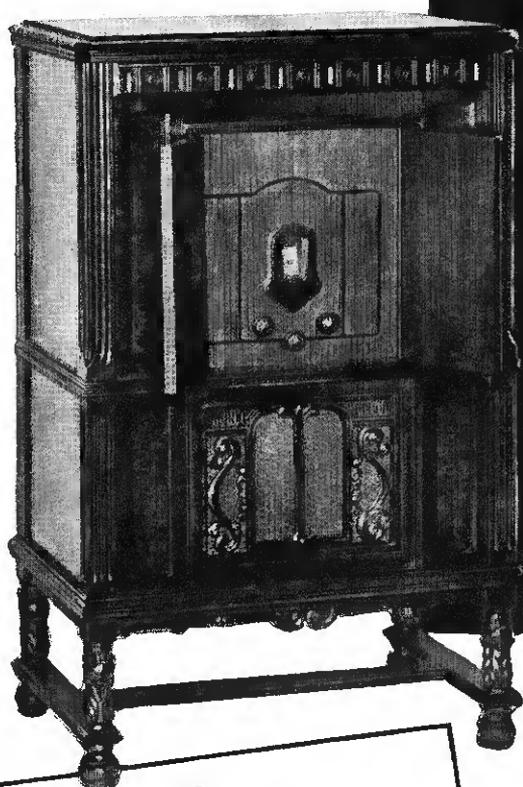
**ABC** **1933 WORLD'S FAIR** **SPINNER WASHER**

If you attend the R. M. A. Show, Chicago, May 23-28, please plan on visiting the ABC washer headquarters in the Congress Hotel

**MANUFACTURERS ABC HOUSEHOLD APPLIANCES SINCE 1909**

# Sales appeal... and plenty of it!

This little stunt brought  
100 people into a Balti-  
more store in a single day  
...Read all about it!



## 3 Profits ...count 'em

Here's the new RCA Victor Model RE-20, an eight-tube radio combined with two-speed phonograph... PLUS *perfected* home recording! At its price—\$199.50 complete—not only a smashing value, but a number that opens up these three profits for you:

- 1 You profit on a RADIO sale.
- 2 You profit on a PHONOGRAPH sale.
- 3 You profit on VICTOR RECORDS, PROGRAM TRANSCRIPTIONS and HOME RECORDING BLANKS.



**G**IVE this little girl a great big hand—for from the back cover of the April 23 Saturday Evening Post she's introducing RCA Victor's *perfected* home recording to your trade. And home recording—presented by the plan worked out at Radio Headquarters—is pulling prospects into dealers' stores everywhere—drew more than 100 people in a single day for a well-known Baltimore radio outlet!

Push Home Recording—and the new RE-20 shown here—and you open up the profit-possibilities of the greatest line RCA Victor ever offered—including the three-way profits of combination sales. You tie-in with quality backed by 30 years of leadership. You step out with RCA Victor—for the present and the future.

Get in touch with your distributor now—or write us direct for story of the Special Home-Recording Promotion Plan.

## RCA Victor

"RADIO HEADQUARTERS"  
Camden, N. J.

A Radio Corporation of America Subsidiary

# THE NEW KELVINATOR

## WATER COOLER

*... leader in a  
\$300,000,000  
market!*

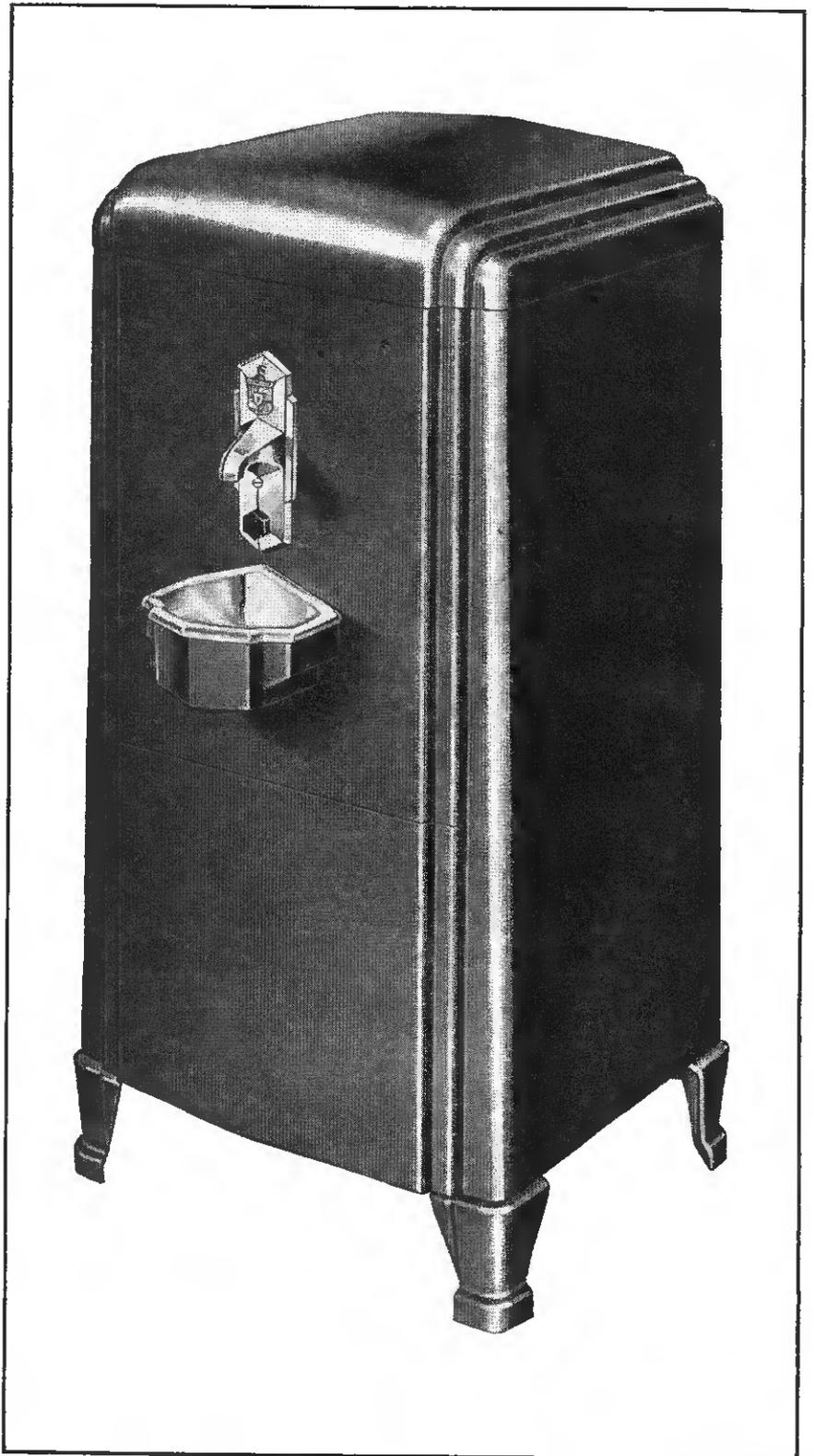
**K**ELVINATOR dealers are not confined to one source of profit. In addition to the most complete line of Domestic Cabinets and the widest range of perfected and proven commercial installations, they have the finest line of Water Coolers built, reaching a market whose possibilities are estimated at three hundred million dollars in the next five years.

More than thirty *different types of prospects* are included in this tremendous market. And each represents a profit potential for the Kelvinator dealer.

As far as the Coolers themselves are concerned, we have never built anything that compares with them. From an engineering, design and performance standpoint, we believe they are unquestionably the finest Water Coolers built to-day.

Responsible merchants who are interested in making money on both Domestic and Commercial electric refrigeration are invited to set the time for a conference with our representative. Wire, write or phone to-day.

**KELVINATOR CORPORATION**  
14263 Plymouth Road, Detroit, Michigan.  
Kelvinator of Canada, Ltd., London, Ont.  
Kelvinator Limited, London, England.



(532)



SINCE 1914

# Kelvinator

The time is ripe for a

# RETURN to REASON

THE mad, mad days of '27, '28, and '29. "Sets—give us sets!" The cry went up from thousands of throats. And the factories *gave* and the dealers *received* and the public came, saw, and bought. Sidewalks cluttered with shipping-crates. Streamers announcing that the New Super-Super Set was here—HERE, Ladies and Gentlemen, come in and see it, hear it, NOW!

Sales-curves followed production-curves in a dizzy climb. The radio industry was Doing Well. And then, like a speeding car approaching a precipice, the crash. Down, down, down went the curves. The thud was awful to hear. The cries were pitiful.

Confusion . . . chaos . . . questionable practices . . . distress-merchandise at a tragic fraction of their former mark-up . . . dealers going broke . . . manufacturers going broke. Two-and-a-half years now. Wreckage all about.

Columbia Phonograph watched this tragedy sympathetically . . . watched and waited. It believes the time is ripe for a return to reason, for a new deal all around, for new courage. With a

*musical* background of 42 years, it sounds the call to sanity—in production, in distribution, in advertising.

It is ready to write off the hysteria of the last few years as *history*, to make a fresh start, with faith in the future. With a complete, new organization, Columbia invites progressive distributors and dealers who share its views, to share its reasoned optimism also.

Visit the Columbia exhibit at the R. M. A. Show—Space B64-65-66; in the Grand Ballroom, Stevens Hotel, Chicago, May 23rd-26th. You will see new radio models, competitively priced, built with a rare knowledge of music-engineering, and housed in beautiful cabinets.

Let us turn our backs on the mistakes of the past, and face tomorrow with bright courage. People are still people and America is still America. Columbia is going ahead on a sound, sensible manufacturing and merchandising program. Let's discuss our plans—and yours—for happier days. Columbia Phonograph Company, Inc., New York.

# AT NEW LOW PRICES

## AN EVEN GREATER OPPORTUNITY

EVER since its introduction last October, the new line of Leonard Electric refrigerators has been hailed as the outstanding value in the industry—a rare combination of beauty, quality and *extra* convenience features, at remarkably low price.

Sales have confirmed this verdict. Both shipments to dealers and deliveries to users have set new records month by month.

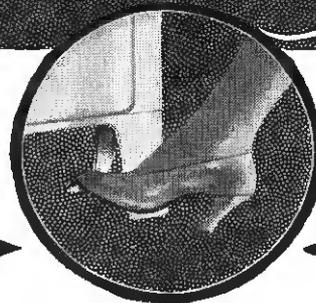
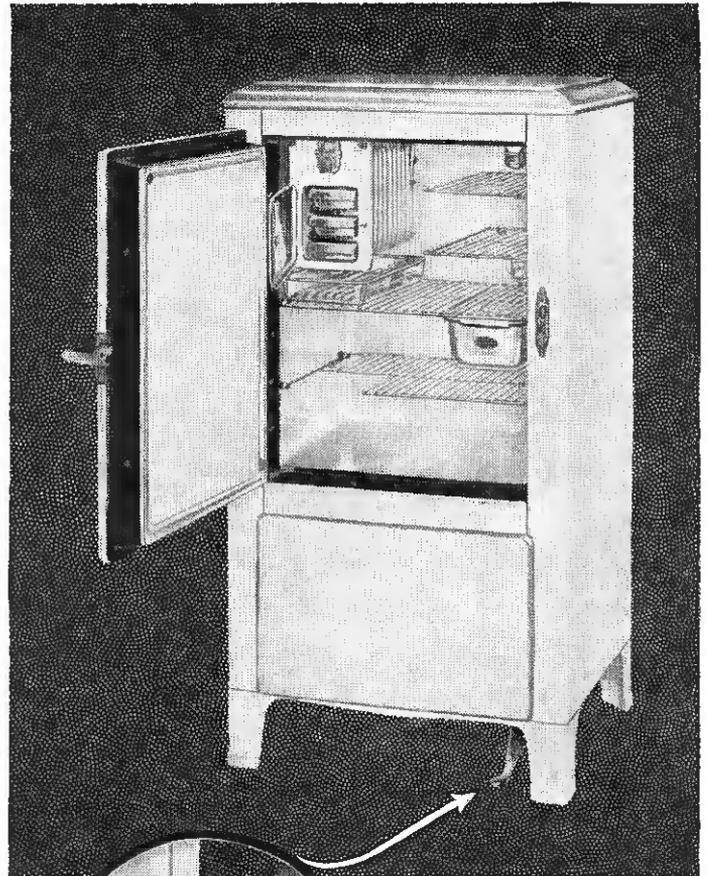
Now, Leonard has announced substantial price reductions throughout its entire line. There is no change in models, features or quality—simply an increase in *value* which makes the Leonard Electric still more attractive to distributors, dealers and public alike.

No other franchise offers such an opportunity to build a permanent, profitable year-round refrigeration business, as this complete, compact line of 9 beautiful "plug-in" models (3 all-porcelain)—backed by the prestige of a long established name, with favorable discounts, and a strong program of advertising and merchandising helps.

In April and May, Leonard is reaching more than 8,000,000 families with the greatest advertising campaign in its history—including a smashing series of full-page, full-color advertisements in *The American Weekly*, listing local distributor and dealer names and addresses.

If you are interested in a franchise that backs its selling organization with such support, write or wire promptly, as territories are being rapidly closed.

LEONARD REFRIGERATOR COMPANY  
14259 Plymouth Road, Detroit, Michigan



GREATEST CONVENIENCE  
FEATURE IN THE INDUSTRY

**THE LEN-A-DOR**

A TOUCH OF THE TOE AND  
THE DOOR SWINGS OPEN

# LEONARD

E L E C T R I C



R E F R I G E R A T O R

(471)

# THE DRIVE IS ON!

*Radio Retailing Started it!*

## FILTERETTE SERVICE STATIONS Will Carry It Through!

Atwater Kent, Audiola, Clarion, Crosley, Philco, RCA-Victor, Sparks-Withington, Stromberg-Carlson, Wright-DeCosta, Zenith and others are supporting this drive for better radio reception. All interference—man-made static—complaints received by these companies will be forwarded to our Corporation. Air Mail will bring these original letters to the nearest Filterette Service Station. This amounts to a personal introduction to the home, and our service representative will be the man best qualified not only to suppress man-made static but to replace tubes and other parts which may be the cause of the complaint.

Tobe Filterette Service Stations will receive, by mail, a comprehensive course of instruction on the elimination of man-made static, based on years of development work carried on by our Corporation. Apply for your district before it is too late!

Permanently established service dealers and electrical contractors are eligible for this appointment. Men with responsibility who can co-operate and work with the local power company will find this new business very profitable.



### APPLICATION BLANK

The Undersigned hereby make application for Filterette Service appointment.

I would like to operate in the territory City of.....  
County of.....

I agree to faithfully follow up all leads furnished me by the Tobe Deutschmann Corporation and to return the service reports promptly after each job is finished.

I also promise to use the Tobe Filterette-Interference Course exclusively for my own use.

I further agree in so far as possible to follow the Tobe Deutschmann Corporation's recommended charges for service work, and in no case will I accept less than the list prices for the Filterettes from my customer.

Signed .....

Street .....

City or Town .....

State .....

Date .....

The Tobe Deutschmann Corporation reserves the right to refuse applications for appointments should there be no territories available.

## TOBE DEUTSCHMANN CORPORATION

*Filterette Division*

CANTON, MASSACHUSETTS

*The Acknowledged Authority on Radio Interference—  
Makers of FILTERETTES, the Accepted Remedy*



# 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, 20PT, MOHAWK Sets, SPARTAN 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 & Linc, Minerva, Crusader, Liberty, Metro, Supervox and Case.

Write Dept. 60 for name and address of nearest jobber.

# KELLOGG

SWITCHBOARD AND SUPPLY COMPANY  
1066 WEST ADAMS STREET CHICAGO, ILLINOIS

# Advance News of 1933 Sets in Big June Trade Show Number

*RADIO RETAILING brings you the complete Radio Show in the Annual June Issue. You don't have to miss the big event. Just order the June number and have the show brought to you on paper.*

ONE of the most important events of the year for the radio merchant is the Annual Radio Manufacturers Show in Chicago. New sets, new tubes, new ideas are introduced to enliven the whole trade. Thousands of dealers will attend.

MANY radio men, because of the distance from Chicago, or the inability to leave their business, will not be able to make the trip. Yet there is no reason why they should miss that big show. Not when there is a way to bring that show right to them through the Annual Show Number of RADIO RETAILING.

THE Big Show Number, published in June, will be packed with actual photographs of the new sets and radio models introduced at the show. Page after page will bring the whole show right to your store. If you don't go to Chicago, you can't afford to miss the June issue. If you do go, then you need it to assist in making your sales of the new sets.

The June issue alone is worth many dollars to any dealer. You can get it—and 11 more monthly aids for \$1 if you use the coupon below at once. **DON'T DELAY. ORDER YOUR COPY TODAY.**

### Special Half-price Offer

The regular price of RADIO RETAILING is \$2 a year. Here is your opportunity to secure a full year's subscription at just half-price. Simply send in \$1 with the coupon below and the next 12 issues will be sent to you. Check, money-order or currency may be sent at our risk. **PAYMENT MUST ACCOMPANY ORDER** at this low rate.

Mail this coupon  with \$1.00 TODAY

### SAVE \$1 WITH THIS COUPON

The regular price of *Radio Retailing* is \$2 a year. This coupon and a check, money-order or cash for \$1 will bring you the next 12 issues of this practical dealer merchandising service at 1/2 the regular rate.

**Mail Your Order—NOW**  
Payment must accompany order as we cannot bill at reduced rate.

**SEND MONEY AT OUR RISK**

RADIO RETAILING, 330 W. 42d St., New York, N. Y.

RR 5-32

Here's my \$1. Enter my name for a year's subscription (12 months) to *Radio Retailing* at special half price rates starting with the big June Trade Show number.

Check here if you are already a subscriber and want your subscription extended at Special \$1 price. (\$2 in Canada — \$3 elsewhere.)

Name .....

Address .....

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

Company ..... Position .....

Nature of Business .....

Price outside U. S. and Canada \$3 a year. Price in Canada \$2.50 year, with a special rate of \$2 if payment accompanies order. Canadian currency acceptable at par.

# PINES "B"-BATTERY ELIMINATOR OVERCOMES THE GREATEST OBSTACLE TO RETAIL AUTO RADIO SALES

**And brings you a double profit!**

**Y**OU sell auto radios. But you want to sell more of them. Here is a way that is proving successful.

You know that many auto radio sales are lost because of the unsatisfactory operation of the "B" Batteries. Results show that the new PINES "B" Battery ELIMINATOR now overcomes this obstacle.

### What it does

PINES "B" Battery ELIMINATOR consists of a very efficient motor in combination with a rotary transformer. It receives its current direct from the regular "A" battery, requiring less current than that used by a single headlight. The result is a constant, steady voltage that improves the tone quality of the radio and at the same time makes possible maximum distance and selectivity. In addition, it makes auto radios more economical because the original cost is now the last.

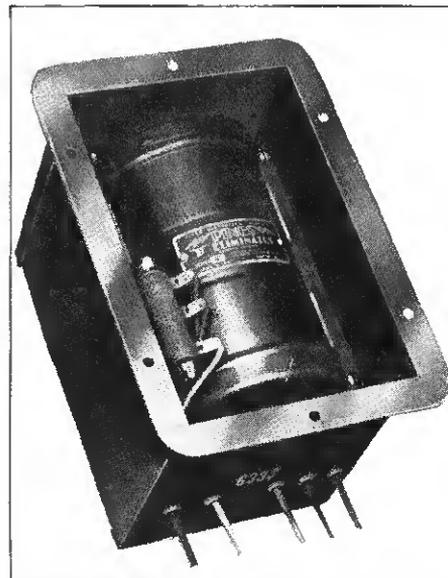
Made of the highest quality materials, PINES "B" Battery ELIMINATOR will give

years of service under all conditions. Water, slush or extremes of temperatures do not in any way affect its operation or efficiency. It is so simple and rugged that there is nothing to get out of order. Greasing, oiling or adjustments are unnecessary. The PINES "B" Battery ELIMINATOR requires only about one-third the space of the regular "B" batteries. It can be very easily installed because it bolts directly to any convenient place under the floor of the car. Requires no cutting.

### A double profit for you

"It takes only one sale to start the profits rolling," say dealers who now handle the PINES "B" Battery ELIMINATOR. Because the first sale means a satisfied customer who gladly spreads the good news to his friends. The result is quick, sure profits both on radios already installed and with new radios, too.

Don't delay. Write for further information and dealer prices today.



Measures 5-3/8 x 8 inches, 6-1/4 inches deep.  
Weight 15 pounds.

RECOMMENDED BY LEADING RADIO MANUFACTURERS

**PINES WINTERFRONT COMPANY** DEPT. A, 1153 NORTH CICERO AVENUE  
CHICAGO, ILLINOIS

## CUSTOMERS BUY!

To Play Your New "Long Playing" Records

### Popular TWO-SPEED GREEN FLYER

Model D Motor, \$15.50

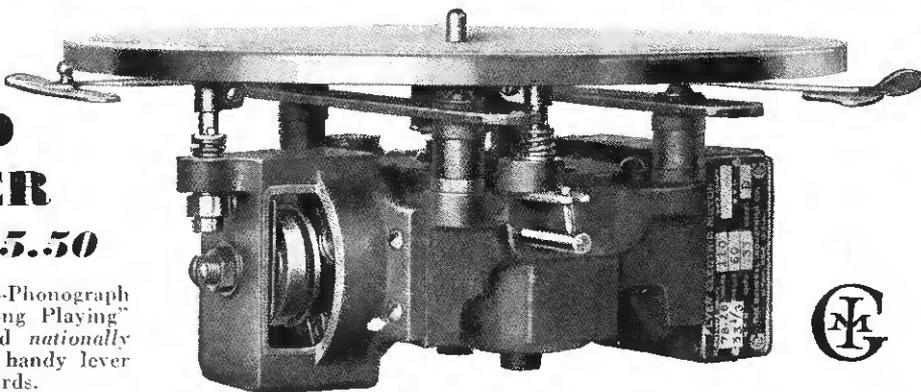
SHOW IT and sell it. The popular Radio-Phonograph Motor unit. For playing the new "Long Playing" Phonograph Records now in demand and nationally advertised. And with a simple shift of a handy lever also playing the Regular Phonograph Records.

Wanted for enjoyment of uninterrupted good music, and for dancing.

Every sale pays you a good profit on the motor, most often another on installing it, and starts one more customer up buying your records. One leads to another.

Specially designed for perfection of dual service. Quality and performance backed by nearly twenty years of leadership in building Phonograph Motors and over a quarter century of success in electrical manufacturing. Responsibly guaranteed.

Complete and ready to go to work with any good pick-up. Retail, \$15.50. Order a sample NOW, from any jobber, or if necessary direct from us.



Two-speed: 33 1/3 and 78 r.p.m.

MODEL D Green Flyer Radio-Phonograph Motor. Self-starting induction type, with ample power. Governor control, with 10% range of speed adjustment. Pulls all "Long Playing" 33 1/3 and Regular 78 r.p.m. records with equal perfection. For all voltages and frequencies; also supplied for direct current, either 110 or 220 volts. Furnished complete with 12-inch turntable, speed-regulator dial and speed-change escutcheon. Automatic stop at slight extra charge. In ordering, please specify for what voltage and frequency.

The **GENERAL INDUSTRIES CO.**  
3214 Taylor Street, Elyria, Ohio

# BIG



*things are in store  
.....for all who attend*

# RMA

**SIXTH ANNUAL  
TRADE SHOW  
EIGHTH ANNUAL  
CONVENTION**

**CHICAGO**

**• STEVENS HOTEL •**

## **RADIO'S BIG ANNUAL CONCLAVE**

EXHIBITING ALL NEW LINES AND THE LATEST RADIO AND TELEVISION PRODUCTS.

ELECTRICAL PRODUCTS ALSO IN TRADE SHOW AND MANUFACTURERS' DEMONSTRATION ROOMS.

EVERYBODY IN RADIO (NEARLY 25,000 RADIO TRADESMEN LAST YEAR) ATTENDS THIS ANNUAL NATIONAL RADIO GATHERING, THE BIG INDUSTRY MEETING EACH YEAR.

### **Better business early in 1932**

The RMA event this year is advanced to start sales early. In June, a few weeks after the RMA exhibits of manufacturers' latest products, there will come the big Republican and Democratic national conventions in Chicago to nominate presidential candidates. In June also another heavyweight championship match between Schmeling and Sharkey is scheduled.

GO TO CHICAGO MAY 23, SEE THE LATEST RADIO AND ALSO ELEC-

TRICAL PRODUCTS OF RMA MANUFACTURERS, AND GET IN EARLY ON THE 1932 TRADE.

This is the big and only national industry radio show, sponsored by the RMA and under its management, for RMA members, jobbers and dealers.

All exhibitors required to show current merchandise—no vacant booths.

Electrical products also displayed.

Thirty thousand (30,000) square feet of radio and electrical exhibits in the official hotels—the Stevens and Blackstone.

**ADMISSION TO THE TRADE ONLY. PUBLIC NOT ADMITTED.**

Reduced railroad rates—special trains—one and one-half fare for round trip to Chicago from everywhere.

Official hotels—Stevens and Blackstone—together on Michigan Avenue. Regular rates. Make your reservations early.

Important and interesting business meetings of industry and allied organizations.

Invitation credentials for the trade show will be mailed about April 15th.

REMEMBER THE DATE—MAY 23—AT CHICAGO.

**Official Hotels—**

• • •

**Stevens Hotel**

**Blackstone Hotel**

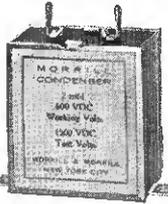
**MAY 23-26  
1932**

**RADIO MANUFACTURERS ASSOCIATION**

11-WEST 42<sup>nd</sup> ST. N.Y. CITY • 32 W. RANDOLPH ST. CHICAGO

**GOING STRONG!** *because*

they insure customer satisfaction and mean a real profit to you.



**MORRILL CONDENSERS**  
eliminate comebacks, stand up under extreme voltage shocks—exceptionally compact—convenient for stacking.

**NEW: MORRILL UNCASED CONDENSERS.**

Compact—reliable—inexpensive. Send for details.

**MORRILL CARBON RESISTORS**

**JOBBERS!** Here are lines it will pay you to handle. Write for our jobbers plan.

**MORRILL and MORRILL** Dept. H-3, 30 Church Street, NEW YORK, N. Y.

*Sole U. S. A. Distributors of the Siemens & Halske Condensers and Resistors*

**A NEW Service Kit**  
**—and a new SERVICE!**

**LYNCH**

Servicemen's **HANDIPAKS** contain a Resistor Assortment of one watt or two watt Metallized Resistors. The two formulas contained in each Handipak make possible hundreds of additional resistance values to meet every emergency.



—To Dealers and Servicemen:—

	List	Your Cost
1 Watt Handipak . . .	\$3.00	\$1.80*
2 Watt Handipak . . .	4.00	2.40*

\*Price includes Manual

**LYNCH Resistor Replacement Manual**

**FREE** with each Handipak purchased, or 10 individual resistors. Manual may also be bought for \$1.00.

Contains all the resistor information you will ever need. Gives value, RMA Color Code schedule and table of Resistance Values together with data on Multipliers.

**Dealers — Servicemen:**

Send order today for Handipak including the Manual, or write for our new complete catalogue, with prices.



**JOBBERS**

Write today for NEW 4-page folder, illustrating and describing our complete line of Resistors and unusual Sales Helps, including FREE Resistor Cabinet offer.

**LYNCH MFG. CO., Inc., 1775R Broadway, New York City**

**A.C. Electric Plants**

ALTERNATING CURRENT ELECTRIC PLANTS now available in sizes from 500 to 10,000 watts. Ten models of modern generating units furnishing the SAME CURRENT as SUPPLIED BY POWER COMPANIES—A.C. 110/220 volt, 60 cycle, single or three phase. Ideal standby units.

OPERATES A.C. RADIO, PUBLIC ADDRESS AND SOUND CAR EQUIPMENT

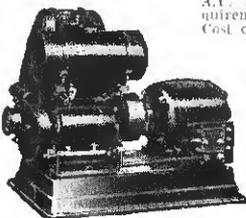
Runs Washing Machines, Water Pumps, Refrigerators, A.C. motors. For all Household and Commercial Requirements. All models complete and ready to run. Cost of operation and upkeep very low.

**D.C. MODELS AS LOW AS \$99**

Direct Current models in 110 or 32 volt, sizes 200 to 1500 watts, ranging in price \$99 and up.

ONAN High-grade, less expensive ELECTRIC PLANTS offer opportunity for many sales of plants, wiring and appliances. Write for details.

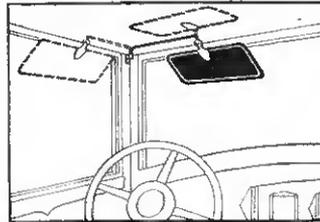
**D. W. ONAN & SONS**  
271 Royalston Ave., Minneapolis, Minn.



**NEW!**

**A Perfect Auto Radio Aerial . . . Combined with Sun Vizor**

HERE'S a new profit-maker! Motor car owners by the thousands are having auto radios installed. They'll prefer Vizor-Tenas for aerials because they provide all the efficiency of the "auto roof" type aerial—retail at half the price—do not require tearing up car's



top for installation. And have additional feature of being an adjustable sun vizor that protects from the side as well as front.

**Newest Accessory Profit Maker**

Demand will be great for this double-duty accessory—and profits BIG! Be the first to have Vizor-Tenas ready for the trade! Mail coupon for Sample pair today!

**VIZOR-TENA**  
*is the Perfect Auto Radio Aerial*

**Mail Coupon or Wire for Sample and Details!**

Vizor-Tenas provide the same clear, undistorted reception of an "auto roof" type aerial—but a pair retails at half the cost. They give far better reception than "running board" and other non-"roof type" aerials—are more easily installed—and sell for less.

RETAILS AT  
**\$5.50 per pr.**

**VIZOR-TENA CO.**  
Balcony Bldg. Dept. D  
Kansas City, Mo.

**SEND COUPON**

VIZOR-TENA COMPANY,

Dept. D, Balcony Building, Kansas City, Missouri

Gentlemen: Send at once Sample pair of Vizor-Tenas at \$5.50 list —less liberal dealer discount.

Name .....

Address ..... City ..... State .....

Jobber's Name ..... City ..... State .....



# Hello, Radio Dealers!

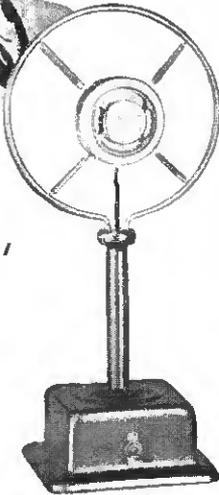


Table  
"MIKE"  
Sells for  
\$5.00

*Prices slightly higher west of Rockies*

Here's  
CONNECTICUT  
"MIKE"

A brand new item that will bring profit to you.

Here's a "MIKE" for home broadcasting that will bring loads of fun to young and old. Can be easily attached to any make radio and is a thoroughly practical precision instrument.

Connecticut "MIKE" is made in three styles: Table Mike to sell for \$5.00, Floor Mike to sell for \$7.50 and Hand Mike to sell for \$4.00. Beautifully finished, individually packed Connecticut Mike offers radio dealers an added opportunity to make additional profit from set owners. You must see and try this Mike to understand what a wonderful instrument it is.

Send for your sample today. Use the coupon and we will ship at once.



Floor "Mike" \$7.50

## CONNECTICUT

TELEPHONE & ELECTRIC CORP.

Meriden Conn.

Send sample of Table "MIKE" to cost \$3.25 delivery paid. \$3.50 West of Rockies. Send me the story of "MIKE."

Firm .....  
Address .....  
City .....  
Jobber .....



### RADIO WIRE PRODUCTS

ANTENNA WIRE                      LEAD-IN WIRES  
ANTENNA KITS                      HOOK-UP WIRES  
ANTENNA ACCESSORIES            ANNUNCIATOR WIRES  
LIGHTNING ARRESTERS            CABLES

WRITE FOR CATALOG AND PRICES

If Your Jobber Cannot Supply You—Order Direct

CORNISH WIRE CO.                      30 CHURCH ST.,  
Makers of the Famous                      NEW YORK, N. Y.

## BRAIDITE HOOK-UP WIRE

### FULCO RADIO COVERS



"FULCO" Radio Covers insure deliveries in perfect condition—without scratches or broken parts. Well padded, strongly sewed, and made to give maximum service at minimum cost. Also Dust Covers. Write for prices.

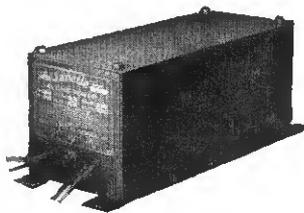


### Fulton Bag & Cotton Mills

Manufacturers Since 1870  
Atlanta                      St. Louis                      Dallas  
Minneapolis                      Brooklyn                      New Orleans                      Kansas City, Kan.

## NOW Auto-Radio Without Dry Batteries..

### JANETTE AUTO-B-POWER



Here's permanent B-Power for auto radios, giving full volume, undiminished by time or usage. Completely replaces dry "B" batteries. Transforms 6 or 12 volt current from storage battery into 135 or 180 volt "B" current. Furnished complete with voltage-divider for tapping off "C" current.

#### Clear Reception

The special Janette Filter eliminates ripple or hum, assuring clear reception.

#### Delivers Pure D.C.

Janette dynamotor generates pure, continuous D. C. just like battery current—no pulsations as with vibrator or interruptor-types of transformers.

#### For New Installations or Replacement

Recommend Janette Auto-B-Power for new installations or for old installations that come to you for service, and prevent trouble calls due to failing "B" batteries.

#### Low Price

The price is remarkably low for this unit, which is equal in quality to the world-famous Janette Rotary Converter. Built for lifetime service.

#### MAIL COUPON TODAY

JANETTE MFG. CO.  
555 West Monroe St., Chicago, Ill.  
Please send complete information on your "Auto-B-Power."  
Name .....  
Address .....  
City and State .....

# SEARCHLIGHT SECTION

EMPLOYMENT and BUSINESS OPPORTUNITIES—SURPLUS STOCKS—DISCONTINUED MODELS

**UNDISPLAYED—RATE PER WORD:**

Positions Wanted, 5 cents a word, minimum \$1.00 an insertion, payable in advance.

Positions Vacant and all other classifications, 10 cents a word, minimum charge \$2.00.

Proposals, 40 cents a line an insertion.

**INFORMATION:**

Box Numbers in care of our New York, Chicago or San Francisco offices count 10 words additional in undisplayed ads. Replies forwarded without extra charge. Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

**DISPLAYED—RATE PER INCH:**

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

**POSITION WANTED**

RADIO interference engineer, 6 years' power company experience, with all classes of radio noises, desires connection. L. L. Robinson, 1024 So. Water, Wichita, Kansas.

**REPAIRING**

GUARANTEED microphone repairs—any make or model—24-hour service. Stretched diaphragm double button repairs \$7.50. Others \$3.00. Single button repairs \$1.50. Write for 1932 catalog with diagrams. Universal Microphone Co. Ltd., Inglewood, Calif.

**AGENTS WANTED**

EARN from \$1 to \$5 an hour extra without interfering with your present employment. Whether office man, salesman, technical man, foreman or worker you can make ready cash quickly and easily each week showing our lists of business and technical books to fellow employees and others. You recommend them, we do the rest. No experience required. Complete equipment free. Write Tom Crawford, Dept. 29, McGraw-Hill Book Co., 330 West 42d St., New York City.

LIVE agents. This year will be a big year for portable public address and sound systems. Commissions generous. Your time will be your only expense. Write for our sound plan. Radio Receptor Co., Inc., 108 Seventh Ave., New York City.

**LEGAL NOTICE**

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of Radio Retailing, published monthly at New York, N. Y., for April 1, 1932.  
State of New York ) ss.  
County of New York }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared C. H. Thompson, who, having been duly sworn according to law, deposes and says that he is the Secretary of the McGraw-Hill Publishing Company, Inc., publishers of Radio Retailing, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, McGraw-Hill Publishing Company, Inc., 330 West 42d St., N. Y. C., Editor, O. H. Caldwell, 330 West 42d St., N. Y. C., Managing Editor, Ray V. Sullivan, 330 West 42d St., N. Y. C., Business Manager, Maurice Clements, 330 West 42d St., N. Y. C.  
2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) McGraw-Hill Publishing Company, Inc., 330 West 42d St., N. Y. C. Stockholders of which are: James H. McGraw, 330 West 42d St., N. Y. C., James H. McGraw, Jr., 330 West 42d St., N. Y. C., James H. McGraw, Jr., 330 West 42d St., N. Y. C., and Malcolm Muir, 330 West 42d St., N. Y. C. Trustees for: Harold W. McGraw, James H. McGraw, Jr., Donald C. McGraw, Curtis W. McGraw, Curtis W. McGraw, 330 West 42d St., N. Y. C., Donald C. McGraw, 330 West 42d St., N. Y. C., Anna Hugus Britton, 330 West 42d St., N. Y. C., Mason Britton, 330 West 42d St., N. Y. C., Edgar Kobak, 330 West 42d St., N. Y. C., Grace W. Mehren, 33 West Grand Ave., Chicago, Ill., J. Malcolm Muir and Guaranty Trust Co. of New York, Trustees for Lida Kelly Muir, 524 Fifth Ave., N. Y. C., P. S. Weatherly, 271 Clinton Road, Brookline, Mass., Midwood Corporation, Madison, N. J. Stockholders of which are: Edwin S. Wilsey, Madison, N. J., Eliza M. Wilsey, Madison, N. J.  
3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.  
4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name

**SPECIAL NOTICE:**

**To the Radio Industry**

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

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

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

**Competent, aggressive  
Sales Representation  
FOR NEW YORK TERRITORY**

Complete organization can start functioning at once for radio, electrical, or specialty manufacturer. Established reputation throughout metropolitan district, New York state, New Jersey, and Philadelphia contacting radio, electric, hardware jobbers, department stores, and important retail outlets. Can cover part or all of this territory thoroughly.

Centrally located offices, efficient clerical force, and trained selling staff. Now representing important radio device, sold to set manufacturers and to service replacement field. Successful establishment of this product now permits concentrated attention on one additional line. Can also undertake entire marketing procedure for specialty to the radio service trade.

All inquiries will receive prompt, direct reply—but out of courtesy to existing connections, please address initial communication in care of

RA-168, Radio Retailing  
330 West 42 St., New York City

**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. See our advertisement on page 64.

MORRILL AND MORRILL  
30 Church St., New York

**LEGAL NOTICE**

of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only.)

C. H. THOMPSON, Secretary.  
MCGRAW-HILL PUBLISHING COMPANY, INC.  
Sworn to and subscribed before me this 31st day of March, 1932.  
[SEAL] H. E. BEIRNE,  
Notary Public N. Y. Co. Clk's No. 262, Reg. No. 3B102. Kings Co. Clk's No. 636, Reg. No. 3129.  
(My Commission expires March 30, 1933)

**Prices Slashed on  
RENEWED VAC-CLEANERS**

**\$4.75** and up

New Attachments.....\$3.00

Dealers and jobbers: Today's thrifty demands require lower priced merchandise. Hoover, Premier-Duplex, Royal Electric and Eureka vacuum cleaners rebuilt with one year guarantee—priced from \$4.75. New bags, new ends, etc. Quick turnover—astonishing profits. Write for wholesale folder today.

**ARMATURE REWINDING**

All makes of vacuum cleaners, washing machines, refrigerators and drills. Special low prices on washing machine, refrigeration and drill motors.

\$1.65 each.....Lots of six—\$1.50 each.

RE-NEW SWEEPER COMPANY  
2262 Gratiot Avenue, Detroit, Michigan

**For Sure, Quick Money, Sell  
Portable Sound-on-Film**

to Theatres, Schools, Churches, Clubs.

Write for manufacturers' prices on Soundheads, Photocells, Optical Systems, Rectifiers, Amplifiers, Horns, Paders, Synchronous Motors, Projectors, Lamphouses, Screens, Microphones, etc.

S.O.S. CORP.  
(Dept. R. R.)  
1600 B'way, N.Y.C. Cable "Sosound"

**NEW  
Radio Handbook**

CONTAINING: Sent postpaid

Technical Information, 25c.  
Volume Control Guide.  
Transformer and Condenser Guide.  
Radio Replacement Parts Catalog.

Hard to Get Parts—We have them.  
Send us your repair work for estimate.

Grant Radio Laboratories  
6521-R South Halsted St., Chicago, Ill.

**FOR FIXIT SHOPS  
Free Foto Guide**

and Vacuum Cleaner Parts Catalog. Most complete ever published. Lists over 800 items and special tools. 32 pages. Illustrated. Standard material at lowest cost. Valuable source data on obsolete parts. Big help to all repair shops.

**WASHING MACHINE PARTS**

Combined washer, vac, and small motor servicing attracts trade and reduces operating expense. We can supply most replacement parts. Uniformity to highest standards guaranteed. Lowest known prices with saving on transportation and trouble. Consolidated orders earn maximum discounts. Instructive catalog free.

URON INDUSTRIES, INC.  
1227 W. 6th St., Cleveland, Ohio



Your  
big opportunity to build  
a Profitable Business

Sell or Rent

**POWERIZER** Portables

Coming national elections and political speeches will bring a big demand for portable public address systems—

**POWERIZER** Portables.

You can also sell them and rent them to schools, churches, clubs, etc.

**POWERIZER** Portables list as low as \$110.00 with hand microphone, volume control and all tubes.

Model shown above with stage type microphone and volume control on head, lists for \$135.00. They are built in sizes to cover two to three thousand people.

Write or wire today for our special introductory plan to help you build profits.

RADIO RECEPTOR COMPANY, Inc.  
106 Seventh Avenue New York, N. Y.

**POWERIZER**

**ALPHABETICAL INDEX TO ADVERTISERS**

This index is published as a convenience to the reader. Every care is taken to make it accurate, but *Radio Retailing* assumes no responsibility for errors or omissions

Page	Page
Altorfer Bros. Co. .... 56	Onan & Sons, D. W. .... 65
American Weekly ..... 3	Pines Winterfront Co. .... 63
Arcturus Radio Tube Co. .... 48	Radio Receptor Co. .... 68
Central Radio Lab. .... 44	Radio Manufacturers Association. 64
Columbia Phonograph Co. .... 59	RCA Radiotron Co., Inc. Back Cover
Connecticut Tel. & Elec. Corp. ... 66	RCA Victor Co. Inc. .... 57
Cornish Wire Co. .... 66	Servel Sales, Inc. .... 49
Crosley Radio Corp. Inside Back Cover	Sparks-Withington Co. Second Cover
Deutschmann Corp., Tobe. .... 61	Stewart-Warner Corp. .... 4-5
Emerson Elec. Mfg. Co. .... 53	Stromberg-Carlson Tel Mfg. Co. 2
Fulton Bag & Cotton Mills. .... 66	United American Bosch Corp. 50-51
General Electric Co. .... 54-55	Victory Speakers, Inc. .... 68
General Industries Co. .... 63	Vizor-Tena Co. .... 65
Graybar Electric Co. .... 52	Westinghouse Elec. & Mfg. Co. 45
Hygrade-Sylvania Corp. .... 6-7	Zenith Radio Corp. .... 43
Janette Mfg. Co. .... 66	
Kellogg Switchboard & Supply Co. .... 61	
Kelvinator Corporation ..... 8	
Kolster Radio, Inc. .... 58	
Leonard Refrigerator Co. .... 60	
Lynch Mfg. Co. .... 65	
Morrill & Morrill ..... 65	
National Carbon Co. ... Front Cover	

SEARCHLIGHT SECTION

Classified Advertising

- AGENTS WANTED ..... 67
- BOOKS ..... 67
- REPRESENT. AVAIL. .... 67
- REPAIRING ..... 67
- RADIO STOCKS
- Grant Radio Laboratories. .... 67
- Re-New Sweeper Co. .... 67
- S.O.S. Corp. .... 67
- Uron Industries, Inc. .... 67

**NOW 20-WATT D. C.**



**Amplifier \$65.00**

with Cunningham Tubes

**A Real Sales Booster**

There is now no need for an expensive alternating current generator on sound cars—

**LOW POWER CONSUMPTION**

This amplifier furnishes a 20-watt output from a 6-volt battery—with a drain of only 2.3 amps. B power supply is furnished by six to eight 45-volt dry batteries. Suitable for public address systems—and can be converted to A.C. for permanent or semi-permanent installations. For use with electrical phonograph pick-up, microphone, or radio..... capacity up to 20 speakers.

**OPENS NEW FIELDS FOR SALES**

Opens new fields for you heretofore closed by high first cost..... Helps increase your sales in speakers, tubes, batteries, microphones, turntables, etc.

**RELIABLE**

Made by the manufacturers of Victory Speakers—in the business since the advent of Radio.

**VICTORY AMPLIFIERS**

Subsidiary of

**VICTORY SPEAKERS, Inc.**

7131 East 14th St., Oakland, Calif.

# CROSLEY RADIO



## THE CROSLEY RADIO CORPORATION

*Powel Crosley, Jr., PRES. Cincinnati, O. Home of WLW - "the Nation's Station"*

You're **THERE** with a Crosley



MR. IRVING H. BUESCHER, PRESIDENT, IN THE RADIOTRON DEPT. OF ONE OF THE THREE DISTINCTIVE RADIO STORES OPERATED BY BUESCHER'S IN METROPOLITAN CLEVELAND

**FINE EQUIPMENT  
FOR THE  
FINELY APPOINTED  
STORE**

Buescher's Radio Stores in Cleveland are noted for their beauty and luxurious equipment as well as for their high quality merchandise and business integrity.

Everything that goes into these stores must harmonize with the rich surroundings, must contribute to the atmosphere of unmistakable quality.

Because of the lack of appropriate merchandising equipment, tube sales formerly were confined to the service department. Then came the Radiotron Merchandisers. Mr. Buescher not only immediately invested in this equipment, but also, as the photograph shows, had a permanent Radiotron Department designed as a setting. Observe the worn spot in the carpet where Mr. Buescher is standing—evidence of a steady stream of customers with tubes to be tested.



Over the counter sales jumped from practically nothing to more than 150 units a month. Service department sales also showed an increase and now average between 300 and 400 units a month.

Radiotrons are handled exclusively. They have been featured as initial equipment in hundreds of sets moved for various manufacturers this season.

"For 28 years, we have always sold the finest musical merchandise," says Mr. Buescher. "We know the value of a satisfied customer—of public confidence and acceptance. The public believes in RCA Radiotrons. Repeat sales are always assured."

Let RCA Radiotrons and RCA Radiotron sales promotion equipment build customer confidence for you. A quality product plus quality assistance is an immeasurable asset these days.

RCA RADIOTRON COMPANY, INC. . . . HARRISON, NEW JERSEY  
A Radio Corporation of America Subsidiary

**RCA Radiotrons**  
THE HEART OF YOUR RADIO