

JUNE, 1936

# RADIO RETAILLING

McGRAW-HILL PUBLISHING COMPANY, INC.

25 CENTS PER COPY



## Leadership gives birth to Responsibility

In pioneering the dry electrolytic condenser, Mallory assumed a definite responsibility in the application and servicing of condensers in radio sets. And Mallory has not stopped with the production of a magnificent replacement condenser line, but has carried the principle of universal application to its logical climax by publishing the Mallory Condenser Service and Replacement Manual.

In developing the Mallory Vibrator, Mallory engineering in a few short years brought about really effective all-electric automobile radio reception. But Mallory engineering did not stop with the Mallory Replacement Vibrator line. Mallory has made effective servicing of auto radio sets a practical reality through the appearance of the Mallory Auto Radio Service and Replacement Manual. In introducing con-

stant improvements in Replacement Volume Controls, Yaxley engineering has brought about undreamed of precision in universal applications for set servicing. And leadership again asserted its sense of responsibility to servicing in compiling the Yaxley Replacement Manual and Service Guide to team with Yaxley Replacement Volume Controls and related parts.

In discharging its responsibility to servicing, Mallory demonstrates its leadership in a most practical way. The man who employs the Mallory-Yaxley Manuals in the universal application of Mallory-Yaxley Replacement Products procures for himself the most effective tools ever devised for an ever widening scope of profitable servicing.

**MALLORY**

**YAXLEY**

P. R. MALLORY & CO., Inc.



INDIANAPOLIS, INDIANA  
Cable Address—Pelmallo

**THEY'VE GOT**

*Sales Rhythm!*



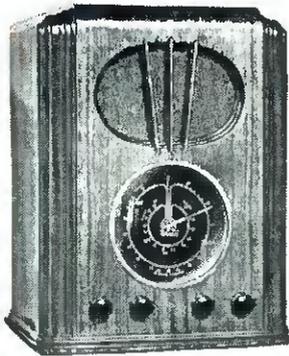
Rhythm Master Model 627—A genuine masterpiece of styling and performance. Six octal base "G" type tubes, all-wave dial, Traveling Spotlight Station Finder.

List: \$74.50



Rhythm Queen Model 927—A "blue blood" of radio royalty, with rhythmic performance that amazes everyone. Nine octal base "G" type tubes, all-wave dial, "Electric Eye".

List: \$99.50



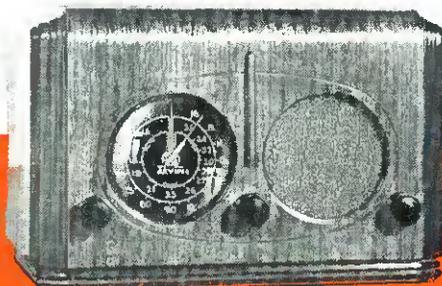
Rhythm Junior Model 517—A smartly styled big table model. Five tubes, standard and foreign short wave bands, Traveling Spotlight Station Finder.

List: \$34.95

**Look at 'em! There's sales rhythm in every detail** of the new 1937 Arvin Radios! The two consoles pictured here typify the rhythmic beauty of every model and indicate the "family resemblance" of design that unifies the *complete* Arvin line. Fourteen models in all, designed to anticipate every customer desire. Consoles from \$54.95 to \$150.00. Four splendid battery models—two consoles and two table sets—for unwired farm homes and summer cottages—a rich market! Snappy little bedroom models, beautiful big table models. Sleek little AC-DC portables. All beautifully styled with big, handsome, reverse-lighted dials, and perfectly engineered with Traveling Spotlight Station Finder and many other new developments. You'll profit with Arvin sales rhythm. Get complete details early from your jobber or write us.

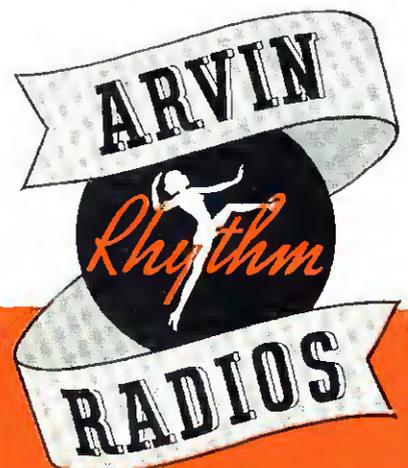
NOBLITT-SPARKS INDUSTRIES, Inc., Columbus, Ind.

Also Makers of Arvin "Tailor-Fit" Car Radios  
(Prices slightly higher west of Denver)



Rhythm Belle Model 467—At right. A modern design and a grand little bedroom radio. Four tubes, standard and police bands.

List: \$24.95



# RADIO RETAILING

JUNE, 1936

## In This Issue

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## Sales Static . . . . "MY LANDS! I PAID \$485 FOR IT!"





BOY - WHAT A LINE!  
WHAT FEATURES!

here they are...  
**NEW**  
**Stromberg-Carlson**

- ★ ACOUSTICAL LABYRINTH
- ★ TRI-FOCAL TUNING
- ★ NEW ADVANCED DIALS
- ★ BEAM POWER TUBES
- ★ CARPINCHOE LEATHER SPEAKER

**ONLY STROMBERG-CARLSON  
WILL HAVE ALL  
THESE SELLING POINTS**

*Never before has Stromberg-Carlson, or any other radio manufacturer, been able to offer so many sales-compelling and exclusive advances combined in a single radio line. They are features which the public will demand as soon as they are announced. Their effect on all radio demonstrations and sales-talks will be immediate. Some of these are noted above. Others include:*

- ... 4 Gang Condensers . . . High Fidelity
- ... Adjustable Selectivity . . . Long-Wave Band . . . Ultra Short-Wave Band to 65,000 kc. . . Indexed Control Knobs
- ... Centralized Tuning Unit . . . Volume Level Indicator . . . Automatic Sensitivity Control . . . Automatic Antenna Selector
- ... Full Floating Chassis . . . Free-floating Phonograph Pick-up . . . Models with real Rosewood Cabinets . . . Bi-Resonator Antenna Tuning System.

**T**HE new Stromberg-Carlson line provides a deluge of things that make radios sell. A dramatic advance in the very character of radio reproduction—a new quality of tone unapproached in radios of any other name. Cabinets from America's leading designers, in wide variety and style-setting brilliance. Conveniences of operation hitherto unknown in the radio art. An extent of models in various types and a breadth of price range in the upper, the middle and lower brackets never before presented in a Stromberg-Carlson line.

Now—for the selling season of 1936—a new opportunity for dealers who hold the Stromberg-Carlson franchise to swell the volume of their sales and to increase their profits.

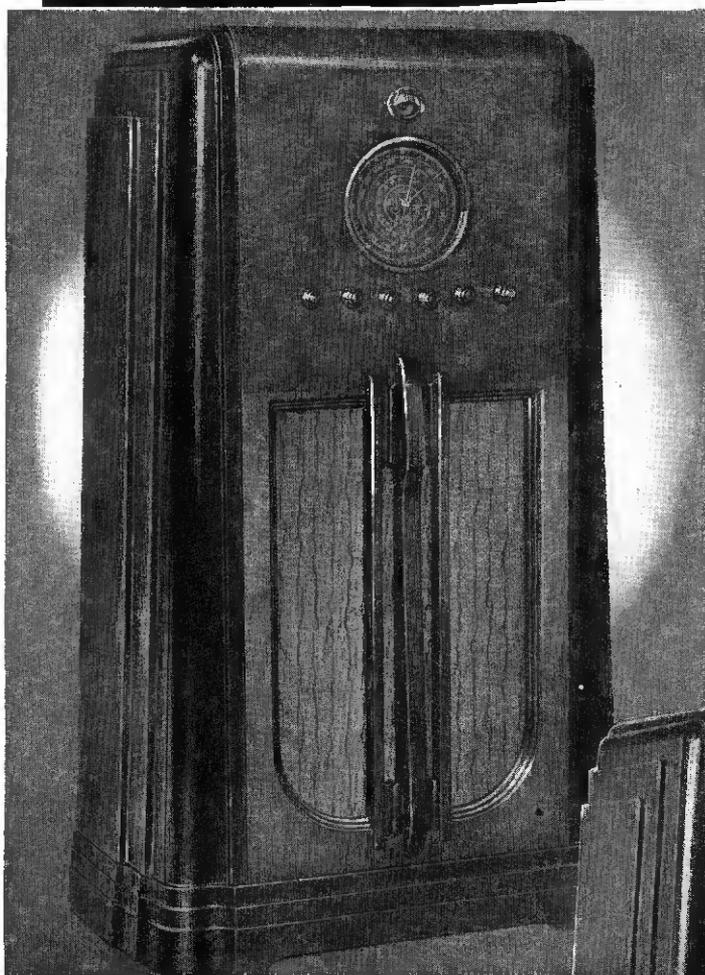
*Illustrated broadside showing the new line will be sent upon request. "There is Nothing Finer Than a Stromberg-Carlson."*

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

# Stromberg-Carlson

# THE EYES OF THE RADIO WORLD ARE ON THE NEW

# FADA Radio



## TWO NEW "STREAMLINE" MODELS

Series 290—9 Tube AC All-Wave Superheterodyne with all metal tube chassis and 12 tube performance.

Model 290C—illustrated above is a striking example of the new Fada "Streamline" console. The contrasting tones, the tapering lines, the smartly proportioned grille, the large dial add to their distinctiveness.

Model 290T—illustrated on right is a striking example of the new Fada "Streamline" table model. All the grace and beauty of the large console in smaller size. All Fada cabinets have been designed by one of America's foremost artists.



## "STREAMLINE" MODELS FOR 1937

From every section of the country the eyes of radio dealers and distributors are on Fada. For months the rumor has been spreading that the new Fada "Streamline" will be the featured line for 1937 . . . and no one will be disappointed.

The new Fada "Streamline" ushers in a new idea in radio. Old in tradition of quality, performance and value yet as new as the vogue of tomorrow. Cabinets of enthralling beauty, in keeping with modern style trends and not passing fads . . . chassis features that add to performance without adding to service problems . . . truly a line of features to make it the featured line of 1937.

The eyes of every radio dealer are now on Fada . . .  
The eyes of every consumer will soon be on Fada . . .  
The sales of tomorrow will be overwhelmingly Fada.

## NEW Chassis Features

- Flash-O-Graph tuning with individual station adjustment.
- Variable selectivity in 3 positions, Sharp, Medium and Hi-Fidelity
- All models ALL WAVE continuous from 525 KC to 18.5 MC
- New large indirectly lighted dial each band identified by color.
- Reception Clarifier
- Compensated volume control.
- Free Wheeling tuning.
- Phono switch on volume control.
- Long wave 2000 meters-optional.
- Walnut Cabinets.
- Bakelite and Plastic Models.

**FADA RADIO and ELECTRIC COMPANY**  
LONG ISLAND CITY, NEW YORK

Radio

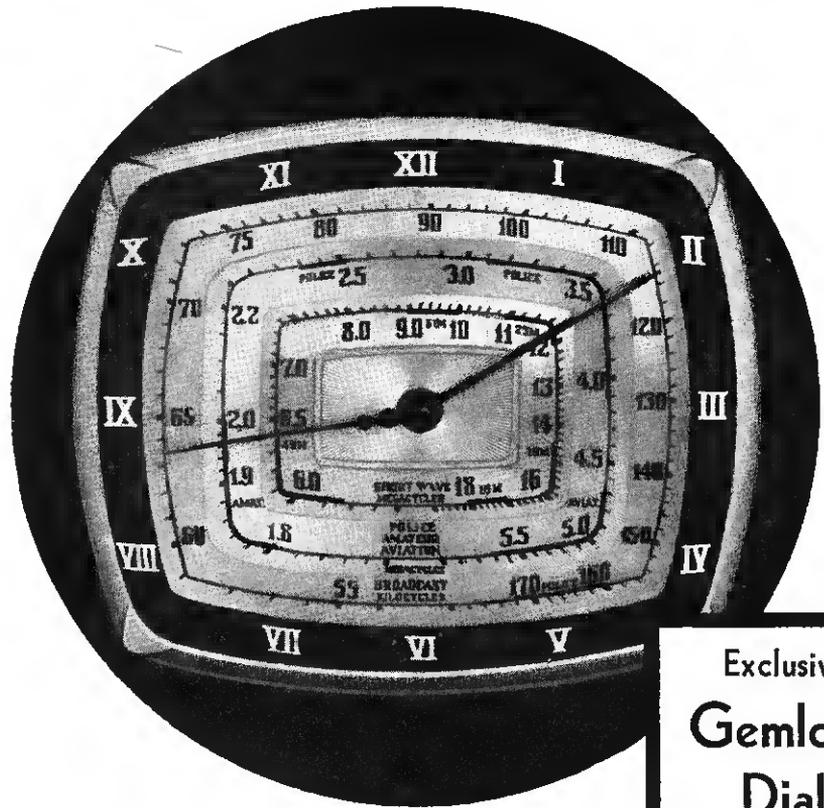
IN YOUR HOME



Emerson

RE-CREATES THE ARTIST

# By all Odds—the 1937 Line LEADS In STYLE — FEATURES — VALUE and TRADE OPPORTUNITY



## Exclusive Gemloid Dial

Radio's most beautiful illuminated dial.  
Strikingly rich etalsonne metal — exclusive with Emerson Radio and Chrysler automobiles. New simplified tuning features for all models.

● This is not a mere CLAIM—it's a FACT, already ENDORSED by all of America's foremost radio distributors and dealers who have had a pre-view of the new Emerson line!

In irresistible eye appeal, exclusive performance features, outstanding value (10% to 30% greater than ever before) it surpasses everything Emerson has ever produced.

In public and trade acceptance—in merchandising flexibility—it has everything which favors success in 1936-37—radio's biggest year!

### Most Powerful Promotion Ever

More cooperative and national advertising—more striking displays and other sales promotion—more PROFIT than ever before—these are additional FACTS which YOU should investigate NOW!

First showing being held at CHICAGO—Stevens Hotel, June 15th-20th, Inclusive.  
First showing at NEW YORK—Waldorf-Astoria Hotel, June 30th, July 1st and 2nd.

**EMERSON RADIO AND PHONOGRAPH CORP.**

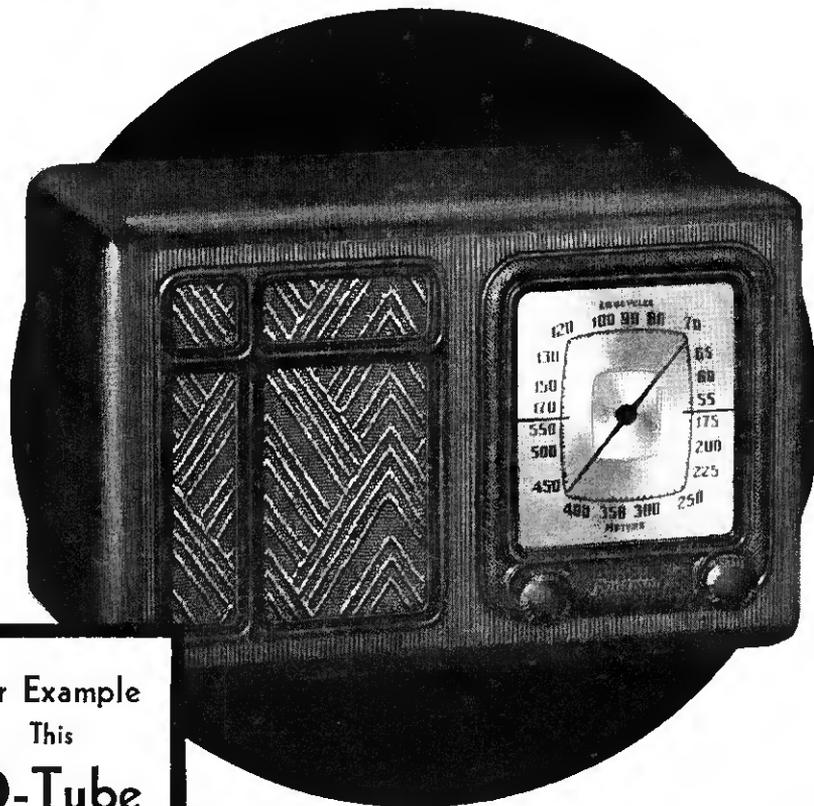
*World's Largest Maker of Small Radios*

111 EIGHTH AVENUE, NEW YORK, N. Y.

25 Sensational Models

**\$14<sup>95</sup> to \$99<sup>95</sup>**

**CONSOLES — COMBINATIONS  
COMPACTS — BATTERY — AUTO**



For Example

This

**6-Tube**

*Superheterodyne*  
(Standard Broadcast and  
Police Bands)

**\$19<sup>95</sup>**

A 10-Tube All-Wave Console - \$99.95

Combination Radio and Phonograph Console - \$69.95

Foreign and American Console - \$44.95

5-Tube Compact - \$14.95

The COMPLETE Emerson line of 25 models includes sets for EVERY market, EVERY purpose—EVERY purse. A portable Battery set for \$39.95—an All-Wave Compact for \$44.95—and many other sensations as radio promotion features.

**Distributors—Dealers—Write or Wire**

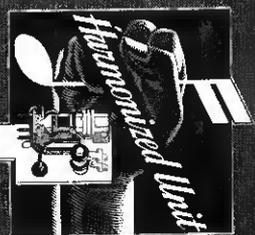
Emerson's 1936-37 proposition is geared to the best merchandising turnover and profit interests of the trade everywhere. For quick action write or wire for details now.

**EMERSON RADIO AND PHONOGRAPH CORP.**

*World's Largest Maker of Small Radios*

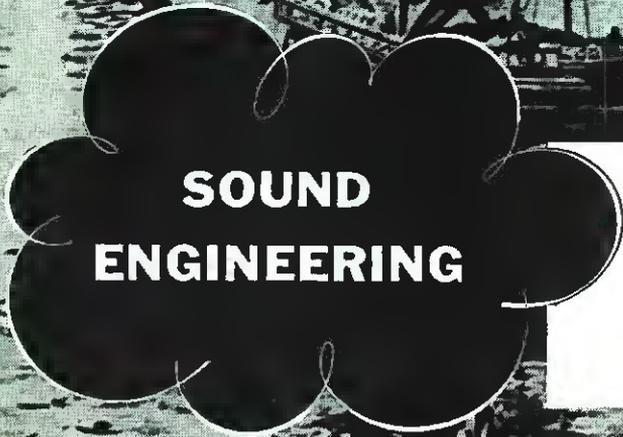
111 EIGHTH AVENUE, NEW YORK, N. Y.

**Emerson**  
 "RE-CREATES THE ARTIST"  
 Handwired Unit  
**Radio**  
 IN YOUR HOME"





# Beacon



**SOUND  
ENGINEERING**

The awe-inspiring Colossus of Rhodes, one of the ancient world's seven wonders. Astride the picturesque Harbor of Rhodes, in the blue Mediterranean, it was not only an engineering masterpiece, but an unfailing guide to sea-tossed mariners seeking haven... as today, research guides RCA's scientists and engineers along the hazardous lanes leading to great accomplishment... sound engineering.

**RADIO CORPORATION OF AMERICA**  
EVERYTHING IN RADIO FOR SERVICE IN COMMERCE

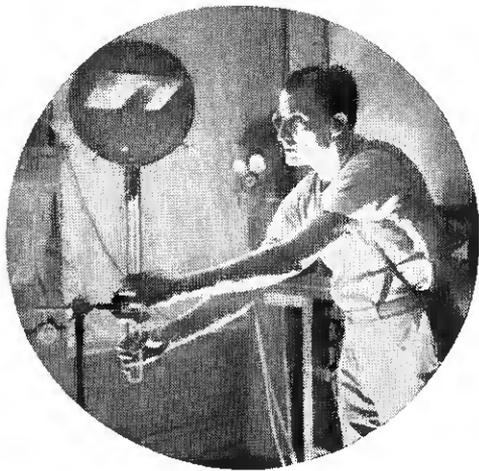
# of Radio Research

**I**N EVERY PROGRESSIVE INDUSTRY, first must come careful, patient research. So it is in radio. For instance, from RCA laboratories shone the beacons of research that led to the first power-operated dynamic-type loudspeaker for the home . . . the first practical superheterodyne receiver for home use . . . the first AC tubes and radio operated from the light socket. More recently this organization has given the world such wonders as the "Magic Brain," the "Magic Eye," the Magic Voice.

Indeed, much has been accomplished as the years have swiftly marched by. And these forward steps in radio foretell a great future for the industry and for RCA. Some day, these RCA laboratories will engineer *sight!*

America's millions, aware of RCA's long tenure of worthy service, have unbounded *confidence* in any product bearing the RCA trademark. This confidence increases sales. It explains why dealers make more money when they identify themselves with RCA—the *only* organization engaged in every phase of radio!

RCA Manufacturing Co., Inc. • RCA Communications, Inc.  
National Broadcasting Co., Inc. • RCA Institutes, Inc.  
Radiomarine Corporation of America



*These are some of RCA's Radio Firsts:*

First AC Tubes and radio operated from light socket.	First to develop and market combination phonograph-radio.
First power-operated dynamic-type loudspeaker for the home.	First to achieve round-the-world radio communication.
First practical superheterodyne radio for home use.	First to introduce radio combination, including home recording device.
First commercial marine vacuum tube transmitting apparatus.	First to introduce "Magic Brain," "Magic Eye," Magic Voice radio sets.
First to commercially introduce electrical phonograph reproduction by use of magnetic "pick-up."	First to manufacture RCA Metal Tubes.

—plus the initial development of scores of important, far-reaching radio advances made available to the entire radio industry.

Listen to "The Magic Key of RCA" on NBC Blue Network every Sunday, 2:00 to 3:00 P. M., E. D. S. T.

**ERICA • Radio City • NEW YORK**

CATIONS . . . BROADCASTING . . . RECEPTION

# AMERICAN BOSCH

... assures your **SUCCESS IN THE RADIO BUSINESS** with this new market-measured line

**YOU** can't help but be a "bull market" success with this dazzling new American-Bosch Radio line. Featuring the "Automatic Maestro," radio engineering triumph of the day... featuring metal tubes... featuring Super-Size Dials... featuring Semaphore Tuning... featuring the exclusive Band-Stand Baffle... featuring a combination of 24 all-star advantages in a market-measured line that is carefully calculated and priced to embrace every type and class of customer.

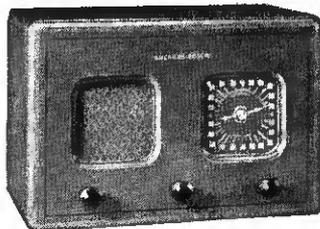
Cabinets are deliberately designed to captivate the woman. Here are radios with flash and finesse... radios with dash and go... radios that fill the eye... radios so elegant in line and finish that they will make any woman's pulse quicken at the prospect of having one in her own living room.

Mail coupon at lower right for "Success in the Radio Business," our new booklet that tells the whole story of the excellence in engineering, styling, pricing and planning of the greatest American-Bosch Radio sets ever made!

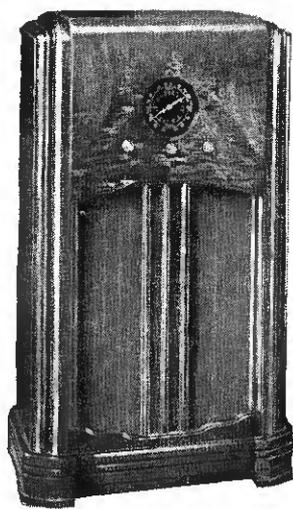
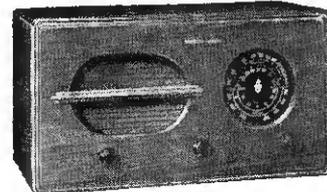
**UNITED AMERICAN BOSCH CORPORATION**  
**SPRINGFIELD, MASS.    NEW YORK    CHICAGO    DETROIT**

American-Bosch Radio is licensed under patents and applications of R.C.A. and Hazeltine Corp.

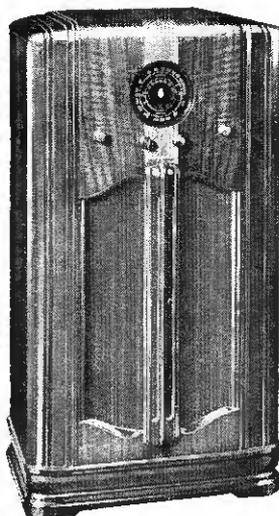
**MODEL 604**—5 tube 2 wave band improved superheterodyne Personal radio for AC-DC operation. Range: 530 to 1500 Kilocycles, 1500 to 3600 Kilocycles.



**MODEL 515**—5 tube, 8 tube performance 2 wave band improved superheterodyne Personal radio for AC current. Range: 540 to 1500 Kilocycles, 1500 to 3600 Kilocycles.

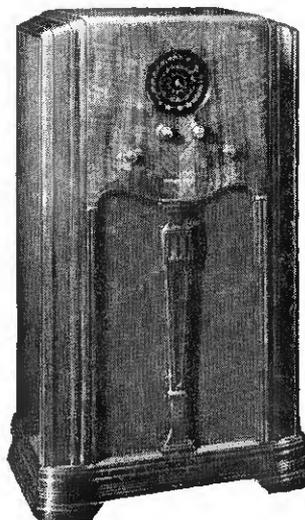


**MODEL 605C**—5 tube, 8 tube performance American-Foreign-Police improved superheterodyne Console. Range: 540 to 1700 Kilocycles, 2000 to 7200 Kilocycles. Super-size full vision black illuminated airplane dial; with scales of different color for each wave band. Perfect automatic volume control. High Fidelity Modulator. Beautiful Console Cabinet.

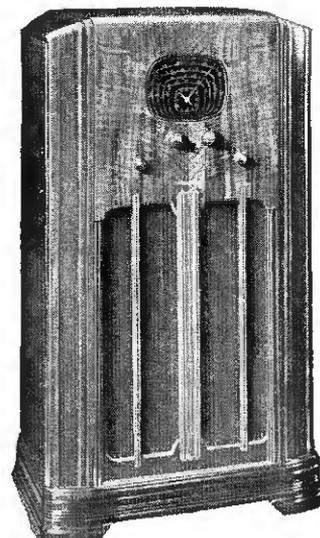


**MODEL 650**—6 tube, 9 tube performance Console for AC operation. American-Foreign-Police 3 Band improved superheterodyne. Range: standard broadcast 540 to 1500 Kilocycles; police and short wave 1500 to 4500 Kilocycles; short wave 5500 to 16500 Kilocycles.

**MODEL 625**—7 tube, 10 tube performance Console for AC-DC operation; otherwise same as Model 650.



**MODEL 660C**—"Automatic Maestro" model; 7 tube, 10 tube performance, All-Wave American, Police and Foreign improved superheterodyne Console. Range: standard broadcast and police 525 to 1800 Kilocycles; police and short wave 1800 to 6000 Kilocycles; and short wave 6000 to 18500 Kilocycles.



**MODEL 670S**—"Automatic Maestro" model; 9 tube, 11 tube performance, All-Wave American, Police and Foreign, plus U. S. weather band, improved superheterodyne Console. Range: standard broadcast and police 540 to 1800 Kilocycles; police and short wave 1800 to 6000 Kilocycles; short wave 6000 to 18500 Kilocycles; and long wave U. S. weather band 150 to 375 Kilocycles.

# THE AUTOMATIC MAESTRO



## Centromatic UNIT

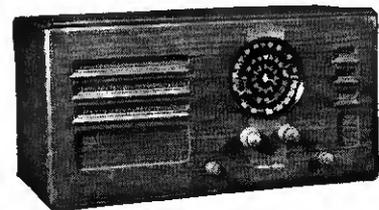
### ONLY AMERICAN-BOSCH HAS IT

# 24 Reasons

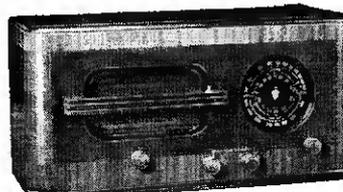
why you can make a "bull market" success selling American-Bosch Radio

- ★ Automatic Maestro
- ★ Metal Tubes
- ★ Band-Stand Baffle (Patent Applied For)
- ★ Super-Size Dials
- ★ Split-Second Tuning Indicator
- ★ Semaphore Tuning—Automatically Flags the Station with Electrical Precision; and Signifies the Wave Band with a Colored Beam
- ★ 90% Less Wiring
- ★ Over 100 Less Soldered Connections
- ★ Every Set Multi-Wave
- ★ More American and Foreign Programs
- ★ Noise Suppression on-the-Station
- ★ Noise Suppression between Stations
- ★ High Fidelity Modulator
- ★ In-Built Wave Trap—suppresses interference from code
- ★ Perfect Automatic Volume Control
- ★ High Fidelity
- ★ Iron Core Coils
- ★ Multiplied and Reduced Speed Station Selector
- ★ Anchored Construction
- ★ Market-Embracing Line—Meets Every Price Class
- ★ Buy-Appeal Cabinets
- ★ American-Bosch Dependability
- ★ Recognized Value
- ★ Full-Size Acoustically Correct Speakers

American-Bosch is the only radio line that offers this complete combination of up-to-the-minute features in radio performance, radio styling, radio standards.



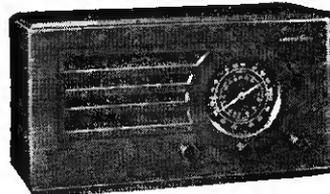
**MODEL 660T**—"Automatic Maestro" model; 7 tube, 10 tube performance All-Wave American, Police and Foreign improved superheterodyne Personal radio. Range: standard broadcast and police 540 to 1800 Kilocycles; police and short wave 1800 to 6000 Kilocycles; and short wave 6000 to 18500 Kilocycles.



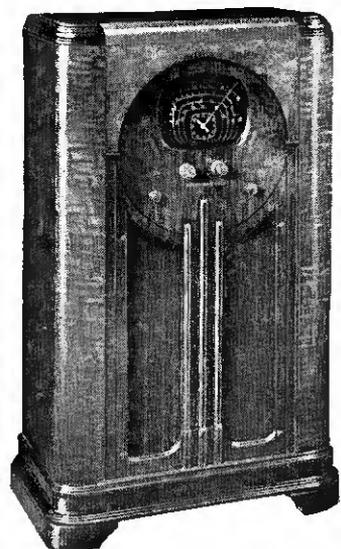
**MODEL 640**—6 tube, 9 tube performance Personal radio for AC operation. American - Foreign - Police 3 Band improved superheterodyne. Range: standard broadcast 540 to 1500 Kilocycles; police and short wave 1500 to 4500 Kilocycles; short wave 5500 to 16500 Kilocycles.

**MODEL 620**—7 tube, 10 tube performance Personal radio for AC-DC operation; otherwise identical with Model 640.

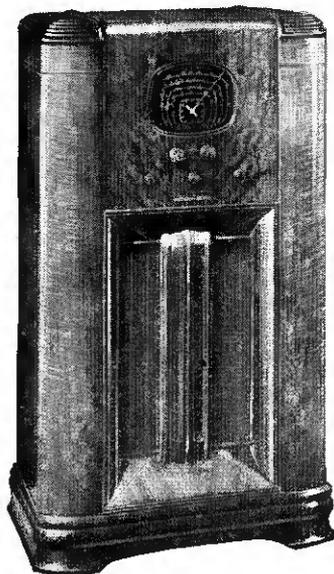
**MODEL 605**—5 tube, 8 tube performance Personal radio for AC operation. Range: 540 to 1700 Kilocycles, 2000 to 7200 Kilocycles.



Also: New battery-operated models for 6-volt storage battery; and for air cell, dry cell, or 2 volts of storage battery. Mail coupon at right for information and prices about these and all other sets illustrated and described here.



**MODEL 670C**—"Automatic Maestro" model; 9 tube, 11 tube performance, All-Wave American, Police and Foreign, plus U. S. weather band, improved superheterodyne Console. Range: standard broadcast and police 525 to 1800 Kilocycles; police and short wave 1800 to 6000 Kilocycles; short wave 6000 to 18500 Kilocycles; and long wave U. S. weather band 150 to 375 Kilocycles.



**MODEL 680**—"Automatic Maestro" model; High Fidelity 13 tube, 15 tube performance, All-Wave American, Police and Foreign, plus U. S. weather band, improved superheterodyne Console DeLuxe. Range: standard broadcast and police 525 to 1800 Kilocycles, police and short wave 1800 to 6000 Kilocycles; short wave 6000 to 18500 Kilocycles, and long wave U. S. weather band 150 to 375 Kilocycles.



**UNITED AMERICAN BOSCH CORP., Dept. R  
SPRINGFIELD, MASS.**

Please send copy of "Success in the Radio Business" containing complete information about the new American-Bosch line.

Name.....

Address.....

# 2 out of 3 RADIO VIBRATORS are **MALLORY** made

MALLORY is recognized as **STANDARD**

Vibrators made by Mallory are *standard equipment* in America's most popular automobile radio receivers and in 6 volt and 32 volt household receivers.

The use of Mallory Replacement Vibrators is *standard practice* on the part of radio service men the country over.

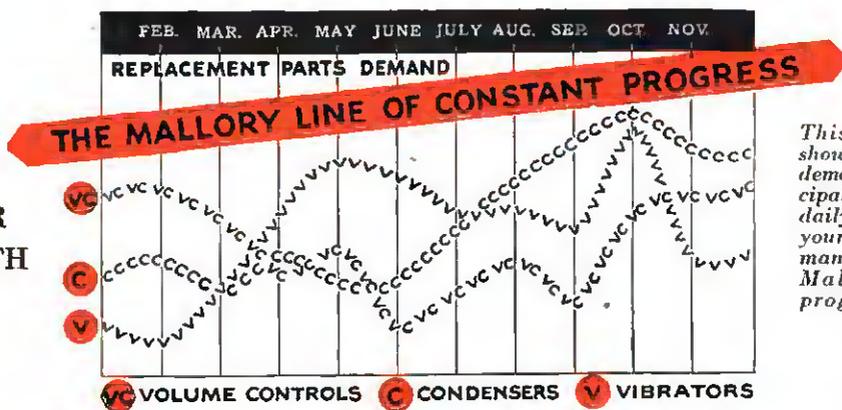
A mere handful of Mallory Replacement Vibrators render universal service to over 3,000,000 automobile radio sets now in use.

Mallory Replacement Vibrators save time — save inventory — reduce stock investments. They are dependable in service. They provide more efficient performance and are easy to install. They build good will and good business!

Be sure your vibrator replacement work is done with Mallory. It pays — in profits, as well as in customer satisfaction — as thousands of service men can tell you.



BUILD YOUR  
BUSINESS WITH  
MALLORY



This composite graph shows the trend of service demand for the three principal replacement items in daily service work. Check your needs with the demand — and depend on Mallory for constant progress.

**MALLORY**

P. R. MALLORY & CO., Inc.  
INDIANAPOLIS INDIANA  
Cable Address—PELMALLO

**YAXLEY**

# THE RADIO MONTH

## Merchandising

### HEAVY PRODUCTION STARTS

Because banner programs such as the Louis-Schmeling fight, the Olympic games, the political conventions and subsequent campaigns are expected to make this a peak radio year new lines have been announced fully two months earlier than usual and the slogan "Start Selling Now" is heard everywhere at distributor and dealer showings.

Backing model announcements with action, many manufacturers are freely bandying present production schedules and our own footwork in major plants indicates definitely that most producers not only have samples to show but can make immediate deliveries.

### JOBBER ORDERS SPURT

Enthusiastic as we are for the new lines we cannot help viewing with what is perhaps unjustified jitters the staggering number of 1937 models already entering the boxcars. Jobbers are ordering heavily, to be sure, and several report signing of contracts for the next six months considerably in excess of their entire 1935 volume.

But consumer demand has not yet been accurately yardsticked and there is the possibility, however remote, that the manufacturer's eyes may be bigger than his stomach. Last year's market was reasonably free from dumping and it would make us unhappy if over-production put the industry through the wringer this fall.

### DEPT STORE CREDIT

From scattered cities we learn that department stores are tightening up on radio department credit to the woe of managers with whom we sympathize. Demand for radio is on the up and the relative ease with which volume can

be swelled today simply by pushing sets on liberal terms is proving somewhat embarrassing to the brass hats.

Noted, also, is more than the usual uncertainty concerning the advantages of featuring nationally-known brands over private-brand merchandise and vice versa. The swing has been toward advertised stock but it seems, now, that small dealers are obtaining leaders sufficiently reasonable to give department store execs an uneasy moment.

## News

### 3 YEARS TO PAY

On June 5 the Electrical Association of New York announced that the National City Bank, backed by local electric utilities, would henceforward finance major electrical appliance sales of approved dealers up to 3 years. Radio, omitted, came in for hot discussion, may qualify in August.

### LESS ACTIVELY TO PROMOTE

"The Atwater Kent Manufacturing Company has decided less actively to promote its radio line and has so informed its distributors. . . . It is not in a position at this time to state what new line of activity it has planned for the future."

This brief statement, received by the press June 1, was not precisely unexpected since associated jobbers had previously been encountered far afield, obviously prospecting. Contacted again since, most distributors interpret the words "less actively to promote" as meaning that AK is definitely out of the radio business.

No such amplification is forthcoming from Philadelphia. Interviewed at the plant, sales manager F. E. Basler jerked his thumb in the direction of the mimeograph release, remarked: "That's all there is. There isn't any more."

### NEW FREQUENCIES

Of immediate interest to the radio trade is the FCC's ruling which removes experimental television stations from the channels between 2,000-2,100 kc. and 2,750-2,850 kc., turning these over instead to inter-city police now using over-crowded, adjacent channels. Also assignment of a new band between 25,625 and 25,875 kc. to "international" stations (formerly called "relay" stations) using 5,000 watts or more.

Inkling of what's ahead is seen in widening of the ultra high-frequency bands for television. Operation is permitted from 42,000 to 56,00 kc., from 60,000 to 86,000 kc. and any two adjacent channels above 110,000 kc. except the 400,000 to 401,000 kc. amateur band. Television or facsimile stations may transmit trade-marks or symbols, or their associated sound channel may carry brief announcements crediting a sponsor, but this may not be done for direct or indirect pay. This restriction is similar to the one still governing international stations.

## Service

### ACOUSTICS HEAD PARADE

Highspot of the month and perhaps the season from the standpoint of design is the seemingly contagious trend toward acoustic compensators for cabinets, for the most part intended to load speakers at low frequencies and so make up the deficiencies of baffles made necessarily small in order to fit in the average room. Closed-up cabinet backs and pipes venting through the bottom, labyrinths, resonant auxiliary cones, multi-aperture backplates for speakers . . . all these and more are found in new lines and manufacturers are hard put to it to find suitable sales names.

# PUNCHBOARDS AND

## RIDICULOUS?

No more so than many premiums offered with radios.

**N**OT many moons ago when a radio premium proposition was running full blast in Milwaukee, a woman plucked her husband's sleeve one evening, as he stared in a show window at a \$34.50 set, saying:

"There must be something wrong. Either the radio or the mixer is no good at that price."

Actually, both the radio and the mixer were perfectly good merchandise. One distributor had an overstock and was granted \$15 to play with on each radio. In some stores a food mixer was offered with the bargain, and in others, electric trains. Still, the idea didn't click. Neither mixers nor trains are associated in the consumer's mind with radio and when wrapped up in the same package at a bargain price, the public flinched.

### **Concealed Cuts**

Clinton A. Scheder, buyer, has been in the radio department of the Schuster department store for nine years. His house has some 50,000 private brand radio installations in Milwaukee. He has been through the mill as far as premiums are concerned. Let Mr. Scheder speak for himself:

"Premiums get crowds if run in shots," he declares. "But they are not good as a steady diet. Of course, if you want to switch your prospect from one brand to another, they are effective.

"The weakness of premiums is the fact that they represent a concealed cut in price. Furthermore, they are effective only when exclusive with



Lazarnick

# P R E M I U M S



Even the dealer's nose is not clean with respect to Spiffs. He frequently follows the manufacturer's and distributor's lead, bribes the consumer to buy

**By Tom F. Blackburn**

one store. The moment every store in town offers the same proposition the premium begins flopping, and fails to produce volume which might justify the hidden cut in price. Too many premiums awaken a tendency on the part of the customer to wait until he can get them, clogging the normal market.

"Trade-ins are out, when premiums are used. If the house both gives the premium and takes the trade-in it leaves an average margin of 20 per cent or less, which is ruinous. With nine out of ten prospects owning old sets, the trade-in angle is much more important."

### **Create Suspicion**

Schuster's is much more interested in long trade-in allowances than in premiums. People with radios from three to five years old value them rather highly. To get rid of old trade-ins once a week this typical store auctions off sets they have taken in. Seven "down stairs" distributors bid on the second-hand lots. In this way the firm feels it gets the best prices.

One Milwaukee distributor, who declines to have his name mentioned, says about premiums: "The public approaches them with suspicion and they are only good to unload excess stocks. On the other hand I do not believe that they educate people to expect them as the usual thing. Premiums represent cut prices and somebody must take it on the chin when one is offered. Consequently I do not think that they are going very far in radio merchandising, for manufac-

turer, distributor or retail dealer."

No blushing violet was William F. Seemuth of Real Radio, Inc., in condemning premium practices before the Wisconsin Radio Refrigeration and Appliance Association. Said Mr. Seemuth:

"Let us stamp out the practices which are wrecking initiative, management and ruining sales forces—meaning spiffs, punchboards, premiums, cash bonus and other kindred evils. You are only kidding yourself if you think they are good. This has been the dizziest year in Milwaukee for such things and they should be stopped completely, at once.

"If persisted in generally, as during the past few months, it behooves every retail outlet to change over to a one-man band—the sooner the better. Retain one extra employee but choose preferably a graduate accountant who can keep closely posted on this multitude of childish games. Too many cockeyed schemes are plastered upon retail management, supposedly designed as merchandising helps."

### **Surface Symptom**

"The radio business is much like an athlete who is overtrained," says Colin Campbell of Campbell-Penfield Company, of Detroit. "Mind you, we don't object to Spiffs for our men when we know of them. But back of it all is an unhealthy condition. Spiffs and premiums are merely a surface symptom.

"In Detroit, distributors and branch houses have sold radio at bottomless prices. A legitimate dealer could scarcely get stock on his floor



"If you must use premiums to sell radios make them accessories that go naturally with the merchandise," says Clinton A. Scheder, Sehuster's department store, Milwaukee, who suggests globes, clocks, hassocks

before he discovered that some outfit down the street had a bigger discount. To this, add indiscriminate selling to any one who calls himself a dealer and you soon have wholesale selling."

"Where does that come in the Spiff picture, Mr. Campbell?" *Radio Retailing's* representative asked.

"When a firm carries an item which is unimportant to them, it doesn't mind if it does give away its discount. A drug store owner will buy a radio for a friend at a dollar profit, for example. Activity like this cuts the ground from under legitimate radio dealers, and soon radios are not moving. The distributor kicks in with a Spiff to get the boys to plug his line. Then the dealer passes along the premium. The thing works in a circle, with the distributor making less, the dealer doing less business.

"Factories are encouraging their purchasing agents to buy wholesale for employees, as it permits them to pay lower wages. They do not realize that when this is practiced on all sides, it backfires on their own distribution set-up."

What this country needs, says Mr. Campbell, is a franchise basis of the Eastman Kodak caliber, which will

protect the dealer and make possession of a line a valuable property.

#### **Allowance Better**

Liberal trade-in allowances are preferred as business-builders by R. O. Martin of Zabel-Martin, Inc., Kenosha, Wisconsin, who says:

"I feel that the question of Spiffs is secondary in importance. The question to be put before the industry at this time is 'Where do we go with the trade-in situation in 1936 and the years to come? If that question is answered properly then the matter of Spiffs and Premiums will be relegated to the corner.

"Today's market is almost 90 per cent replacement. The question immediately comes up, 'How much am I allowed for my old radio?' And what dealer, who is aware of his cost of doing business, can give even so much as a thin dime out of today's discounts, for an unsaleable trade-in and still offer service? We are of the opinion, and we have been thinking of this subject for years, that the manufacturer could easily attack the trade-in evil by having approximately six models in his line covering trades. The models would necessarily be in the various price brackets.

"There have been several promotional models brought out by at least one nationally known manufacturer this year and to say the least we sure 'went to town.' We absorbed the trade, obtained our legitimate profit, made the customer happy, junked the old radio and made a profit for friend jobber and manufacturer. This can't be done with a 40 percent discount.

"We believe that if a trade-in schedule were adopted by all nationally known manufacturers, keeping at all times the thought of competitive price structures in mind, salesmen would be happy to push any such line for the base profits, without regard to Spiffs. Dealers could then afford to hire more able men and pay better commissions and salaries, as the trade-in evil would be eliminated from their investments, and premiums would not be required."

Rule 2, submitted by manufacturers of radio receivers to the Federal Trade Commission and now under consideration reads: "*Commercial bribery is immoral, against public interest and is an unfair trade practice.*"

Premium offers by the retail trade to the consumer constitute in many instances, equally destructive bribery.

# FIGURES

## RADIO RETAILING'S MONTHLY BUSINESS BAROMETER



### RADIO OWNERSHIP

From the Columbia Broadcasting System's Dr. Daniel Starch, whose research staff called in person upon 24,000 dwellers in cities of over 10,000 population during 1935, we receive the following interesting data in addition to the chart herewith reproduced:

In cities of over 250,000 radios were found in 93.8 per cent of all homes; from 25,000 to 250,000, saturation was 91.1 per cent; 10,000 to 25,000 showed 92.4 per cent and the average saturation was 92.6 per cent.

Analyzed by time zones, saturation reached 93.4 per cent in the Eastern Belt, 90.6 per cent in the Central, 91.1 per cent in the Mountain and 94.3 per cent in the Pacific.

Precisely 97.3 per cent of all homes owning automobiles also owned radios and, in reverse, 75.5 per cent of all radio homes owned cars. And 95.6 per cent of all telephone homes owned sets.

It was found that 96.1 per cent of all radios were in working order, 77.3 per cent were in use sometime every day, 67.1 per cent were turned on after 6 p.m. and 58.5 per cent were used sometime before 6 p.m.

### BROADCAST REVENUE

Total receipts of the 36 broadcast stations in New England from the sale of time during the year 1935 amounted to \$3,664,687, according to Wm. L. Austin, Director, Bureau of the Census, Department of Commerce. Approximately

one-half this revenue (50.58%) was derived from local advertisers, about one-sixth (17.55%) from national and regional advertisers who purchased time directly from the stations and the remaining one-third (31.87%) from national and regional network programs.

Total receipts of the 77 broadcast stations in the three Pacific Coast states totaled \$6,441,623, of which 56.2 per cent was derived from local advertisers, 20.6% directly from national and regional advertisers and 23.2% from networks.

Total receipts of the 30 broadcast stations in Texas amounted to \$2,220,821 during 1935. Of this, 57% came from local advertisers, 22.78% from national and regional advertisers and 20.22% from networks.

### PARTS PER SET

Study of construction, 8 new lines, gives this average number of specific parts per set:

Seven tube sockets, 1 a.f. transformer, 1 power transformer, 1 choke, 15 com-

FEATURE POPULARITY	
300 dealers surveyed by <i>Radio Retailing</i> rank improvements contributing most to sales in last 12 months as follows:	
DIAL APPEARANCE.....	21.6%
SHORTWAVE COVERAGE.....	19.6
IMPROVED TONE.....	18.
NEW TUBES.....	12.
INCREASED SELECTIVITY..	10.
BETTER CABINETS.....	10.
TUNING INDICATORS....	5.
CIRCUIT REFINEMENTS....	3.5
EFFICIENT SPEAKERS AND Baffles.....	.2
ASSEMBLY AND PARTS IMPROVEMENT.....	.1

position resistors, 1 wirewound resistor, 1.5 variable resistors, 2 filter condensers, 15 bypass condensers, 1 variable tuning condenser gang, 8 trimmer condensers, 5 coils, 1 speaker.

### SURVEY OF SALESMEN

Gerald Stedman, lecturing before the Wisconsin Radio, Refrigeration & Appliance Association in April, quoted the following national survey figures concerning appliance salesmen:

Married men constitute 82.3 per cent of the total employed. Average present monthly income is \$148.45. Men selling both in the store and outside predominate at 80 per cent, 13.1 per cent spend all their time outside and the remaining 6.9 per cent sell in stores only.

Fully 56 per cent of all sales are closed in the home, half of these at night and 9 out of 10 when husband and wife are together.

TUBE PRODUCTION BY TYPES					
MANUFACTURER	GLASS	METAL	MG	G#	SPECIALS
ARCTURUS.....	42%			35%	23% <sup>@</sup>
CHAMPION.....	95%				5%
HYTRON.....	60%		15%	25%	
HYGRADE-SYLVANIA..	60%	10%		30%	
KENRAD.....	50%	40%		10%	
NATIONAL UNION...	75%	5%		20%	
RCA RADIOTRON...	50%	40%		10%	
RAYTHEON.....	60%	10%		30%	
REPUBLIC.....	40%		15%	5%	40% <sup>†</sup>
TRIAD.....	70%		20%	10%	
TUNG SOL.....	90%	10%			

\*Metal over glass envelope, octal base. #Glass envelope, octal base.  
<sup>@</sup> Coronet. <sup>†</sup> Metal over glass, wafer base with glass type pins.

# WARMTH FOR THE COLD



In which a salesman experience opens up

... A rainy day is excellent for canvassing. The housewife stays at home

amount of regular canvassing, because there is no comparable method of developing a new store man's selling personality and because it teaches all salespeople to quickly distinguish between genuine prospects and duds.

Three things dampen the morale of the embryo canvasser: A rapid series of sharp turndowns. Constant, unaccustomed pounding of the pavement. And no quick sales.

... Wherever possible offer some sort of souvenir or service in your approach

The following suggestions seem invariably to help new men:

Don't take sharp turndowns too much to heart. It might have been very inconvenient for the prospect to answer the bell. Perhaps several other

By **Sam Chaifetz**

As told to *Joseph Salzman*

**F**OR a big, burly six-footer to lose control of his facial muscles, shift sheepishly from one foot to the other and nervously twist his hat in his hands when the first door cold canvassed is opened by a kindly, motherly type of woman is, admittedly, silly. Yet in 28 years as salesman and crew manager for insurance, sewing machine and electrical appliance retailers I have seen this happen many times, even to experienced store men.

Stage fright on initial calls ruins many potential quota busters and it is an important part of my job to help promising but flustered beginners over the bumps, important because specialty salesmen can be successful only when they do a certain



# CANVASSER

with 28 years of  
his bag of tricks

canvassers have called just before you. Frequently the woman who turns you down abruptly one day is quite receptive the next. Forget it and go on to the next house.

Dress immaculately. This is no academic suggestion. It will counteract development of an inferiority complex, dynamite for the cold canvasser.

If you have never canvassed before your first experience is similar to that of the man who never spoke in public before. Stage fright will dwindle in direct proportion to the number of calls. Said Emerson: "Nature is upheld by antagonism. Passions, resistance, danger, are educators. We acquire the strength we have overcome."

Think of yourself as a salesman, bringing a worthwhile product to people who probably need it, not as a peddler hawking wares the public does not want.

Know the article you sell thoroughly. If you are certain that no one can trip you on a single question about it this builds confidence.

Avoid trying to cover too much ground in one day. Twenty-five calls is sufficient. Don't hurry. Take it easy. This will prevent discouragement due to physical tiredness.

## At the Door

More specific are these suggestions:

Always plan your cold canvassing work the night before.

There is no need to pick your location. Prospects are found behind almost any door, frequently where you least expect them.

Do not canvass a street if you see another canvasser there before you.

When canvassing an apartment house always begin at the top floor and work down. If you happen to be seen by the superintendent while on the way down he will not stop you. If you meet him on your way up approach him as a prospect, then ask him to help you find business.

Don't canvass when tired out. Avoid casting your eyes around when talking with a prospect.

Under no circumstances permit doors to be shut on you if it is at all avoidable. A proper approach will prevent this in most cases and make your work more pleasant and profitable.

Men are more considerate with canvassers but some show signs of jealousy when you talk with their

wife. They show it by ignoring you. In such cases direct your conversation to the husband.

Avoid making calls during the dinner hour; at lunch time when children are returning from school.

The best time to canvass is from 10 a.m. to 12 noon and from 1 p.m. to 3 p.m. In extremely hot weather canvass from 9 a.m. to 12 noon only.

The best time to make night ap-  
(Please turn to page 75)



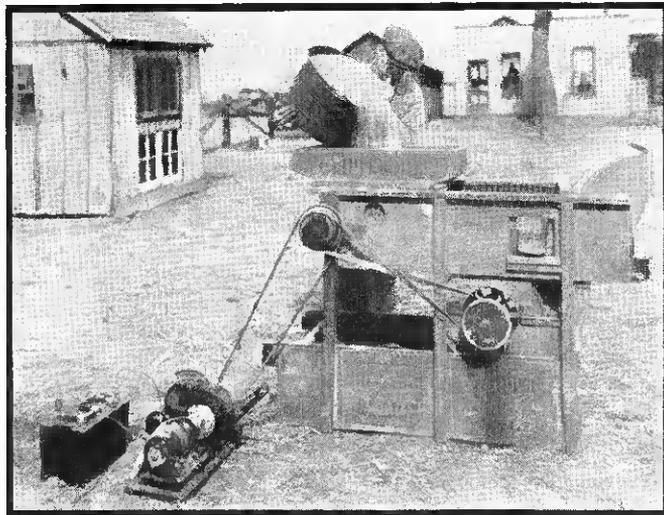
... When canvassing an apartment house begin at the top floor and work down. The superintendent will not stop you if you appear to be on the way out



**HOMEWORK . . .** Out goes eyestrain as in goes a charger



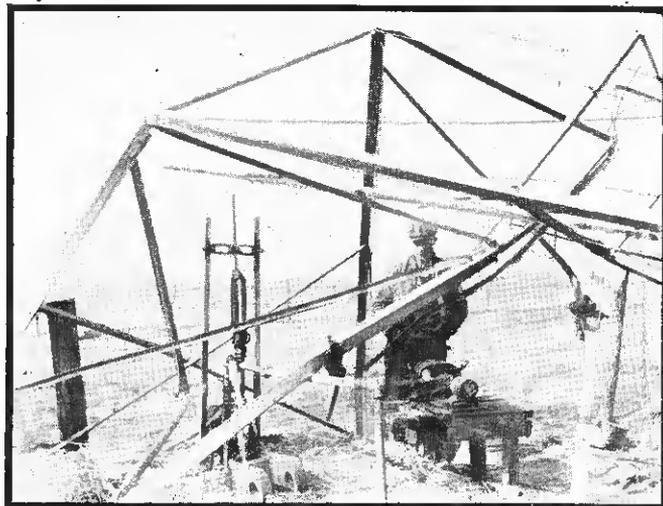
**CHORES OVER . . .** Radio brings Broadway to this rural home. Gasoline charges the set battery, one for house lighting and another in the barn



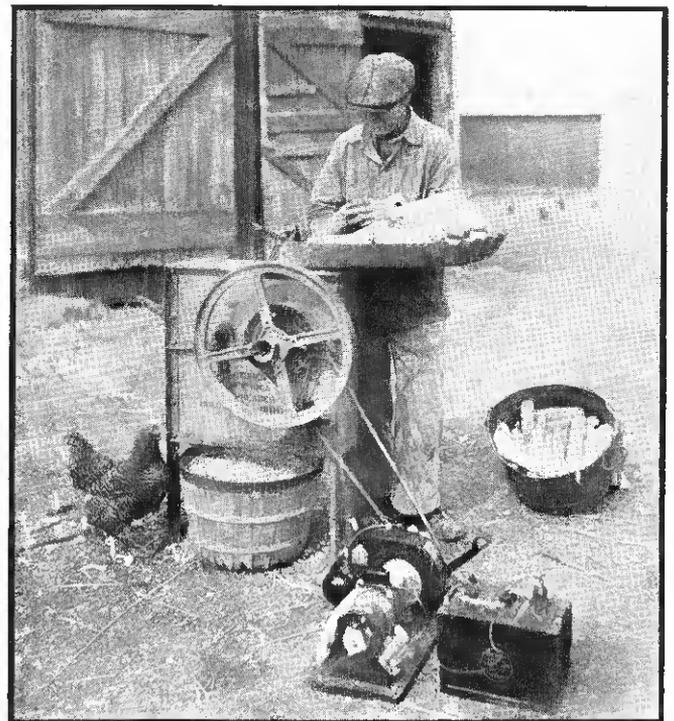
**CROPS IN EMBRYO . . .** A seed-cleaner in action

## D O W N O N

New gasoline driven battery chargers run radios . . . lights . . . washers . . . churns . . . corn shellers . . . pumps . . . seed cleaners



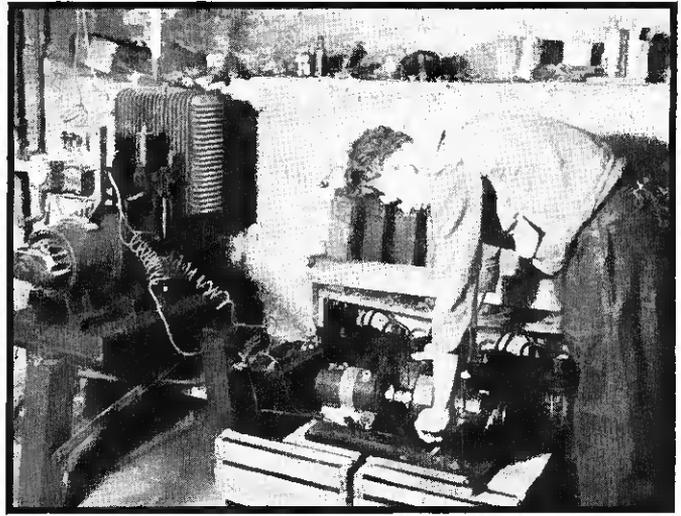
**EMERGENCY WATER . . .** Down went the windmill in a storm and into action went the radio battery charger



**OUTDOORS TOO . . .** Shifted to the barnyard, this machine drives a corn-sheller



**EXIT KEROSENE . . .** Two 135-ampere, 6-volt batteries operate 13 lights in this 10-room farmhouse

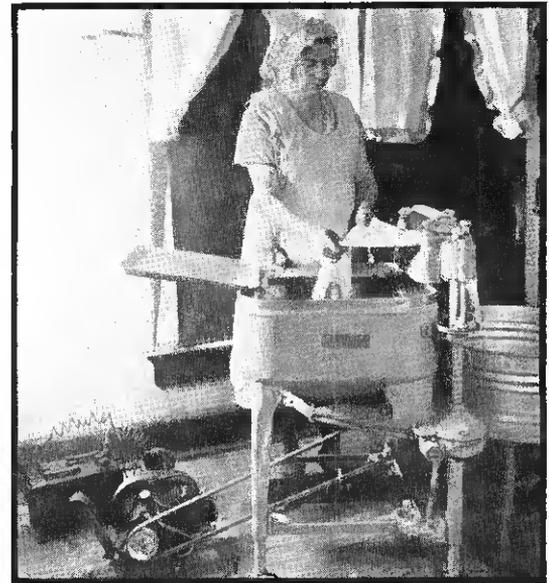


**SUBSTITUTE . . .** This man's 32-volt system batteries went sour so he switched to a 6-volt job

## THE FARM



**DEMONSTRATION . . .** C. B. Klinker Sales Company man operates six lights from a Sentinel Farm Powr unit near Lafayette, Indiana



**WASHDAY . . .** This woman moved from an electrified district to the sticks, rigged up her machine for direct drive

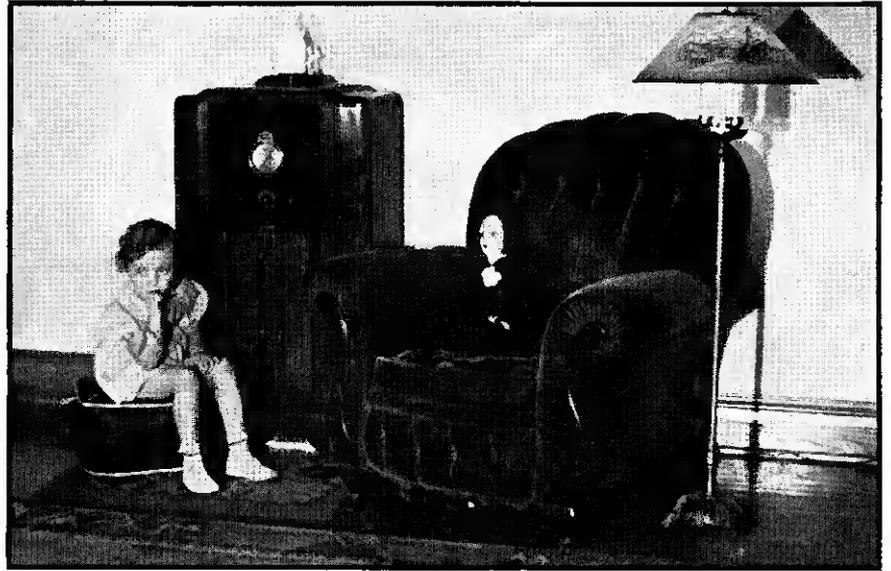


**BUTTER . . .** Here a charger operates a churn and washer mechanically, simultaneously energizes batteries for 6 lights and a radio

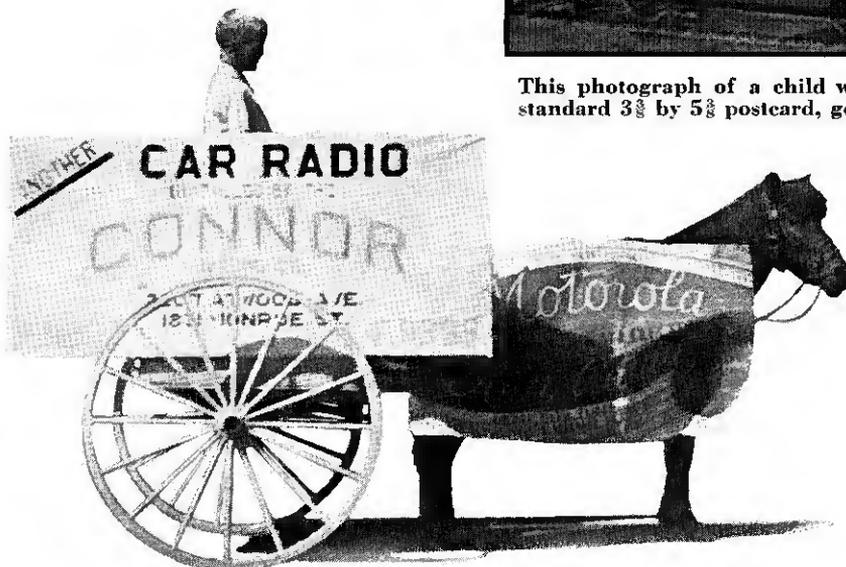
# DISPLAY.....MANAGEMENT.....

Experience from the field, briefed by

Up went auto-radio sales when Connor installed one in this kid's pony cart, plastered it with signs and paid him chewing-gum money to drive around town



This photograph of a child well known in her neighborhood, printed on a standard 3 1/2 by 5 1/2 postcard, gets attention where ordinary circulars fall down



renovations and replacements. More than 25 per cent of the company's business comes from this source.

## Time is Money

PHILADELPHIA — Says Paul G. Freed: "The essence of profit in radio repairs and service is *time*. Statistics are plentiful showing the various expenses encountered in the business and they show that time is by far the most important commodity we have for sale. Subsidiary profits from the sale of tubes, replacement parts and accessories must not be permitted to affect time charges. Some servicemen are so blinded by a \$3 profit on a large replacement part that they shave the labor charge to zero. This is an error that commonly keeps such men in a rut.

"It is also possible to go to the other extreme. Some men, heads full of figures and statistics, try to make the charges on a few big jobs pay the entire overhead. Naturally, the customers so taxed soon realize that they have been overcharged, spread the word around and give the shop a bad reputation.

"A knowledge of overhead costs is valuable but in order to apply this knowledge it is necessary that there

## Personalized Ads Pull

MADISON, WIS.—Into the wastebasket go most direct-mail circulars. Not so those devised by V. H. Connor, who uses photographs high in natural interest. Take the reproduced photograph of a little girl listening to her radio, for example. Checkup on a 2,000 mailing showed a 5 per cent response on sets, 7 per cent response on service. This isn't a bad return. And yet illustrated cards of this type are used primarily to build goodwill, carrying short, simple messages.

Connor follows up with mimeographed handbills carrying the real sales punch, dope about his line, prices, terms. These too, because

they are preceded by the cards, attract 5 per cent of the people receiving them to the store. Of these, 2 per cent buy radios or appliances.

Another example of clever, personalized advertising is this dealer's use of a kid's pony cart, equipped with signs and a set, to promote automobile radio. Six set sales are directly traceable to this stunt and business is still coming in.

Many prospects for new sets are brought in by the extension of the personalized promotion idea to service. Every regular customer of the store is visited by a repairman each 30 days. This results in service work,

# ADVERTISING.....SELLING.....

Radio Retailing's travelling editors

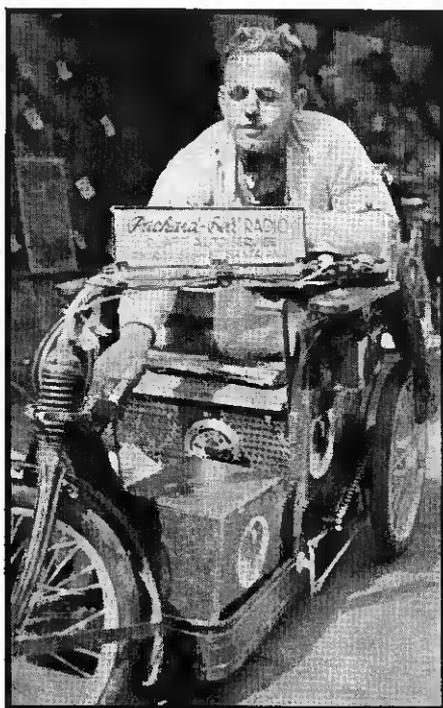
be a reasonably steady flow of business into the shop. If, for example, overhead is known to be \$9 per day and on Monday no work comes in it is certainly not practical to double Tuesday's charges in order to make up the entire loss in one crack.

"Our pricing system for the general public is based upon hourly labor charges for miscellaneous types of work and upon specific flat rates for common repairs. The work we do for other dealers is handled under two plans: so much per individual job and on contract. The contract plan is extended to outlets that give us all their repair work and is available only when volume is large. Contract work tends to smooth out the curve of actual working hours and, although it is not as profitable as public work, fills in time which might be wasted.

"Since, in our opinion, flat rates are more equitable for the customer and more certain for the serviceman, it is important that each job be done expediently, yet without sacrifice of quality."



Regularly contacted by the firm's serviceman, this customer naturally came to Ed Krocker for his new set



**NO SALES CRIPPLE . . .** Platt Radio Service of Santa Ana, Calif., has installed an auto-radio and a sign on the motorized wheel-chair of this downtown area newspaper seller who receives a commission on leads

## Sales from Service

MILWAUKEE—Heart of the Park Electric Company's business is a list of 5,000 people for whom the firm has serviced in the past five years. One full-time serviceman makes an average of 8 inspection calls per day, covering the entire list each 18 months. He notes the age of the sets checked plus the customer's receptiveness to the suggestion that replacement seems advisable, turns the names of approximately 60 per cent of his contacts over to store salesmen for follow-up. This has resulted in the sale of new equipment to 22 per cent of the original list.

Where sets seen in homes appear to be too new to warrant replacement, or where finances apparently do not permit extensive purchases, direct-mail circulars are used for follow-up, advertising tubes, accessories and adjustment service.

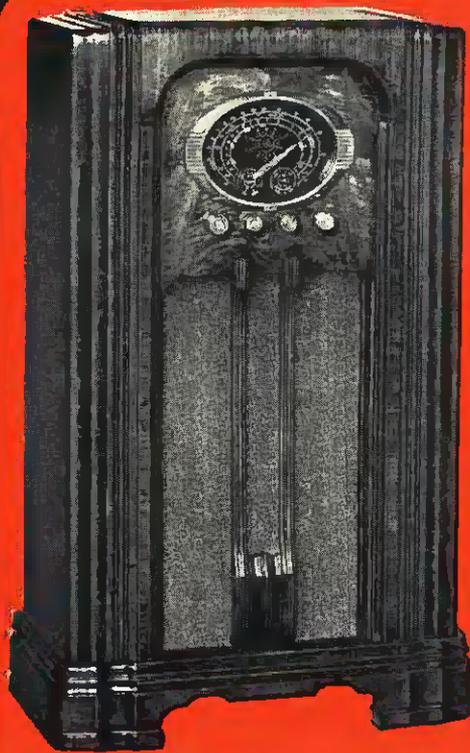
Says manager Ed Krocker: "During the depression we considered it a privilege to be allowed to nurse along an old set for the customer. We con-

tinued to maintain close contact with our entire list, just as if they were hot prospects for new sets. Now, with more money in circulation, they remember our attention and we are cashing in."

## Uses The User

WEST CHESTER, PA.—The George J. Palmer Company, this city, sent questionnaires recently to 79 people who bought G-E refrigerators from the firm in 1928, asking them: (1) How many times the units had been out of service, (2) monthly current charge for operation, and (3) whether or not the performance had lived up to claims made at the time of sale. The mailing cost \$12.50 and 52 replied.

A complete summary of the questionnaires indicated that a total of



Model 770



Model 778-A



Model 686



Model 666

## They Satisfy, they Sell

Belmont residential receivers are distinguished by their attractive cabinets, their oval dials, their extraordinary sensitivity, and their remarkable tone quality. These excellent and essential features are backed by skilled workmanship, quality materials, and capable engineering.

Among auto-radio receivers the Belmont Model 666 has established itself as the set which meets every consumer requirement: custom trim dials, one or two speakers, no spark plug suppressors, dependable reception under all motoring conditions.

Experienced servicemen admire the quality and simplicity of these receivers! Your sincere consideration of Belmont radios will disclose potential profits.

**BELMONT RADIO CORPORATION**  
1257 Fullerton Ave., Chicago, Ill., Cable Address, *Belrad*  
*Licensed under R. C. A. and Hazeltine Patents*

# BELMONT

THE DEPENDABLE

# RADIO

\$21.25 had been spent for the whole 52 boxes over the entire 7-year period, that all 52 were still in use and that the customers were, if anything, more enthusiastic about the machines than were the salesmen who originally sold them. A summarizing placard placed in the store window, listing the names and comments of users has produced much new business.

The "using the user" stunt is particularly effective in a small town where nearly everyone knows everyone else, states the firm. The questionnaire provided, also, an excellent theme for local newspaper ads.

### Mark-Down Leads

DES MOINES—When prospects display interest in certain radio models yet fail to buy, their names and preferences are placed on a list maintained by sales manager O. R. Haptonstahl of the Thomas Electric Company. This list, says Hap, is a gold mine when the time comes to clear out stock in advance of new model announcements.

"When new models come along I write letters to this entire list, offer them the sets in which they exhibited interest at substantial discounts. Many reply and we clear out marked-down stock without advertising clearance prices.

"Sets just succeeded by new models move quite easily because of this plan and our salesmen, realizing this, frequently clear out such stock even before we get rolling on the new."



**SNAPPY STORE LAYOUT . . .** Here's the last word in modernistic interiors, the radio department managed by H. R. Doyle at Hurley's (Camden) home furnishing store

### Dials on Display

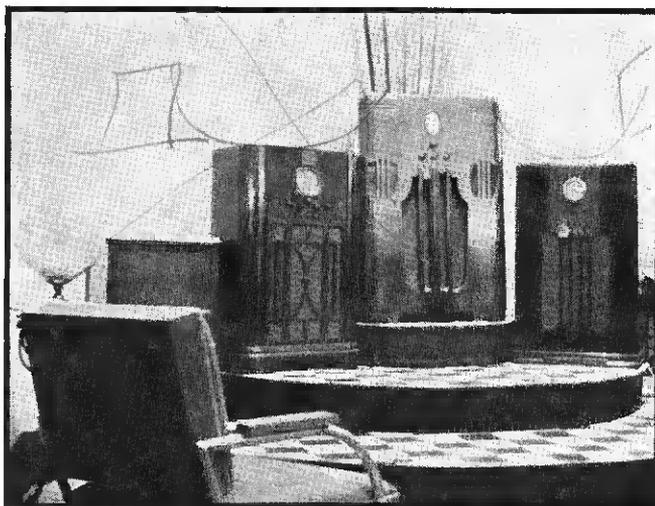
ANN ARBOR—Set dials should be illuminated to attract attention, according to George R. Campbell. It is not economical to keep all the receivers on the floor in actual operation just to light the pilots but a satisfactory effect may be obtained by using Christmas-tree bulbs properly wired to the a.c. line.

Secure old tree cord sets and clip the bulb sockets off, leaving about 10 inches of wire attached to each one. Hook eight bulbs in series, using rub-

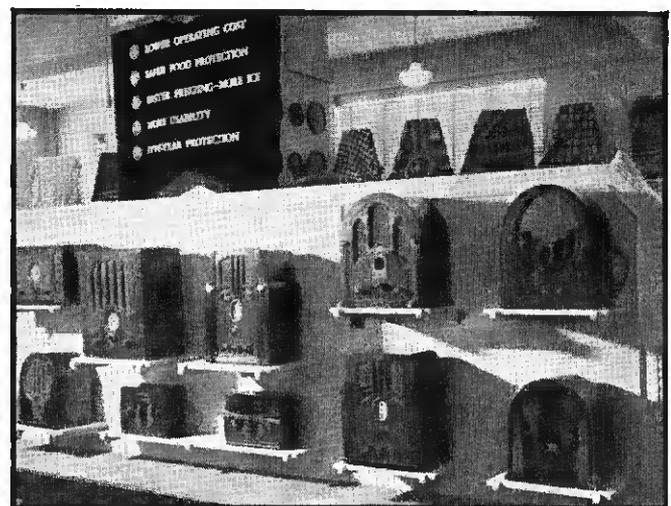
ber-covered wire long enough between bulbs to permit one to be placed within each set in the store. Place the bulbs back of the dial plates, supporting them with thumbtacks pressed into the inner surface of the cabinets.

If you care to make a semi-permanent installation the wiring may be placed behind or under baseboard molding so that it is concealed from sight.

New, allwave receivers have especially interesting dials and if these are lighted people will examine them closely.



**CONSOLE DISPLAY . . .** Raised platforms help Floyd Ford, of Pasadena's L. C. Taylor Company, dramatize consoles, give big receivers an impressive stage setting



**MIDGET DISPLAY . . .** And projecting, individual shelves mounted on a mid-store partition aid C. B. Goodman of Manchester's, Madison, Wisconsin, department store

# FOR 1937 A DOUBLE-BARRELED RCA VICTOR LINE



SHOOTING  
NEW PROFITS  
FOR YOU

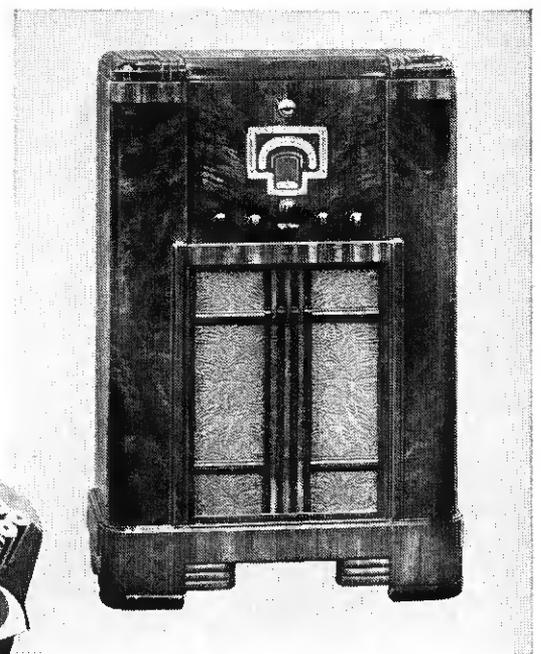
NEVER before has RCA Victor offered the American public a line of radios so compelling to the eye . . . ear and pocketbook!

Never before has RCA Victor given dealers a line so packed with impressive selling features!

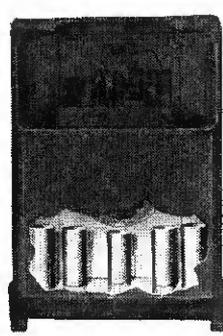
From every part of your neighborhood the customers will come pouring into your store—to see—hear—and BUY!

Why are we so certain? Because this year RCA Victor enables you to present a DOUBLE-BARRELED LINE! A magnificent series of sets with the sensational new Magic Voice, priced from \$129.95. A splendid Extra Value series of 28 sets under \$100, including models with "Magic Brain," "Magic Eye" and RCA Metal Tubes.

This means that no matter what your customers seek—they can find the answer in a 1937 RCA Victor. So prepare for profits—BIG profits. You can have them by pushing this great new line!



This will be the big seller of the MAGIC VOICE line. Model 9K2, with Magic Voice, "Magic Brain," "Magic Eye," RCA Metal Tubes. "X" band of U. S. weather reports; all foreign and domestic, police, aviation, amateur bands; local ultra-short-wave. \$129.95.

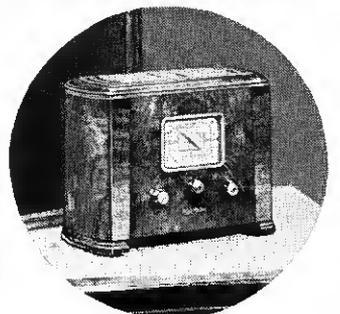


## Revolutionary!

RCA Victor's thrilling new MAGIC VOICE is composed of a closed sound chamber containing 5 organ-like pipes . . . scientifically designed and placed in relation to air-space and speaker. Controlling tone, they release for your enjoyment only those low notes which blend perfectly with tones from front of speaker. Ugly "boom" and other unnatural sounds are gone. You hear with stirring realism the rich tones found by "Magic Brain," tuned by "Magic Eye," made more sensitive by Metal Tubes!

Table Model 5X. A five tube, 2-band superheterodyne for AC or DC. Domestic programs, short wave broadcasts through 49-meter band, police, aviation and amateur calls. \$32.95.

(All prices f. o. b. Camden, N. J., subject to change without notice.)



# RCA Victor

RCA Manufacturing Company, Inc., Camden, N. J. • A service of the Radio Corporation of America

# PRACTICAL PORTABLES

**I**N THE next two months two million Americans will desert sweltering offices and hot asphalt pavements for the cool and comfort of mountain and beach. En route, many will enjoy auto-radios and later, established at vacation spots where electricity is available, transportable sets borrowed from home or purchased especially for the occasion.

Even away from power lines radio reception is practical this year. For several manufacturers have already announced new, efficient, battery-operated portables and, as we go to press, more sets sensitive enough to receive programs from distant cities yet small and light enough to carry easily are reaching the market. Some, it appears, will even tune in shortwave bands, bringing in entertainment transmitted by relay stations even in remote areas where broadcast signals fall down.

Until this year dry batteries designed for "A," "B" and "C" use in portables have been bulky. Note the size of typical new batteries by comparison with older units, shown in the accompanying drawing. Other shapes and types, including flexible-connected cells which may be rolled up (or even fastened around the user's waist!) are now available.

Additions to the 2-volt filament line of tubes, which permit sets as efficient as those made for home use to be designed, have also been made since last season. Take the 1F4 and 950 output pentodes, for example. These types deliver more than a third watt to a speaker with 135 volts on the plate and draw only 120 milliamperes of filament current. The 1C6, a pentagrid-converter, gives excellent "mixer" performance in superheterodynes. Some of the new portables are expected to use series-operated filaments and total filament drains as low as an eighth ampere seem possible.

Parts, too, have been improved. Iron-cored i.f. and r.f. transformers permit higher gain from a given number of tubes and circuits, yet occupy less space. Magnetic speakers have been further flattened physically so that they can be installed in shallower carrying cases. And where increased power sensitivity and better tone is required new, permanent magnet dynamic speakers using ultra-efficient iron fields have possibilities.

For years there has been a sizeable summer market for true portables, but set makers, handicapped by lack of suitable batteries, tubes and parts and in-



Photo courtesy Ansley

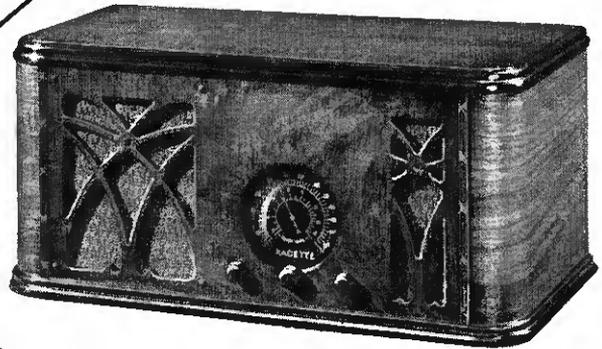
tent upon corralling the larger all-electric market, neglected to produce suitable merchandise. As a result the public, except for the hardshell who knew what he wanted and wouldn't give up, forgot about portables.

Now set makers are going after this plus-business and, with the help of the distributor and dealer, will get it. The market is there but it'll need prodding. Tell every customer about . . .

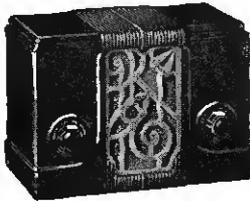
Practical Portables.

**New batteries, tubes and parts make summer sets easy to carry, economical to operate**

New!  
KADETTE  
Battery  
Radio

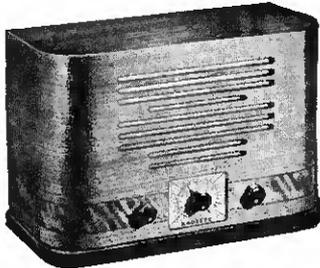


for **FARMS . . COTTAGES . . CAMPS**  
AND ALL UNWIRED LOCATIONS



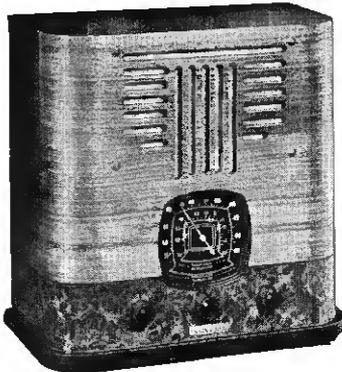
**KADETTE JEWEL**—The original and most beautiful AC-DC compact in the world. Encased in scratch-proof bakelite with exquisite grille settings representing precious stones. A wide selection of colors. Size: Only  $5\frac{1}{4} \times 7\frac{1}{4} \times 3\frac{3}{4}$ ". Weight:  $3\frac{3}{4}$  pounds.

- Model 41—Walnut Bakelite . \$13.50
- Model 43—Deluxe Ivory Plaskon . . . . . 16.50
- Model 44—Deluxe Red Plaskon 16.50
- Model 47—Deluxe Black Pearl 16.50
- Model 48—Deluxe Marble . . 16.50



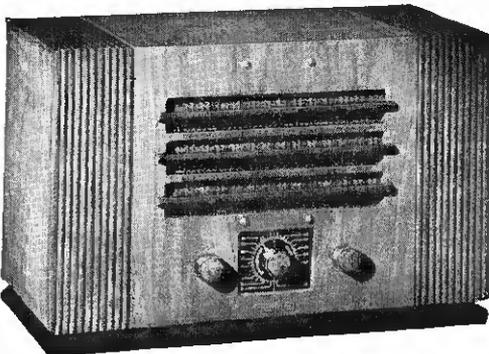
**KADETTE SIXTY-SIX**—Powerful Six Tube AC-DC Superheterodyne tunes all police calls, amateur, airplane and standard broadcast bands. Beautiful moderne design cabinet of American walnut with oriental walnut inlay. Polished black ebony finish base. Sharply selective, amazing performance, natural full tone. Size  $13\frac{3}{8}$ " wide, 9" high and 6" deep. Weight 8 pounds.

Complete with tubes \$19.95



**KADETTE "77"**—A new, powerful, seven-tube long and short wave superheterodyne. Two distinct tuning ranges, 560 to 1500 kilocycles and 5.5 to 15.5 megacycles covering complete standard broadcast, foreign and domestic short wave. Extra-large airplane dial, with vernier drive, convex crystal enclosed. Powerful, electro-dynamic speaker. Sharply selective, with full, rich, thrilling tone. Beautiful modern cabinet, sliced American walnut; genuine burl walnut inlay. Knobs and base black ebony finish. Size  $12\frac{1}{2}$ " high,  $11\frac{3}{4}$ " wide,  $6\frac{1}{4}$ " deep.

Weight, 10 pounds. Complete with tubes, \$26.95.



**KADETTE BATTERY RADIO MODEL 400 COMPLETELY PORTABLE**—Standard broadcast and short wave. Revolutionary new Perm-O-Flux permanent dynamic speaker. Amazing lifelike tones, excellent selectivity. Three ordinary ignition dry cells and three portable "B" batteries, self-contained. Approximately 300 hours service from 3 dry cells. Modern cabinet of American walnut. Size 16" wide, 7" deep,  $10\frac{3}{4}$ " high. Aerial and ground attached, completely portable, wt. 25 pounds. With Batteries and Tubes, \$29.95.

**C**OMPARABLE in sensitivity, volume and tone to electrically operated sets of higher price and with a greater number of tubes.

Oversized  $6\frac{3}{4}$ " Perm-O-Flux permanent dynamic speaker eliminates battery drain, gives full-toned, thrilling and lifelike reception.

Superheterodyne, two-bands—Standard Broadcast, 550 to 1600 kilocycles (180-555 meters) and American-Foreign Short Wave—18 to 55 meters. Exceptionally large airplane dial protected by unbreakable convex crystal. Vernier drive tuning with no backlash. Full automatic volume control.

Genuine American walnut cabinet with beautiful butt walnut front panel. Has gracefully rounded corners, exquisitely designed, laydown style. Size 24" wide, 11" high and  $11\frac{3}{4}$ " deep.

Ample room provided in cabinet for 3 heavy duty "B" batteries and one 2-volt "A" battery of which several types are available. Exceptionally low battery drain provides many months of service.

**KADETTE Battery Radio Model 500** represents the finest value in ANY Battery Radio. Complete with tubes, less batteries.....

**\$32<sup>50</sup>**



STEP WITH  
**KADETTE**

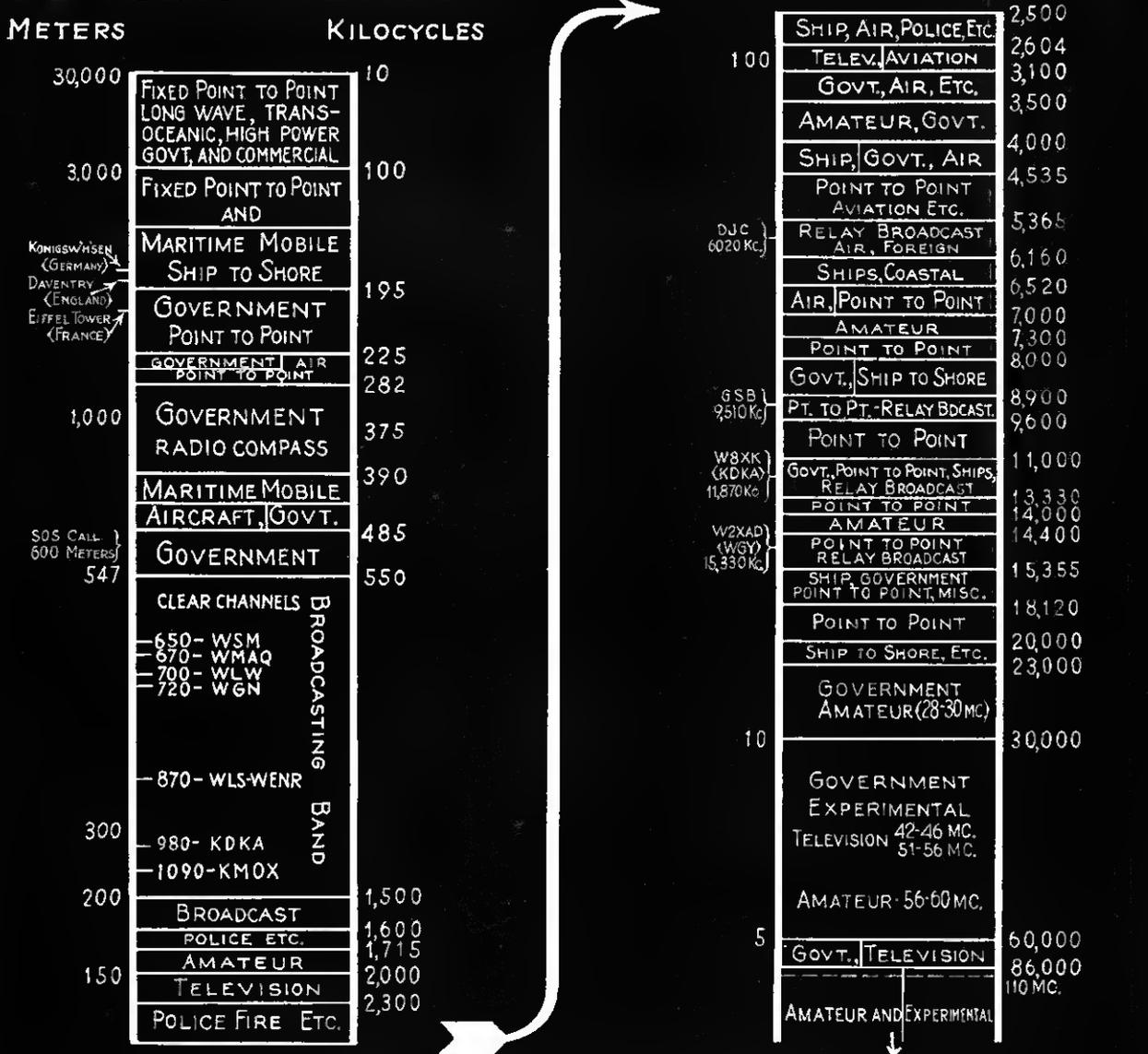
With **KADETTE** you'll always be a step ahead of your competitors because Kadette gives you the new things first. Examine the modern Kadette line—compare with what you are now selling—then step into the profit parade with Kadette.

**INTERNATIONAL RADIO CORPORATION**

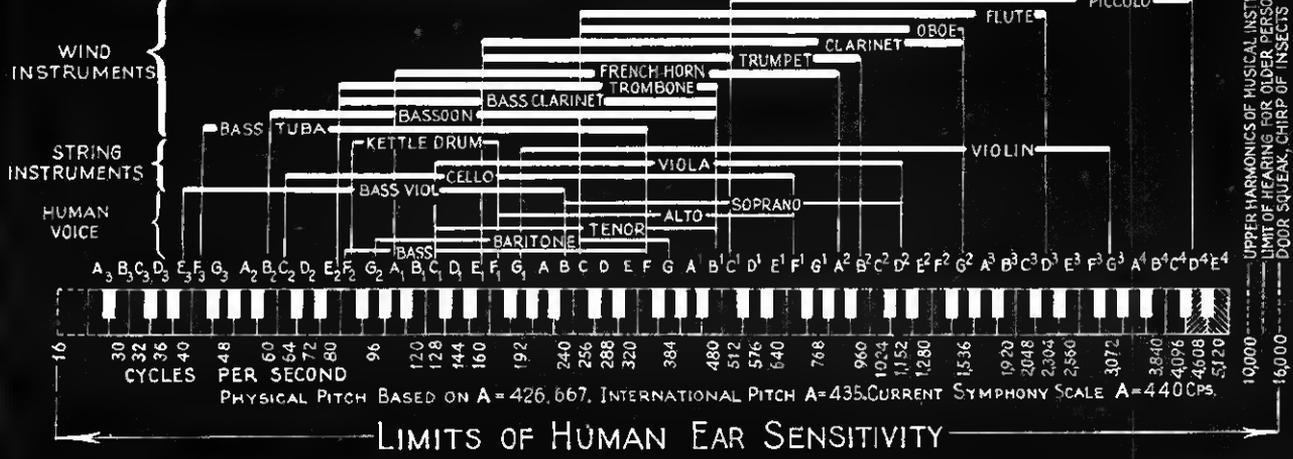
506 Fourth St. ANN ARBOR, MICH.

# WHAT WE HEAR AND WHERE

## THE RADIO SPECTRUM



## THE AUDIBLE SPECTRUM



FAIRBANKS-MORSE PRESENTS

# TURRET SHIELDED

## RADIO !

Plus

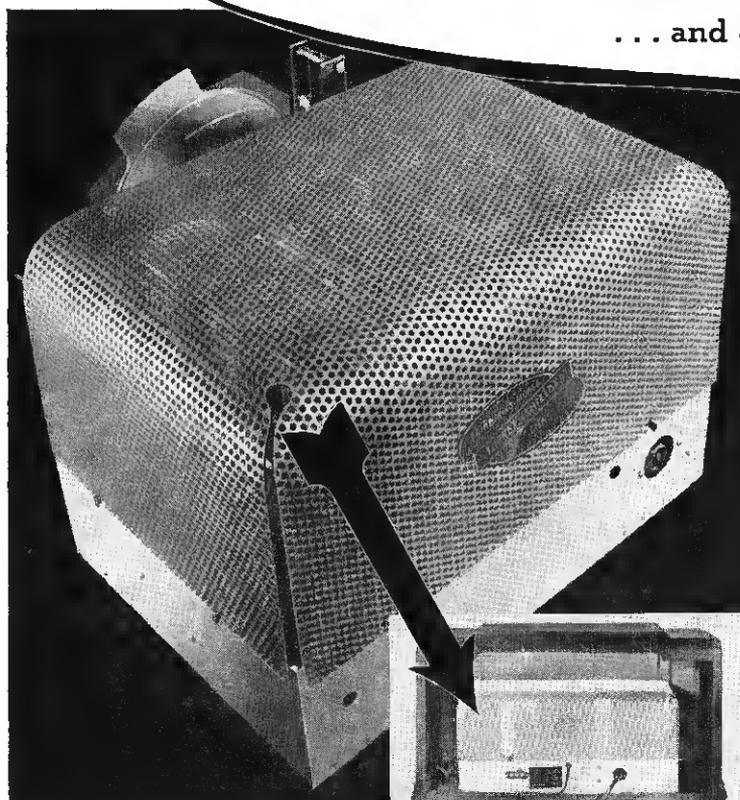
NEW • TONE PROJECTOR • • •

NEW • VOICE CONTROL • • •

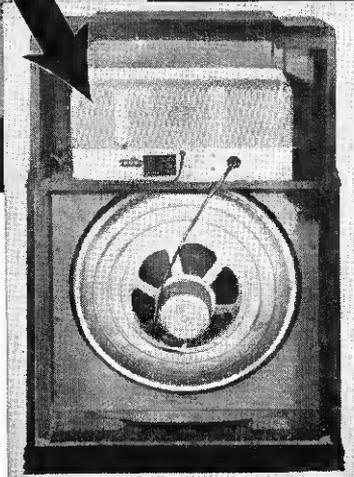
NEW • SEMAPHORE DIAL • • •

NEW • BALANCED PERSPECTIVE CABINETS

... and 37 other salable features!



**QUIET!** Here is shielding that really shields the entire chassis top, bottom, and all four sides. Turret shield (an exclusive feature) easily and quickly removable for replacing tubes. And does it make a difference in blocking out interference! Just listen! Literally a "turret"! Keeps out prying fingers, gives appearance to the chassis.



Rear View

Features *sell* radio receivers. Engineering features that achieve better reception. Convenience features that make station-finding easier. Beauty features that stand out from the rank and file. Features that the floor salesman can point to. Features that the public can see and understand.

Look at all of the new radio receivers for 1936-37. Listen to all of them. Then see and hear the new Fairbanks-Morse line. Just put them on the scales of your own judgment. You know *performance* when you hear it. You know *salability* when you see it. And you see it *all* in the new F-M line. Fairbanks, Morse & Co., Home Appliance Div., 2060 Northwestern Ave., Indianapolis, Indiana. Other Fairbanks-Morse Products: Conservador Refrigerators, Washing Machines, Ironers, Automatic Coal Burners.

# FAIRBANKS-MORSE



## RADIOS

# NEWS

PEOPLE • PRODUCTS • PLANS



Douglas Dairy Company donated a Zenith to St. Casimir's School, Chicago—and here's how the kids showed their appreciation

## BULK OF NEXT YEAR'S SETS ALREADY ANNOUNCED

Industry Off to Auspicious Start with Innovative Features Galore—Season Begins NOW, All Agree

NEW YORK—At last the Radio Industry is in tune with the times! Maybe it was last season's amazing jump-up in sales volume. Perhaps we remembered what the 1928 elections did to radio stocks. Or maybe it was just a case of getting hit on the head with a sledge hammer. Whatever the cause, the fact is that as we go to press, practically every one of the nationally known set purveyors has introduced its bona fide 1937 receivers to a palpitating trade and is at the plate ready for the first pitch.

And that's not all! If a floor clerk or an outside salesman can't book business this year it won't be because he hasn't something new, something infinitely better in the way of radio merchandise to sell than he ever had before. Boy, these new lines are hot! They fairly sizzle with "reason why" talking points.

So let the record-breaking jobber turnouts, the solemn speeches, the banqueting—yes, even the girl show entertainments, be forgotten. Mr. and Mrs. Smythe won't give a nickel for a Zeppelin full of convention atmosphere. But what Mrs. S. will tell her hubby to

buy will be these new standards of radio performance and cabinet appearance.

### Acoustics and Dialing

In our opinion, they've done most with acoustics and dialing this year. Both words cover a lot of ground.

Take tone control. One outfit takes it and pipes the desirable back-waves—mostly the low notes—down through the bottom of the cabinet (the speaker compartment is completely enclosed). When these waves meet those generated by the front of the cone both are in perfect resonance. Another company (see New Products Section) tackles this same problem of interfering back-waves and cabinet reverberations with an adjustable speaker covering—looks like an old-fashioned bee hive. This rigging permits the user to tailor-fit his set to the size and acoustical properties of the room.

And all the other manufacturers have their own pet acoustical gadgets—all making for perfect tonal reproduction and every one of which will *sell sets to those who already own a good radio.*

In the matter of dials and tuning the

story's short—and sweet. Dials average bigger and certainly they're easier to solve. Short wave bands are spread out, plainly marked, spot-lighted or otherwise identified. A high class moron should get China without any trouble with this season's sets.

Then there's automatic expression-tors, station finder-on-the-nose, split second re-locaters, privacy plug-ins, "Mystic Hands," "Magic" eye, ear, nose and throat specialties, ultra high wave bands (up to 70,000 kc.), spinner tuners, new knob locations, magnetic tuning, "Focused Tone," "Teledial Tuning" and other conveniences just as meritorious as these . . . dozens of them.

"Why, dammit men," quoting one spellbinder, "the broadcasters are crashing through with the hottest series of ear-gluing programs in years; the new sets are ready—and right!—and the public is going to buy. If your men who will sell this new merchandise will just memorize its features the business is in the bag."



ROSS D. SIRAGUSA—Power behind Continental's present drive for increased business

### Siragusa Springs "Tilt Tuning"

CHICAGO—Since September Ross Siragusa, interviewed last month at his offices in the Continental Radio & Television plant, has been working to produce a dial retaining all the sales and operating advantages of the popular airplane type and at the same time permit the user to tune in without "getting down on his haunches." The result is "tilt tuning" (see description of Model AM6 in the New Products section).

Continental's set sales for 1936 will probably top 225,000 units, about 80,000 of these being battery models.

## NINE DISTRIBUTOR CONVENTIONS HELD DURING LAST 40 DAYS

### Dealer Meetings Now On— Sales Outlook Most Promising

THE FOLLOWING summaries of the manufacturer-distributor conventions held this month and last cannot adequately reflect the new policy of preparedness on the part of the set makers or the genuine enthusiasm, from case-hardened jobbers, that greeted the release of one hot piece of news after another.

At every conclave the story was the same: record outpourings of seasoned wholesalers; models head and shoulders above those of prior years; Al promotional policies—and 1937 merchandise ready for delivery.

Here's the boil-down:

### CROSLY

CINCINNATI, May 8—Crosley distributors viewed for the first time the revolutionary Phantom Conductor (auto expressionator) in the studios of WLW. This tube-controlled device restores volume and expression ranges of music heretofore lost in the monitoring processes. Also were loud in their praise of the new automatic bass compensator and automatic tuner.

Powel Crosley, Jr., presented the line, ably seconded by Lewis Crosley, general manager, Neil Bauer, J. P. Rogers, Glenn Corbett, advertising manager, and Thomas W. Berger. The latter is the new general sales manager.

While devoted primarily to the 1937

radio models, other Crosley products, such as Shelvador refrigerators, Savamaid washers and ironers, Koldrink bottle coolers and the Coolrest bed cooler, were given the once over.

Forecasts of the biggest year in radio were substantiated by reports of Crosley distributors from all parts of the United States.

E. H. Rogers, president, Consolidated Automotive Equipment Co., Jacksonville, and C. A. Pound, president, Baird Hardware Co., Gainesville, Fla., reported that business conditions in Florida the best in years.

V. H. Maurer, president, Maurer-Gruessel Co., Milwaukee, reported its sales of refrigerators are running about 20 per cent ahead of those of a year ago, with the outlook for radio the best they have ever seen.

In his address to the distributors, Mr. Crosley said that the company is set for the biggest radio production schedule in its history to take care of the unprecedented demand that has already begun for radios and will become intensified as the presidential campaign progresses. He stated that production on new models has already reached 2,000 sets in one day.

### ZENITH

CHICAGO, May 15 — With 30,000 new models already off its production lines and in its warehouses or on their way to jobbers' storerooms, the Zenith Radio Corp., closed its most successful



Paul M. Bryant went with the Zenith Radio Corp. last month as assistant to president Eugene F. McDonald, Jr. Since 1925 Mr. Bryant—marketing counselor—has been a vice-president in a number of well known advertising agencies

distributors' convention here today. President Eugene McDonald, Jr., stated that his firm would show the greatest net earnings in its history as of the close of the fiscal year, April 30—"and no inventory here or in the field of last year's receivers."

The jobbers, meeting in the Eighth Street Theater, heard a sales program sparkling with aggressiveness. Result—every jobber placed orders in excess of originally contemplated quotas. Zenith's remarkable gains last year in battery operated sets, as well as in town and city areas, was the reason.

Eugene Tracey, v.p. in charge of sales, then took the ball and carried it down the field with the company's slogan "Triple-the-business."

Zenith isn't afraid to do things differently. Its dials are larger than ever with the control knobs in each corner of the "Squared circle." Also its cabinets (some models) represented a wide departure from the conventional.

Paul Bryant, newly appointed assistant to Mr. McDonald, was given a big hand following his initial talk on field conditions. This survey of dealer methods and requirements was not a desk job. Mr. Bryant went out and personally called on the trade—from Boston to San Francisco.

Other recent additions to the Zenith outfit are Edgar Hermann, advertising manager, and J. H. Rasmussen, assistant sales manager. Both did a fine job, scoring two more touchdowns for Zenith.

### PHILCO

CONVENTION CRUISE, May 15—Announced aboard the *Monarch of Bermuda* at the first business session of distributors was a new tuning method by means of which the pressing of a lever brings in the desired station right on the

### Hamburg's Men Win RCA Sales Caster Contest



Here they are—the champs in RCA's Sales Caster Contest. Splitting a pot totaling over \$5,000, Hamburg Brothers doughty crew, who said it with orders, are now enjoying the fruits of their victory. In spite of fire and flood, they bested such tough competition as Chicago, Detroit, Newark, Boston, New York and Philadelphia.

Among those present: Bill Rapport—288 per cent over quota; Bill Combs—worked the Ohio valley in a boat; Walter Stern—used same system in Johnstown and Altoona; Earl Victorson—tops for battery sets in West Virginia; Dick Arthur—Allegheny County; Ben Marcus, Bill Ritchie and Bill Hoover—all with thin territory in northern Pennsylvania

# TWO PROFITS

and a

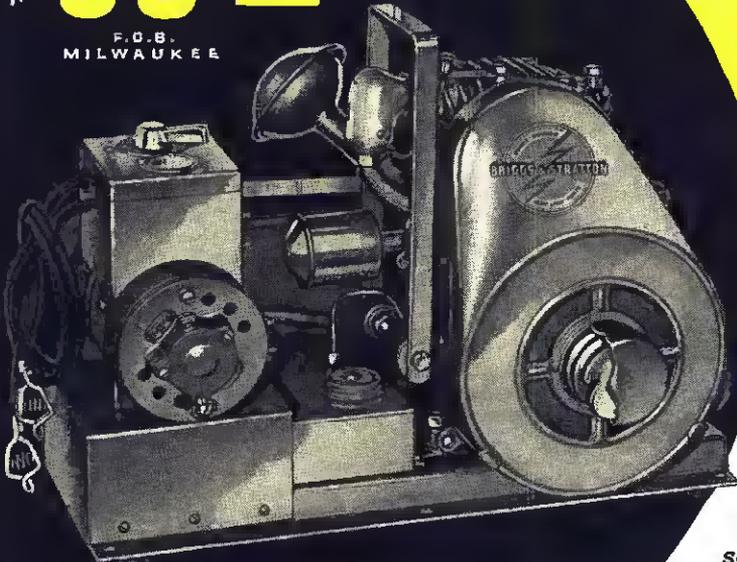
*Bigger Market*

with a

## BRIGGS & STRATTON POWER-CHARGER

LIST PRICE  
**\$ 59 50**

F.O.B.  
MILWAUKEE



### POWER-CHARGER

6 VOLT, 220 WATT

Built by the  
**BRIGGS & STRATTON CORP.**  
Milwaukee, Wis., U. S. A.

POWERED BY THE FAMOUS



OVER 500,000 IN USE

#### STANDARD EQUIPMENT

Electric Starting—Multiple control switch—cut-out—ammeter—battery leads—voltage regulator terminals—ignition shielding—motor power take-off and starter pulley—air cleaner—muffler—stop button—choke knob—emergency starter rope—carrying handle—tools and complete instructions.

**GASOLINE MOTOR**—Standard Briggs & Stratton Motor, 4-cycle, single cylinder, air-cooled—over 500,000 in use. Trouble free. Economical to operate.

**MULTIPLE CONTROL SWITCH**—4 settings—Start, Neutral, Low, High—“Low” delivers trickle charge for final charging stage, which conserves Battery life.

**VOLTAGE REGULATOR TERMINALS**—Provide for easy installation of automatic voltage regulator. Available at small extra cost.

**GENERATOR**—Special high efficiency unit—200 watts—ample overload capacity. Armature full ball bearing—fan cooled. Operates as starting motor through series winding.

**SAFE AND FOOL-PROOF**—All moving parts and wiring fully enclosed.

**BUILT-IN MAGNETO**—Located in motor flywheel. Motor can be started and run without battery.

**IGNITION SHIELDING**—Power-Charger operates without radio interference.

**POWER TAKE-OFF and EMERGENCY STARTING PULLEY**—Provides direct power to operate small equipment.

Write, or mail the coupon for full information on the new field Briggs & Stratton Power-Charger opens up for you.

**BRIGGS & STRATTON CORP., Milwaukee, Wisconsin**

# BRIGGS & STRATTON



Power-Charger is serviced by the nation-wide Briggs & Stratton Authorized Service Distributors operating under factory supervision.

Briggs & Stratton Corp., Milwaukee, Wisconsin  
Send complete information at once on the 6-volt, 200 Watt Power-Charger.

Name of Radio handled.....  
Dealer..... Distributor.....  
Firm.....  
Street Address.....  
City..... State.....  
Signed..... RT-1

nose. In his opening address, president Skinner also stressed Philco's interest in better foreign reception. To this end his concern will include one of its new shortwave aerials with every set.

Approximately 900 Philco representatives journeyed to Havana, combining a liberal dose of business with a like amount of pleasure.

"Philco's tube policy will remain substantially the same as last year," stated vice president Sayre Ramsdell. "In this year's line eleven of our 35 models have metal tube equivalents in the glass envelope type."

Laurence E. Gubb and Tom Kennally carried the burden of the second day's proceedings.

### RCA VICTOR

CHICAGO, May 14—Over 500 jobbers and their key salesmen convened at the Edgewater Beach Hotel, heard president Cunningham review past groundwork accounting for RCA's early announcement of its new and superior radios this year. Heard also his solemn promise that "this is the last time I will refer to the past; from now on we think of the future only. We're on our way."

Every feature was beautifully staged and as this company had four major groups in its receiver line not to mention generator plants, sound amplification equipment, phonograph records, tubes, testing equipment and parts this was quite a chore. Special scenery and star performers kept the distributors on the edge of their chairs throughout the two-day session.

C. T. McKelvey presented the special features and most of the models. Tom Joyce did a swell job on the advertising plans, promotional literature and other dealer help material.

This year's plans call for aggression in the de luxe field, the sale of better table models and pushing auto-radios and battery sets.

Judson Sayre, assistant to the president, functioned as chairman and registered many telling points.

Of special interest was the introduction of an extensive line of radio phonographs and the declaration that the record and player business is showing great progress and that this revival of interest will be taken full advantage of. The extent to which this company is going to push records was indicated by the announcement of a house-to-house canvass plan on this item.

It was also announced that the RCA Mfg. Co. has contracted with the Globe-Union Battery Co., Milwaukee, Wis., to make available the latter's splendid line of storage batteries to the radio trade and also with Briggs & Stratton Corp., same city, makers of gasoline powered generators. Walter Stellner will be in charge of sales promotion of battery sets.

E. N. Deacon, sales manager, Radio-tron Division, and D. J. Finn covered tubes, testing equipment and parts sales.

Two new comers to this organization are B. R. Peacock, who will head up auto-radio sales, and E. S. Germain, who will promote records.



National Products Distributing Co. has just signed with General Household to job Grunow products in the Georgia market. President E. M. Sturham obliges with a picture snapped in the outskirts of Atlanta

### GRUNOW

CHICAGO, June 4—Over 300 distributors met in the Blackstone Hotel here today to hear Wm. C. Grunow, president, and other officials of General Household Utilities Company outline sales and advertising plans for the 1937 line of Grunow radios. The expectations that this outfit would introduce several revolutionary improvements on its new models were fully realized.

An outstanding development was "Teledial" tuning, a device to dial 15 stations perfectly in less than 15 seconds, also an entirely different type of cabinet design which, it is claimed, will totally eliminate tone distortion due to cabinet resonance.

Thirty-six models make up the new line, six being for farm use. Consoles will be stressed, two-thirds of the total sets shown being in this category.

Discussing sales plans, H. J. Shartle,

general sales manager, disclosed that the company would market a complete line of auto radios under the Grunow name. Prior to this date it had manufactured under another brand name, for a prominent car maker. The new auto sets, Shartle said, will bring in distant stations without fading or interference.

Advertising plans, as outlined by Tod Reed, call for increased space in newspapers, rotogravure and national magazines. Outdoor posting and some radio spot broadcasting is also being scheduled. It was estimated that approximately \$250,000 will be spent to reach consumers this fall.

### GENERAL ELECTRIC

BRIDGEPORT, CONN., June 4—GE's emphasis on its determination to adhere rigidly to its announced schedule of list prices and other stabilization and dealer protection policies shared honors with the innovational tuning features and design improvements incorporated in its new line of 24 receivers. Both high lights of its opening convention, for eastern jobbers, met with universal approbation. The line is competitively priced, "more dollar value per tube" being mathematically demonstrated on a large analysis chart.

Said chairman Ralph Cordiner: "We believe in the sale of radio only through franchised dealers. . . . That the minimum discount should be 40 per cent, to be increased on the higher priced models . . . note the very large speakers—and high wattage output."

Radio Sales Manager E. H. Vogel, after furnishing convincing proof that the General Electric Company had profited 100 per cent from its first year's experience "on its own" in radio—and now was ready with 3,000 trained factory workers, a seasoned, practical, sales organization and construc-

### Bruno-New York Signs \$1,000,000 Order

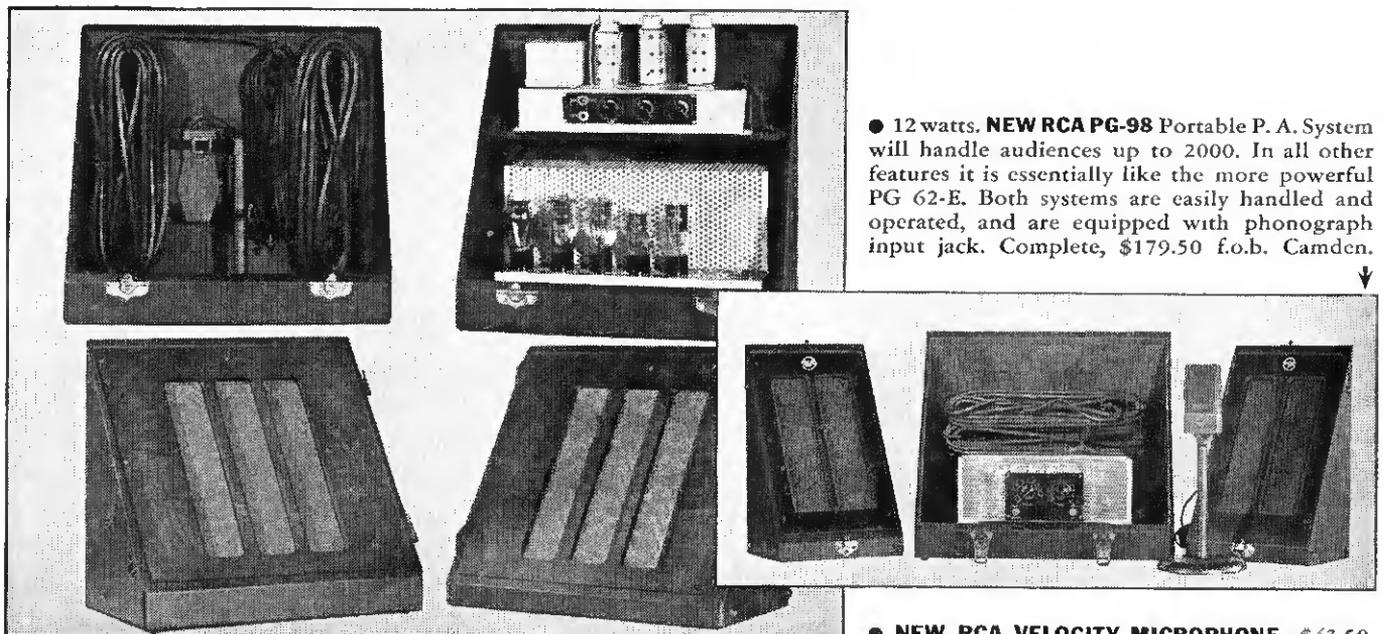


"Happy Days are Here Again." Witness Charles Sonfield, president Bruno-New York, saying it with his signature. This order calls for the immediate shipment of over a million dollars worth of RCA merchandise for this metropolitan market.

At the brave lad's left is Irving Samoff, v.p. and at his right, L. W. Teegarden, dist.mgr. Upper row, left to right: John Griffin, eastern manager, RCA; Jerome Harris, treas., Bruno-N.Y.; Judson Sayre, RCA sales executive and Bill Kelly, RCA New York sales representative

# FOR THE BIGGEST P.A. MARKET IN HISTORY... 2 NEW LOW-PRICED SYSTEMS BY RCA

When the conventions close, the political campaigns get under way in dead earnest. That opens the biggest market of all time for Public Address Systems. RCA now offers two new P. A. Systems, one 12 watts, one 20 watts, at remarkably low prices. Whether you sell these outright to local committees, halls, parks, etc., or handle them on a rental basis, they will make more money for you. Each system embodies the fruits of RCA's unequalled experience in sound pick-up, amplification, and reproduction. Each gives you a Velocity Microphone. GET AFTER P. A. BUSINESS NOW—THERE'S MONEY IN IT!



● 12 watts. **NEW RCA PG-98** Portable P. A. System will handle audiences up to 2000. In all other features it is essentially like the more powerful PG 62-E. Both systems are easily handled and operated, and are equipped with phonograph input jack. Complete, \$179.50 f.o.b. Camden.

▲ ● 20 watts. **NEW RCA PG 62-E** Portable Public Address Equipment includes 20-watt amplifier, the new RCA Velocity Microphone with adjustable banquet stand, and two special dynamic loudspeakers. Will take care of 3000 people indoors or outdoors. Operates entirely from 50 to 60 cycle AC, 115 volts. Packs away into two cases. Complete, \$299.50 f.o.b. Camden.

● **NEW RCA VELOCITY MICROPHONE.** \$43.50. An extremely high quality ribbon Velocity Microphone for P. A. Systems, at a reasonable price. Highfidelity. Write for information.



## SEE THIS PARTIAL LIST OF P. A. PROSPECTS

- |                 |                   |                    |                      |
|-----------------|-------------------|--------------------|----------------------|
| Amusement Parks | Civic Centers     | Fairs              | Railroad Stations    |
| Athletic Fields | Churches          | Gymnasiums         | Resorts              |
| Auction Rooms   | Clubs             | Hospitals          | Restaurants          |
| Auditoriums     | Colleges          | Hotels             | Schools              |
| Banquet Halls   | Conventions       | Industrial Plants  | Skating Rinks        |
| Cabarets        | Dance Halls       | Lecture Rooms      | Swimming Pools       |
| Carnivals       | Department Stores | Orchestras         | Vaudeville           |
| Caterers        | Exhibitions       | Political Meetings | Window Demonstrating |



# Public Address Systems

Commercial Sound Section • RCA MANUFACTURING CO., Inc. • Camden, New Jersey  
A Service of Radio Corporation of America

tive merchandising policies—then presented the new sets. "Focused Tone," with which is incorporated the new "Colorama" dial, automatic frequency control and a local station "personalizer" dial insert strip, constitute GE's 1937 bid for sales feature talking points.

Mr. Vogel's statement that, from now on, the metal tubes used in the GE receivers would bear the "GE" monogram and be so known, and be distributed only through GE jobbing outlets, got a big hand. J. W. McIver did a grand job putting over General Electric's impressive array of sales promotional material and advertising plans. Don't miss his hospital clinic big scene—with nurses in the modern manner—when GE's traveling convention party reaches your city. Two tours now are on the road and will cover the country.

## ARVIN

COLUMBUS, Indiana—"They've Got Rhythm!" With this modern phrase as its sales slogan, Noblitt-Sparks Industries, Inc. announced a line of 14 brand new radios, tailored for the 1937 market, here last month. Refreshingly styled in the modern manner, with rhythmic lines in nine different cabinets—yet possessing a family resemblance—Arvin offers sets from \$19.95 to \$150.

Here's another fast comer in the industry that has gone in for large, black, reverse-lighted dials; also precision tuning by means of the oscillograph ray tube. Likewise Arvin favors the octal based, "G" type tubes. Is the tail, in metal tube trends, going to wag the dog? Also stresses its true fidelity amplifier circuit.

Aggressive plans for jobber and dealer presentation build-ups and for promotional activities on a scale of national magnitude, will be reported in our next issue.

## Begy Joins GE



T. Phil Begy, associated with the radio industry since its inception, joins General Electric as district radio specialist for the Buffalo territory.

Begy was formerly sales manager for the Grunow factory branch at Buffalo.

## Down Went Coogan



Walter Coogan dons diving helmet to look for Sylvania tube prospects off San Juan. Host C. Ortiz has his fingers crossed

## FADA

NEW YORK—"Fada Forges Ahead," last year's slogan, originated by president J. M. Marks, finds its fruition this summer in a new line of radio receivers, "streamlined," housed in striking cabinets and meeting ready trade acceptance.

Sixteen years old in radio, Fada's jobbing organization has been strengthened and rounded out by the recent acquisition of Class A wholesalers in all key territories.

The new line will cover a price range of from \$19.99 to \$275. Notable will be table models in plastic housings, one of which measures 17 inches in length.

The Fada Radio & Electric Company has been forced to lease larger space at its present location in Long Island City. This move, together with a much larger personnel, will insure prompt deliveries of the new models.

## Grunow Allies With Trundle

CHICAGO—General Household Utilities Co., Chicago, manufacturer of the Grunow refrigerator and radio, has retained the Trundle Engineering Co., Cleveland, as management engineers in connection with the operation of its plants at Chicago and Marion, Ind. The Trundle staff will take

an active part in the production, budgeting, engineering and general operations of the company, according to George T. Trundle, Jr., president.

"With three highly up-to-date plants and widespread acceptance for its products over the past three years, the company is now making money," Mr. Trundle said. "Right now it is producing some 10,000 refrigerators a month."

## Electrolab Incorporated

BLOOMFIELD, N. J.—The recent formation of Electrolab, Inc., this city, brings another newcomer into the field of those companies making cathode ray oscillographs and associated equipment. This concern, headed by Howard F. Murphy, also will market an electronic switch and a.c.-d.c. amplifiers.

Edward Strack is the secretary-treasurer of this concern; William Y. Riedel, vice-president, and Louis Parker, chief engineer.

## Metal Tube Prices Reduced Approximately 30%

CAMDEN, N. J.—June 1 reductions of list prices on metal tubes make total drop, since July, 1935, original price scale, approximately 30 per cent. First lists ranged from \$1.50 to \$2.

## New Sales Head



Thomas W. Berger, formerly president of the Prima Mfg. Co., has been made general sales manager of the Crosley Radio Corporation. Has served as sales manager of the Vacuum Cleaner Co. and manager of the appliance div., Philadelphia Electric Company

## Atwater Kent Retiring From Radio Field

PHILADELPHIA—The Atwater Kent Manufacturing Company has decided "less actively to promote its radio line and has so informed its distributors," according to a news release under date of June 1 issued by its advertising agency, Batten, Barton, Durstine and Osborne. The dispatch states that it is believed that less than 100 employees will be affected by this decision at this time. This pioneer in radio also advises that it is not now in a position to announce any plans for manufacturing activities "in new lines."

Based on the actions of AK's distributors,

it is apparent that this terse statement has been interpreted by the trade as indicating the virtual withdrawal of Mr. Kent from radio manufacturing and merchandising.

A. Atwater Kent laid the foundation of his present large fortune in the early automobile days. With the coming of radio, Mr. Kent quickly won a dominant position in this new industry, being considered, for several years, the leader in aggressive sales promotional ideas and in the volume of business enjoyed. During the depression era, however, he adopted a more conservative course, culminating in his present announcement.

## EMERSON SHOWS NEW LINE AT CHICAGO

New York Unveiling, June 30

CHICAGO, June 15—To an audience of midwest and southern states jobbers and dealers far eclipsing in number and "coverage" any prior convention, the Emerson Radio and Phonograph Corporation unveiled its new line of 25 receivers here at the Hotel Stevens today. Charles Robbins, sales manager, presided, sharing honors with president Abrams in applause producing results, as each highlight was announced.

The new dial, "Gemloid," new in design and capabilities, came in for most praise. But Emerson's plans for national promotion—including the clever use of endorsements by Lowell Thomas and Fannie Brice—also registered markedly.

Eastern distributors and the trade generally will have a peek at these models—from \$14.95 to \$99.95 (compacts, table models and consoles)—at New York, June 30 to July 2.

### Sign Many New Jobbers

Among the jobbers represented at the Stevens were Columbus Ignition Co., Columbus, Ohio, and B. W. Smith, Inc., of Cleveland. Both have recently signed with Emerson. Another new distributor is E. J. Edmond Co., White Plains, N. Y. Edmond will have seven northeastern counties in New York state.

### GE-New York Presents Line at French Casino

NEW YORK, June 12—Amid the unique and colorful surroundings of the French Casino, Gotham's high spot entertainment palace, the New York Division of the General Electric Company presented G.E.'s new line here today. The meeting opened at 4 p.m. and the business sessions lasted until 10 o'clock. Then followed a supper and floor show as only the French Casino can

## EXPANSION

H. J. Casey, general manager of the Republic Radio Mfg. Corporation, RCA licensed manufacturers of radio tubes, announces the removal of Republic's factory and sales offices to newer and larger quarters at 255 Grant Ave., East Newark, N. J.

OAKLAND, CALIF.—"Our company has just branched out with a new jobbing branch in Sacramento," writes E. J. Watkins, Electric Supply Co.—Emerson and Arvin distributor. ES is Oakland's oldest wholesale house. Started in 1923.

CHICAGO—Faced with the necessity of providing greater production facilities, the Edwin I. Guthman Company, makers of r.f. and magnetic coils, moved May 25 to a new location at 400 South Peoria Street, this city. Guthman now has a total floor space of 25,000 square feet. Additional equipment and machinery is being installed.

CLEVELAND—The M and M Company, for many years located at 500 Prospect

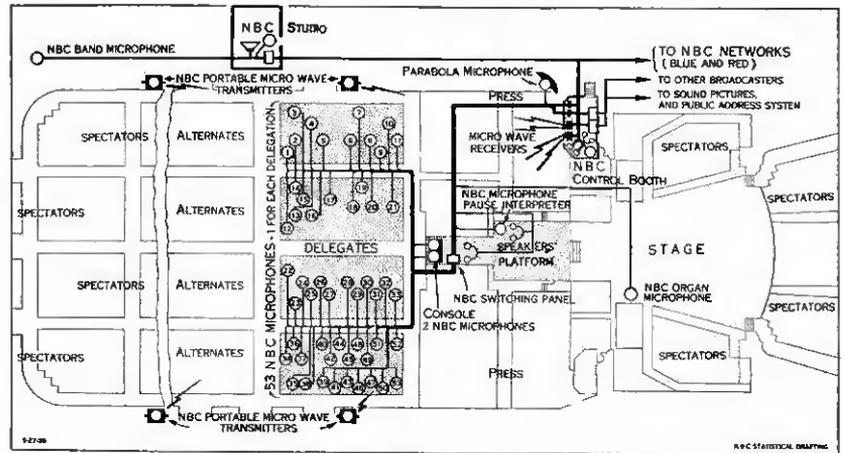
Avenue, will discontinue entirely its retail operations and June 15 will move to new and larger quarters at 5200 Prospect Avenue where it will engage exclusively in the wholesale distribution of electrical appliances.

PITTSBURGH—Despite fire, flood and building collapse (Hamburg Brothers please note) Anchor Lite Appliance Company, Crosley distributor, annexed 60 new dealers during this period of trial. Now are decorating, adding new offices, new store front, new employees—and new trucks.

CHICAGO—Roy W. Augustine, new sales manager of the Midwestern District of the Cinandagraph Corporation has his office at the Brokers Building, 160 East Illinois Street.

Mr. Augustine, veteran in the speaker business, will direct sales effort of the Magic Magnet speaker line in this territory.

## 75 NBC Mikes Cover Cleveland Convention



Here's how modern broadcasting is reporting the Republican convention at the Cleveland Auditorium. This tremendous investment and marshaling of engineering talent comes to the American listener gratis

dish up these entertaining specialties.

In charge was radio's master showman, "Winnie" May. This event was proclaimed the most successful (from all angles) radio affair ever staged in the annals of the industry. Ernest Vogel, radio sales manager, came from Bridgeport to assist in the presentation of the new line.

### Foreign Amateur Hours

The amateur program idea has penetrated to Latin-American countries, but so far it hasn't reached South Africa, according to RCA-Victor wholesalers from these countries who attended the RCA convention at Chicago. According to Juan Castro of Havana, Cuba, amateur programs are quite popular, together with Cuban comedy broadcasts. The Major Bowes type of entertainment hasn't hit South Africa as yet, however, says Arthur Mackay of Johannesburg.

## RADIO SPEAKERS, INC. ORGANIZED BY FORSTER

CHICAGO—Henry C. Forster, veteran radio manufacturer, has organized the firm of Radio Speakers, Inc. Headquarters will be at 1380 S. Michigan Blvd. Speaker shipments already are being made to a number of receiver manufacturers.

Prior to this activity, Mr. Forster, one of the oldest and best known men in the speaker game, was with Utah Radio Products Company.

## JOBBERS NEWS

NATIONAL PRODUCTS DISTRIBUTING Co., Atlanta, has been appointed distributor for Grunow refrigerators and radios in the Georgia territory.

PETER R. BILLETER and WILLIAM T. WHITE have been engaged to serve as special factory representatives for the Crosley Radio Corporation. They will devote their time to the development of sales of the Crosley Savamaid Electric Washer and Ironer lines.

Another newcomer is G. EARLE WALKER, formerly sales promotion manager for Prima Manufacturing Co. Walker has joined the sales promotion department of Crosley.

GENERAL HOUSEHOLD UTILITIES Co. announce the appointment of eleven new distributors for its radios and refrigerators.

These appointments include: Reichman-Crosby Co., Memphis; National Products Distributing Co., Atlanta; Commercial Refrigeration Co., Houston; R. H. Mehlman, Inc., Columbia, S. C.; Charron Radio Co., Worcester, Mass.; Findlater Hardware Co., San Angelo, Texas; Hastings Piano Co., Hastings, Neb.; Red Rooster Supply Co., Grand Island, Neb.; Virginia Battery & Tire Co., Petersburg, Va.; Warren Electric Co., Sioux City, and Wichita Distributing Co., Wichita Falls, Texas.

# TELEDIAL IS HERE!

(PATENT PENDING)

Distributors, Dealers, Call Grunow's  
**NEW TELEDIAL Hottest Radio**  
*Sensation in Years!*



FIRST IMPROVEMENT  
 IN YEARS CUSTOMERS  
 CAN LOOK AT AND  
 PLAY WITH!

HOW THAT "FINGER-  
 TOUCH" TUNING  
 WILL DEMONSTRATE!

These pictures were snapped at the convention where Grunow introduced TELEDIAL to its dealers and distributors. Many distributors asked us to double their June allotments when they saw this amazing advancement! You'll see why when you get the full TELEDIAL story. Write for it today.



GRUNOW ALWAYS  
 GIVES YOU BETTER  
 MERCHANDISE  
 THAT SELLS!

THAT AND THE  
 BIG ADS WILL  
 DOUBLE OUR  
 FLOOR TRAFFIC

TELEDIAL is here and automatic radio tuning, that brings in stations with a flick of a finger, is a reality! And with TELEDIAL come half a dozen features, in the new 1937 Grunow radios, second only to TELEDIAL itself in drama—sensation—selling value.

New "violin shape" cabinets that utterly ban cabinet resonance! The new Aladdin Color-Flash Dial, with clock-type tuning that gives twelve times more accuracy in tuning short-wave stations! New "Tone

tested" Resonator, with a new kind of utterly pure tone! Automatic Frequency Control that makes detuning impossible!

Features like these really demonstrate! We don't have to tell you how they will swell floor traffic and sales. Why not get the whole story. Write, and let us put you in touch with your nearest Grunow distributor today. Act at once.

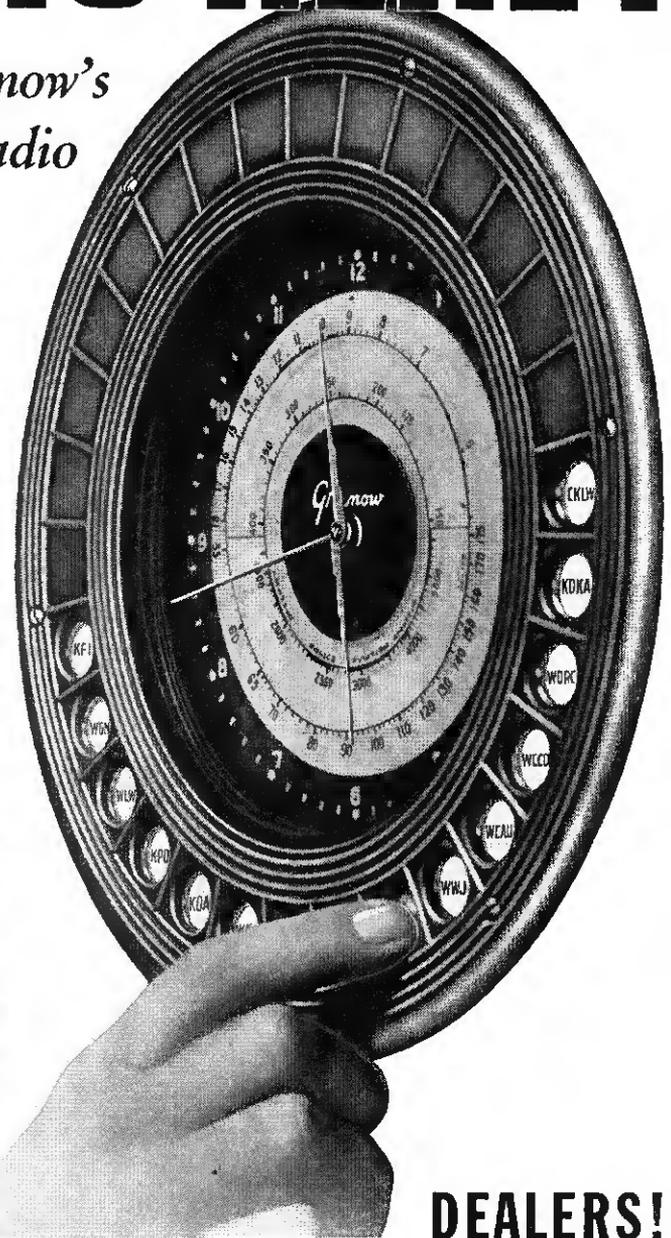
**GENERAL HOUSEHOLD UTILITIES CO.**  
 CHICAGO, ILLINOIS      MARION, INDIANA

Manufacturers of Grunow Super-Safe  
 Carrene Refrigerators • Grunow House-  
 hold Radios • Grunow Automobile Radios

**LIST PRICES**  
**\$19.95**

AND UP  
**F. O. B. FACTORY**

**Grunow**  
 All-Wave Radio for 1937



**DEALERS!**

**WRITE NOW! BE STOCKED  
 WHEN TELEDIAL ADS APPEAR!**

**USE THIS COUPON**

GENERAL HOUSEHOLD UTILITIES CO.  
 2642 North Pulaski Road, Chicago, Ill.

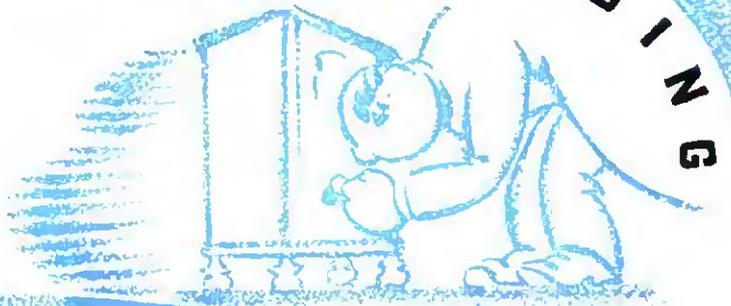
Send me the full facts about the new TELEDIAL today and put me in touch with the nearest Grunow distributor today.

Name.....

Address.....

Town..... State.....

NO MORE BACK BENDING  
TUNING



# TILT-TUNING



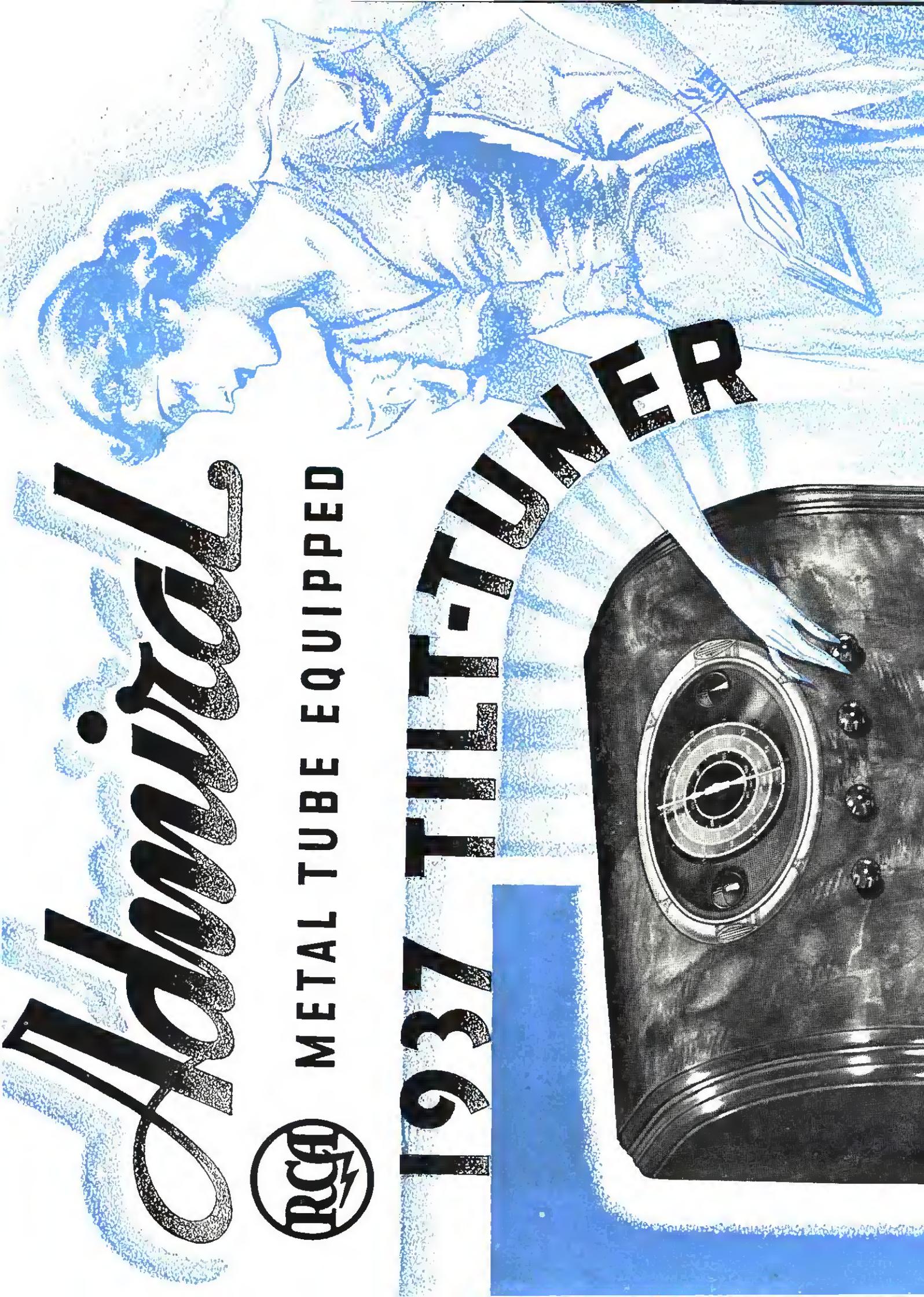
IS HERE!

# Admiral



METAL TUBE EQUIPPED

# 1937 TILT-TUNER



4 BANDS—17 TO 2000 METERS  
VISUAL WAVE BAND INDICATOR

VISUAL STATION INDICATOR  
"FINGER FLICK" TUNING CONTROL

11" OVAL DIAL—12" SPEAKER  
"MINUTE HAND" for "TELL-TIME" TUNING

5 TO 30 WATTS UNDISTORTED OUTPUT  
ABSOLUTE 2 MICROVOLT SENSITIVITY

THREE EXQUISITE WALNUT CABINETS  
8 Tube \$79.50 • 10 Tube \$99.50 • 17 Tube \$175.00



... AND A SCORE OR MORE IMPORTANT FEATURES

# BRING YOUR PROFIT SHIP HOME

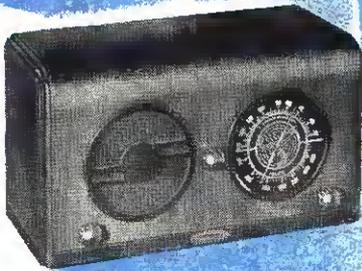
with this complete line of Admiral Radios—AC  
Battery—AC-DC—Auto—14 Models—5 to 17 Tubes  
16-2000 Meters—RCA Metal Tubes

A brilliant achievement in radio engineering genius and ultra-modern cabinet-designing—that's the Admiral line-up for 1936-7. Each model offers exceptional value in its respective price class . . . eye-appeal, selectivity, sensitivity and all-around performance unequalled anywhere . . . Headed by the sensational new "Tilt-Tuners" the Admiral line has sure-fire sales appeal . . . a complete line for home, farm and auto, priced from \$19.95 to \$175.00, that will sail your profit ship swiftly homeward.

a \$19.95 Leader that "TOPS" them all!



Model A126



Models B125 and B225

**Model B125 Admiral 5-Tube AC Radio**—Tunes the entire Broadcast, Police and 49 Meter Foreign Band. 5 1/2" Airplane dial with vernier tuning. Full 6" dynamic speaker. Automatic volume control. 15" x 8 3/4" x 6 1/2" beautiful rolled-top walnut cabinet. RCA Glass Tubes. List price \$19.95.

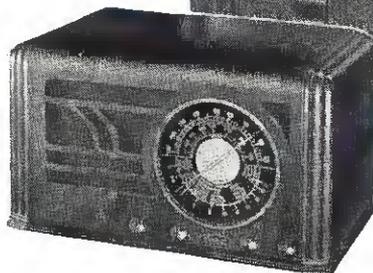
**Model B225 Admiral 6-Tube AC-DC Radio**—Same cabinet and chassis as Model B125. RCA Glass Tubes. List price \$27.50.

**Model A126 Admiral 5-Tube AC Radio**—3 full bands. 6 1/2" airplane dial with 15-1 velvet-smooth dial ratio. Variable tone control. Heavy duty 6 1/2" speaker at top. 3 gang condenser. Extremely sensitive and selective. Semi-upright cabinet 13 1/4" x 10 1/2" x 8". Metal Tubes. List price \$32.50.



Models AZ393 and AZ593 (Right)

Models Z344 and Z544



## Admiral TILT-TUNER



Models AM387, M587, AM688, and AM889

**Model AM387 Admiral 8 tube AC "Tilt-Tuner"**—4 Full Bands. See illustration and specifications preceding page. 8 RCA Metal Tubes. List price \$79.50.

**Model M587 Admiral 7 tube 6 volt "Tilt-Tuner"**—4 Full Bands. Similar to Model AM387. 8" permanent magnet dynamic speaker. Complete operation from 6 volt storage battery. 1.7 amps. drain. List price \$79.50.

**Model AM688 Admiral 10 tube AC "Tilt-Tuner"**—4 Full Bands. Same as Model AM387 plus many important features such as automatic tone control, push pull output, 10 watts undistorted power, etc. List price \$99.50.

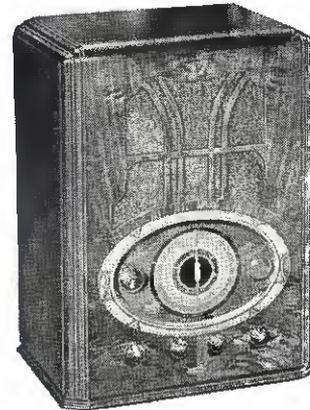
**Model AM889 Admiral 17 tube AC "Tilt-Tuner"**—4 Full Bands. Twin chassis, giant twin 12" speakers, automatic tone control, automatic bass compensation with 30 watts undistorted power, and a host of other important features. RCA Metal Tubes. List price \$175.00.

**Model Z344 Admiral 6 tube AC "Laydown"**—3 full bands. 6 1/4" airplane dial. 3 watts undistorted output. "Hi-gain" coils for better selectivity and sensitivity. 3 gang condenser. Plug-in type heavy duty dynamic speaker. Automatic volume control. List price \$39.95.

**Model AZ393 Admiral 6 tube AC Console**—Same chassis as Model Z344 except for 8" speaker. Full size 39 inch console. 6 RCA Metal Tubes. List price \$59.50.

**Model Z544 Admiral 6 tube 6 volt "Laydown"**—Permanent magnet type dynamic speaker. 6 1/4" airplane dial. Battery drain 1.4 amp. Push pull output. 3 full bands. List price \$49.50.

**Model AZ593 Admiral 6 tube 6 volt Console**—Same chassis as Model Z544. Full size 39 inch console. List price \$69.50.



**Model M351 Admiral 8 tube AC Table Model**—Chassis same as Model AM387 except for 8" speaker. List price \$59.50.

**Model M551 Admiral 7 tube 6 volt Table Model**—Chassis same as Model M587. List price \$59.50.

Models M351 and M551

Our new booklet gives detailed specifications covering all the new Admiral models. Send for your copy today. There is no obligation. Admiral is the biggest value in radio today . . . price for price will outperform any set on the market. Make your own comparison with any model! Best of all Admiral allows you your full profit. Don't delay—write or wire today!

Dealers! Jobbers!

# Distributors in the News



**NEW RCA JOBBER**—He's H. M. Bizzell, of Interstate Electric Company, Shreveport, La.



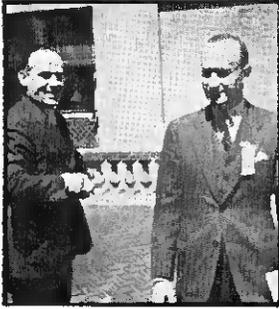
**ON GE CRUISE**—Max Kasover (Vim, N. Y.); Mrs. Benj. Ginsburg and Mr. and Mrs. Louis LeWinter. Lou runs 7 stores in Brooklyn



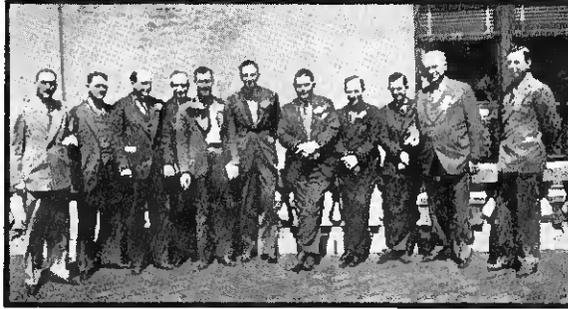
**GE CRUISE**—Art. Hirsch, dist. mgr. and (right) Ernest Vogel, Radio Sales Manager for the General Electric Company



**AT CHICAGO**—R. E. A. U. Cloud, owners of Cloud Bros., South Bend, of RCA's newer distributors



**EASTERN Radio Co.** top hats. Ralph Cron and Alan Steinert of Boston, Mass.



**HALES-MULLALY'S boys**, star salesmen all. They came clean from Oklahoma City to view the wonders of the Windy City and get the full RCA Victor picture



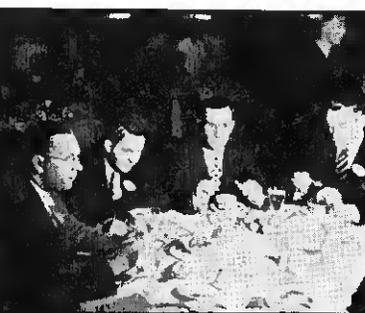
**LAWRENCE LUCKER** in the flesh. Minneapolis potentate sends his greetings to the trade



**LEO MEYBERG CO.** sent D. Redmond (center) and D. Diefenderfer to the shindig. Leo N. D. Stafford, RCA dist. m



**ZENITH ZIONISTS**—Stan. Glaser, L. S. STRAIN—GSM of Star Radio, Washington, D. C.; Dave Major Appliance Co., Goldman, T and M, Philadelphia, and Omaha, Neb., banks on Zenith, J. R. Brandenburg



**MILLER**, Zenith service; Percy Griffith and Leon Shriver, of Braid Elec., Nashville. Right, G. A. Neunstiell, Knoxville



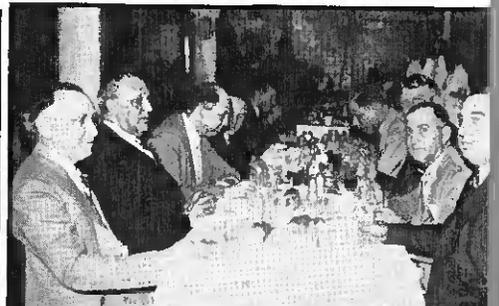
**GRUNOW'S** new sales manager, H. Shartle (right) greets Stuart Louché and Harry Doule, of Motor Parts Co. Philadelphia, as they register



**CROSLY CONFEREES**—R. C. Bohannan, Columbus, O.; Hollander and Findley, Stanley Sales, St. Louis and Bill Joy, DSM for Missouri and Neb.



**CROSLY TOPPERS**—Jack Rogers and Powel Crosley III, v.-p.'s; Tom Berger, new GSM and President Powel Crosley, Jr.



**TRENCHMEN**—Messrs. Brewer, Kiefer, Stewart, Indianapolis; Maurer, same co. Wheelless Gambill, Jr., Nashville; Hyma Reader, Houston and (right) Hugh Green

## First Fortnight's Sales, Toscanini Discs, \$25,000

**T**WO WEEKS after the national advance release of Victor's album set No. M308—Wagner music drama excerpts played by the New York Philharmonic-Symphony orchestra directed by Arturo Toscanini—this five-disc Masterpiece reached unprecedented sales heights in its field. Over 2,500 sets retailing at \$10, passed over dealers' counters to admirers of this great conductor.

Think of it! Twenty-five thousand dollars worth of phonograph records (of a single unit) sold by less than 100 dealers within a fortnight. The reasons are Toscanini's towering musicianship, also the timeliness of its release . . . only a few days after his departure for Europe and his permanent resignation as conductor of the greatest of symphony orchestras.

And the advertising campaign is just getting under way. Record reviews of the Toscanini discs will appear in newspapers and magazines for the next month. When more of the musically-minded public know of these superb recordings the sales figures quoted above will be tripled. Furthermore, dealers who will keep these Toscanini discs before the public will find them a continuous source of revenue for years to come. In a sense that all record dealers will understand, Toscanini is more than another Caruso. Additional new Toscanini records will be released in the future.

The excerpts from "Lohengrin" and "Götterdämmerung" and the complete "Siegfried Idyll," included in the set are favorites with the musical public and need no introduction from the dealer. The first Toscanini records made since 1929, they give his admirers who have heard him in person or by broadcast an artistic memento, the importance of which cannot be over-emphasized.

Lastly, superb Higher Fidelity recording preserves every nuance, every feature of the orchestra's magnificent tone, and the full surge of emotional intensity. Demonstrate Prelude to Act III of "Lohengrin." This record will help sell combinations. It isn't an overstatement to say that the Toscanini records are something to conjure with. Get behind this set—you've a small but perennially productive gold mine here.

### Grace Moore on Decca

Decca Records, Inc. announces a new Personality Series—records of popular vocal stars to list at 75c. and \$1 for the 10-inch and 12-inch sizes respectively. The first release, three discs by Grace Moore, a fine box office attraction right now in "The King Steps Out," includes four songs from this motion picture, music by Fritz Kreisler. You won't have much difficulty with this line. Just familiarize your customers with La Moore's singing of "What Shall Remain," "The End Begins," "Stars in My Eyes" and "Learn How to Lose." If the customer has seen the picture—the sale is easy. Grace Moore's soprano is adroitly accompanied by Josef Pasternack and Concert Orchestra (Decca Nos. 23000

### Arturo Toscanini



His first records since 1929 start sales stampede

and 23001). Also a 12-inch disc: "One Fine Day" from "Madame Butterfly" and "Love Me Forever" (Decca No. 29000). All potential best-sellers.

Don't overlook the "Swing Classic" series of Victor, featuring Benny Goodman, Tommy Dorsey, and others, and also the discs of Louis Armstrong, Frank Froeba, Duke Ellington, and others made by Decca, Brunswick and Columbia. Swing is still King.

### "Phonograph-Radio Player"

One large manufacturer of combination instruments means to popularize the record end of its line by reversing the former designation: "Radio-Phonograph Combination."

Also, for the first time in years, a phonograph of fine quality (but without radio) will be included in the line.

Note the trend to equip all radios with phonograph terminals in which to plug pick-up connections.

### Aerovox Wins Patent Decision

BROOKLYN, N. Y.—The suit brought by Aerovox Corp. against another large manufacturer of condensers, for infringement of two of the former's patents on electrolytic condensers, was decided in favor of Aerovox in a decision handed down May 14, by Judge Marcus Campbell of the Federal Court for the Eastern District of New York. The decision favored the plaintiff on all claims involved and an injunction and accounting was ordered.

### DuMont Enters Service Field

UPPER MONTCLAIR, N. J.—Harry C. Holmes, director of sales for Allen B. DuMont Laboratories, Inc., states that his company is now producing a line of cathode ray tubes and cathode ray oscillographs and associated equipment for

the radio service field. To further this new policy duMont has appointed the following representatives: James J. Backer Co., Seattle, Wash.; George K. Brown, San Francisco; Walter V. Gearhart Co., Atlanta, Ga.; H. C. Gawler, New York City; J. T. Hill, Los Angeles, Calif.; A. C. Leonard, Minneapolis; Morrissey-Kantenberger, Dallas, Texas; H. D. Segar, Syracuse, N. Y., and Morris F. Taylor, of Silver Springs, Md.

### Weston Lowers Prices

NEWARK, N. J.—A move to bring precision test units within the "mass market" price range has been made by the Weston Electrical Instrument Corporation. Price reductions up to 25 per cent from previous levels on standard test equipment for home and shop servicing are made possible by the new policy without departure from established standards.

The new price policy will apply immediately on the all-wave test oscillator, the vacuum tube voltmeter and direct reading output and capacity meters.

### Briggs & Stratton Has 40 Branches

MILWAUKEE—To provide efficient service on Briggs & Stratton gas engine battery chargers there are 40 service stations in the principal cities of the United States. Each authorized service distributor carries a complete stock of Briggs & Stratton repair parts and is equipped with special factory service tools and factory-trained mechanics.

### George Cohen Heads Boston RWC

BOSTON—At a recent meeting of the Radio Wholesalers' Club, Boston, George Cohen, of Northeastern Radio, Inc., was elected president; Hollis Vaughan, of George H. Wahn Company, vice-president; Arthur C. Marquardt, of Hunt-Marquardt Company, Inc., treasurer, and Frank C. Gorman, secretary.

The entire membership of RWC supported the motion to conduct the 9th Annual Radio and Electrical Appliance Trade Show on June 24-25, at the Hotel Statler.

### Convenient

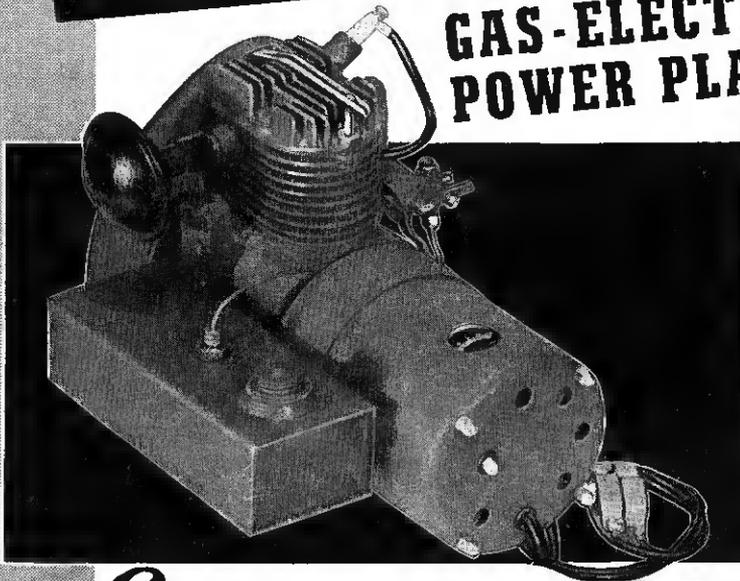


Designed for parts jobbers' salesmen, this portable display case should get the business

# ANNOUNCING

## 200 WATT 6 or 12 Volt

### GAS-ELECTRIC POWER PLANT



\$ **44.95**  
LIST

## THE PIONEER

# 'Cub'

POWERED by "SMOOTHFLO"  
**LAUSON ENGINE**

**FOR 45 YEARS, A LEADER IN  
THE QUALITY GAS ENGINE FIELD**

Portable, light weight Lauson "Smoothflo" gas engine—sturdily built—furnishes compact, reliable power for gas-electric plants, washers, water systems, power lawn mowers. This powerful 5/8 H.P. engine will operate 16 hours on one gallon of gasoline. Counter balanced crankshaft — air

cooled — runs on ball bearings — quality construction throughout!

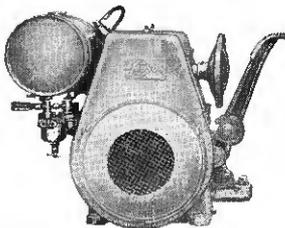
The LAUSON engine is the perfect light weight portable power plant! Wherever dependable, economical portable power is required—specify the LAUSON gas engine.

Here's a NEW way to BIG profits! Sell the lowest priced gas electric plant ever offered!

200 Watts 6 or 12 volts—the new PIONEER "Cub" is a REAL VALUE! And every farmer wants electricity on his farm! It will operate a lighting system—charge radio, auto and truck batteries. It will drive small machinery mechanically! The first practical LOW COST FARM LIGHT PLANT!

### OTHER PIONEER PRODUCTS

"Baby Jumbo" Gas-Electric Plants with magneto ignition: 6, 12 volts—150 watts D. C.; 6 volts—200 watts D. C.; 12, 32, 110 volts—250 watts D.C. "Blue Diamond": 300 watts 110 volts A.C. "Gold Crown": 32 volts 800 watts D.C.; 110 volts A.C. 600 watts 1000 or 1500 watts A.C. or D.C. Complete line of PIONEER Dynamotors, converters, and Gen-E-Motors.



### LAUSON ENGINES ARE IDEAL PRIME MOVERS

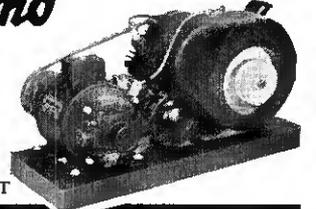
There's a myriad of uses for these unique Lauson Engines. They're made in a variety of sizes and types—an efficient design for every need! Air Cooled Models from 1/2 to 3 hp.; Radiator Cooled Models from 2 1/2 to 5 hp. (all vertical) and the horizontal types ranging from 1 1/2 to 18 hp. All of them are efficient and economical to operate and have a LOW FIRST COST! Write for full information TODAY! Send in the coupon NOW!

### 300 WATT 110 VOLT A.C. PIONEER 'Blue Diamond' Gas-Electric Plant

The Lowest Priced "City" light plant ever offered. Operates standard A.C. "City" appliances. Also has D.C. winding for charging 6 volt batteries. Amazing economy—rock bottom price—yet a big profit for dealers! Write for full information TODAY!

Cable Address: SIMONTRICE, New York

\$ **79.95**  
LIST



**THE LAUSON COMPANY**  
No. 6 Monroe St., New Holstein, Wis.

Send me complete information on the LAUSON Gas Engine Line.

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

**MAIL THIS  
COUPON  
TODAY**

**MAIL THIS  
COUPON  
TODAY**

**PIONEER GEN-E-MOTOR CORP.**  
464-G West Superior St., Chicago, Ill.

Rush full information on PIONEER "CUB" at once!

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



M. W. Kenney, Grunow director of engineering, explains a technical feature of the 1937 line. Jimmy Davin, sales promotion manager, does the Statue of Liberty act.

## PA Sales Growing

Sound equipment volume for schools is growing. Operators inform us that the sale of amplifiers for educational and industrial use may shortly equal volume in the entertainment field. It's cleaner and more profitable.

Not always is it necessary to play politics to sell a school communication system. Cash donations by graduating classes or money raised by the kids' own Thespian efforts frequently is spent for sound equipment by the principal "going it on his own."

## Carduner Joins Meissner

MT. CARMEL, ILL.—William Carduner, formerly sales manager for Federated Purchasers, Inc., and more recently production manager for United Catalog Publishers, has joined the Meissner Manufacturing Company, of Mt. Carmel, Illinois, as sales manager, jobbing division, according to G. V. Rockey, vice-president.

Mr. Carduner, who has been in the radio business since its inception and is thoroughly familiar with the jobbing trade and its problems, plans to push a complete coil line through trade channels this fall.

## Radioland at Cleveland

Visitors at Great Lakes Exposition in Cleveland this summer can see their favorite radio stars scintillate in Radioland, the biggest broadcasting studio in the world.

Except on those dates when it houses such national conventions as the American Legion, Public Auditorium's largest hall, seating 13,000 comfortably, will become a gigantic broadcasting studio throughout the 100 days of the Exposition which opens on Cleveland's lake front June 27.

The Crosley Radio Corp. will be among

those broadcasting from "Radioland's" stage.

As we write, the Republican Convention is in full swing—also at the Auditorium. This 100 microphone event just about clinches Cleveland's claim: "The World's Biggest Broadcasting Studio."

## AIR CONDITIONING

DETROIT—G. W. Mason, president of Kelvinator Corporation, in a recent statement to a utility group, stressed the fact that as a result of research and investigation it has been found entirely practical to provide air conditioning for moderate priced homes. He defined the "moderate priced" home as one that can be sold for less than \$6,000 the lot.

## Skipper Easman



Another nautical radio man. W. S. Easman, Newburgh, N. Y., pilots his own craft

## CONVENTIONEARING

The motor car radio season is being extended. Starts earlier and will hold up this year well into the winter months.

There is a \$6,000,000 market—at wholesale billing prices, in auto-radio this year.

"You've got to sell the customer on the radio set merits if you expect to get that sixth and seventh payment," McKelvey, RCA.

Much favorable comment was heard on the enlarged lines of battery sets.

"This year there will be three selling seasons before Christmas: June-August because of the political conventions, Louis-Schmeling fight, baseball games and bonus payments; September-October when the presidential campaigns and the baseball champions will be reported, and the November-December holiday business, football play offs and better reception," Joyce, RCA.

"The trend is to the horizontal types in table models," Vogel, G.E.

Met the Triplett, of Triplett, in Chicago last month and was temporarily bowled over by his youthful appearance . . . as he probably was by ours! While visiting with Walter Peck out at the Arvin plant we spotted chief engineer Booth and a young fella at a drafting board poring over a copy of *Radio Retailing*. Columbus is a heck of a place to make train connections and in the hustle and bustle we neglected to find out whether (a) Booth was looking for the masthead to see who the deuce we were (b) admiring our latest issue or (c) putting it on the pan.

Forgot our candid camera when calling on Billings, of Belmont, early last month and mentally gnawed our fingernails about it while chewing the rag over his glass-topped desk. Heard later that he is camera-shy anyway and always registers extreme annoyance in the presence of a lens. Our guardian angel continues to hover protectively.

While in Detroit recently we went through Detrola's plant with salesmanager Legg, saw a flock of small battery sets on their way to China. Said Legg: "We shipped 50 over there 6 months ago and it looks like re-orders are going to make that first shipment seem like small potatoes." President Ross was all steamed up about a new network dial that indicates what chains stations belong to at a glance, thinks he has something hot.

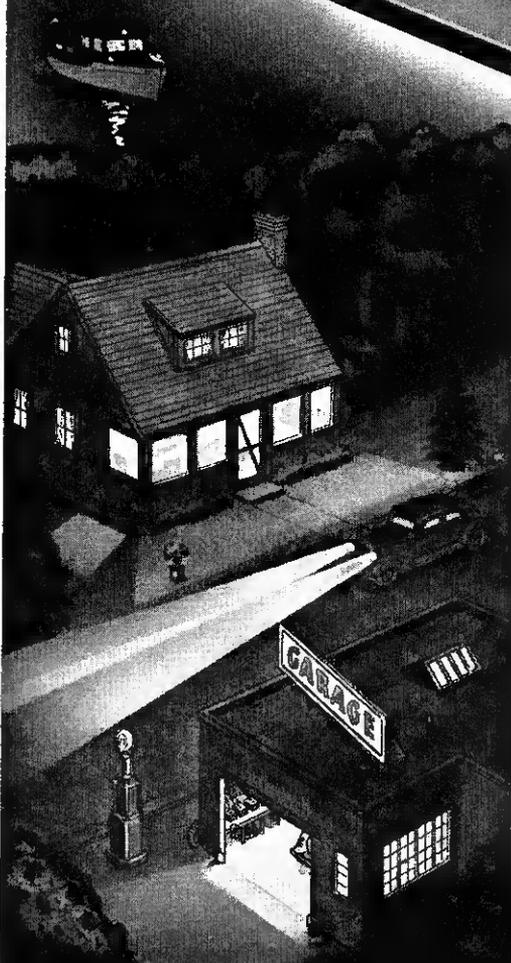
Didja ever wonder how much of a job it was for a concern like Mallory to compile data for one of those encyclopedic condenser or variable resistor guides? We have . . . until we stopped over at Indianapolis. The staff working on this job alone represents a real man-size office force.



**NEW!** *A Quick*  
**TURNOVER -**  
**GOOD PROFIT**  
**ITEM** *for the*  
**RURAL**  
**Radio Market!**

***Tiny Tim***

**BATTERY CHARGING**  
*and Portable*  
**LIGHTING POWER**  
**PLANT**



● Can you imagine a better sales opportunity than this super-engineered Tiny Tim portable power-plant offers you? Here's a dependable, compact power-plant that's equipped with a new type generator which has constant voltage over varying speeds, assuring protection to batteries at all times. This is an exclusive Tiny Tim feature. Plant weighs only 51 pounds. Can be easily carried with one hand. It's just the thing for charging auto and radio batteries —and for lighting farm home, barn or wayside garage. It will light 7 25-watt, 6-volt lamps, and when operating even under this load will continue to charge the battery. Will also run a washing machine. The Tiny Tim portable power-plant consists of a Continental quality-built gasoline engine driving a direct connected 6-volt generator with 200 watt output. Ideal for summer cottages, boats, camps, trailers. Your customers can buy this product with complete confidence. Retail selling price \$55.00. Write for discounts and information on dealer proposition.

***Continental Motors Corporation***

12801 East Jefferson Avenue

• DETROIT, MICHIGAN

## WAVE BAND BATTLE

### BREAKS JUNE 15

WASHINGTON—Broadcasting, with its allied services, and business generally is vitally concerned over the outcome of the Federal Communications Commission conference to open June 15.

The problem of future allocations has crystallized recently largely because of the advances made in the ultra high frequencies and the conference aims at finding some practical solution for it.

Among the conference objectives is the determination of methods for conserving enough of the ultra high spectrum to accommodate television, facsimile and other "apex" broadcasting.

Many engineers are advancing the theory that present services, such as transoceanic communication, aviation, police radio and even broadcasting itself might be better off if shifted to new wave bands. The conference will consider the possibilities in such shifts, realizing, of course, that any wholesale alterations would upset the industry completely and the radio listener as well. Major changes, therefore, are unlikely.

Future needs of broadcasting for space in the ultra high spectrum are contemplated in the plans outlined by James W. Baldwin, National Association of Broadcasters. Experimenters in television, facsimile and broadcasting are back of those plans, with their eyes fixed firmly on the higher reaches, between 30,000 and 110,000 kc, now given over to experimental work.

A real clash is likely to come between demands of the army, navy, aviation, and similar non-public services and general broadcasting. Already the non-public services are asking for virtually one-half of the available space bands in the higher spectrum.

## STATION NEWS

WNAC, Boston's oldest radio station, will supplant WEEL, NBC's present Red network affiliate in that city, as soon as current commitments are worked out, probably this fall.

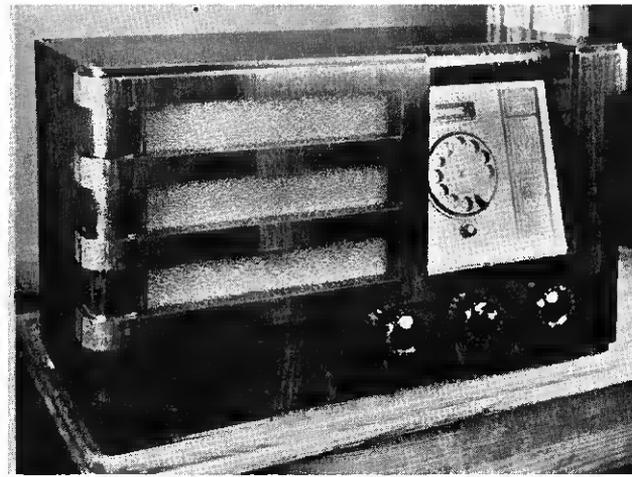
The Blue network of NBC has intensified its coverage in the New England area with the addition of WEAN, Providence, R. I., and WICC, Bridgeport-New Haven.

The two most important markets of the Pacific Coast soon will be served by new and better Columbia facilities.

In Los Angeles, 50,000-watt Station KNX replaces the 1,000-watt KHJ. Will operate on a nationally cleared-channel at 1,050 kc.

In San Francisco, 1,000-watt Station KSFO replaces KFRC of the same power. Station KSFO broadcasts on 560 kc., one of the most effective of the cleared regional channels.

Despite the fact that RCA-NBC is launching its experimental television broadcasts from the top of Empire State building in New York City on June 15, evidence seems to be accumulating that Hollywood will be the capital of visual radio as it is



### New German Radio Set

European stations are dialed a la American telephone system. The list of international stations is at the right of the dial. Shown at the Leipzig Fair.

### RMA at FCC Hearings

WASHINGTON, D. C.—The Radio Manufacturers Association, cooperating with the National Association of Broadcasters, ably reinforced the latter's presentation of the American broadcasters position with respect to reallocation of wave lengths. The hearings started here June 15. The respective allocation requirements for television, facsimile and other services were outlined to the Commission. Engineering data of a comprehensive nature was prepared by a committee headed by Dr. W. R. G. Baker. The R.M.A. special committee of executives was chaired by James M. Skinner, of Philadelphia.

### Olympic Games to Be Heard Here

Elaborate arrangements to bring the American radio audience a complete picture of the XI Olympic Games in Berlin, Germany, this summer, have been com-

pleted by the National Broadcasting Company.

Twenty-four broadcasts have been scheduled including 20 competitive events, official ceremonies, word pictures of the picturesque setting of the games, the Olympic Village which has been constructed to house the athletes, and the Torch Relay Run from Olympia, Greece, to Berlin, scheduled for July 21.

William Slater, famous sports announcer, will be the chief NBC descriptionist. Bill will paint his word pictures from Berlin.

### NEW BOOKLETS

Just off the press is the first Magic Magnet speaker catalog of 8, 10, 12, and 18 inch speakers for economical use in set, car and public address fields. In it Cincin- audagraph Corporation, Stamford, Conn., introduces a host of convincing reasons for the trend to P.M. speakers.

"The 6L6 Beam Power Amplifier" is the title of a new 22-page engineering bulletin just published by The Ken-Rad Corporation, Owensboro, Kentucky. Gives detailed information and charts of the Ken-Rad 6L6, a cathode type power amplifier tube designed for the output stages of radio receivers and audio power amplifiers.

"The Oldest Power on Earth" is the name of Wincharger's new booklet for radio dealers and installers. Tells where and how to sell wind driven battery chargers—and how to make a service profit. Write the Wincharger Corporation, Sioux City, Iowa.

FADA's "Motoset" bulletin gives complete listing of auto-radio panels by model number for every make of motor car.

Servicemen who have not fully acquainted themselves with radio interference elimination possibilities in their locality are missing a real bet according to information contained in the 1936 Sprague Condenser Catalog just issued by the Sprague Products Company, North Adams, Mass., and available free upon request. Also available to servicemen is a booklet "How to Eliminate Radio Interference" and a series of clever post cards designed to bring this profitable new business to those who will use them.

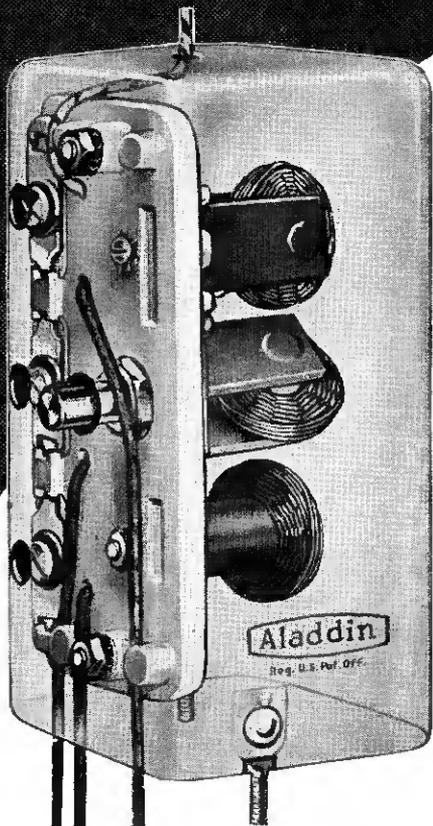
for the movies. In fact, before television really "arrives" Hollywood may have supplanted New York as the prime point of origin of audible radio also, if the current rush of radio-movie stars to the West continues.

A new high efficiency circuit for radio frequency amplification, particularly applicable to broadcast transmitters, has been perfected by engineers of Bell Telephone Laboratories. Whereas in the past 30 per cent efficiency has been the maximum that could be expected of the linear power amplifier stage in a high quality transmitter, efficiency as high as 65 per cent now is a reality. From this same standpoint, it is also superior to systems employing high level modulation, it is claimed.

At present American shortwave stations are operating under temporary licenses. This service has been fully justified. No longer an experiment, it is entitled to permanent recognition.

We were told in Washington the other day, by a member of the technical staff of FCC, that such might be the case the latter part of this year.

# WHAT *will* 1936 Mean to You?



Type D Aladdin Polyiron i-f transformer, a three-circuit condenser-trimmed continuous flat-top band-expansion coupling device in which the center inductor may be rotated with respect to the other two inductors, varying the selectivity without appreciable loss in gain or departure from a flat-topped steep-sided characteristic.

These devices are manufactured under one or more of the following U. S. Letters Patents:

1887380, 1940228, 1978568,  
1978599, 1978600, 1982689,  
1982690, 1997453, 2002500,  
2005203, 2018626, 2028534,  
2032580, 2032914, 2035439.

Other patents pending.

**Y**OU will probably find your most enterprising competitors making sales featuring ALADDIN Polyiron performance.

ALADDIN products are characterized by the use of ALADDIN Polyiron magnetic cores which increase the effective inductance of the windings substantially more than the effective resistance.

ALADDIN products provide greater gain and selectivity, the factors that assure superior performance in competitive radio selling.

Live-wire distributors and dealers are insisting on ALADDIN Polyiron equipped receivers.

# Aladdin

Reg. U. S. Pat. Off.

Aladdin Radio Industries, Inc., 466 West Superior Street, Chicago, Illinois

Licencee of Johnson Laboratories, Inc.

# ATWATER KENT

## RADIO

---

June 6, 1936

Dear Mr. Dealer:

Political conventions are creating opportunity for the sale of dependable, quality radios. The quality of Atwater Kent Radio is never questioned.

Today—as in the past—the name “Atwater Kent” on a radio receiver is full assurance to the dealer and consumer of outstanding quality, real value and satisfactory service from his set.

The distributor in your territory will be happy to serve you. Get in touch with him.

**ATWATER KENT MANUFACTURING COMPANY**

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**ARROW-LIGHT TUNING**

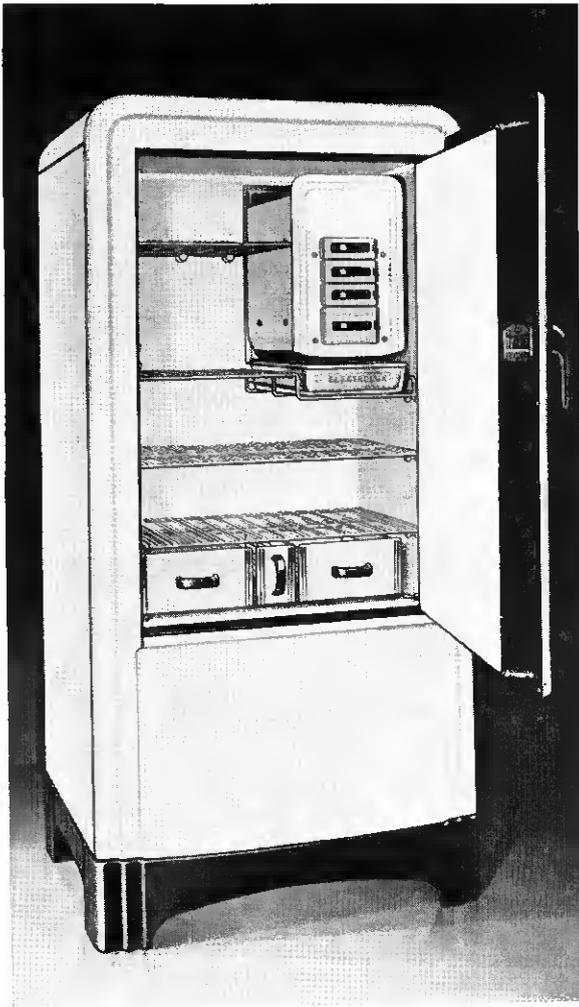
**RAINBOW DIAL**

**FAN-SPREAD STATION SPACER**

# NEW MONEY-MAKING OPPORTUNITY FOR RADIO DEALERS WITH KEROSENE ELECTROLUX



*Nationally famous Electrolux now also runs on kerosene (coal oil)  
... opens the door to a vast, untapped market for profitable  
refrigerator sales beyond the gas mains and power lines*



**Record of 2 years' outstanding sales success  
... backing of powerful magazine and radio  
advertising campaign**

If you are located in a trading center which serves families living beyond the gas mains and power lines, here's news that may be worth money to you! Kerosene Electrolux now makes it possible for these families to have finest city refrigeration. And for just a few cents a day!

**PROVED EFFICIENCY**

This ideal kerosene refrigerator is identical in all important respects with the famous gas-operated Electrolux which has been serving hundreds of thousands of fine city homes and apartments during the past nine years. Kerosene Electrolux has no moving parts to wear ... needs no electric current, no daily attention, no water. It's equipped with all those worthwhile conveniences that mean so much to women.

Dealers who have been selling Kerosene Electrolux since its introduction two years ago report enthusiastic and profitable acceptance of this new appliance for farm

and rural homes, inns and camps. The families who comprise its market know the benefits of automatic refrigeration—and want them!

**PROFITABLE LEADS**

Remember, too, constant advertising—through the pages of nine great farm papers and over 16 broad-coverage radio stations blanketing rural America—is telling the story of Kerosene Electrolux to millions every week ... developing good-will and worthwhile "leads" for dealers everywhere.

A few Kerosene Electrolux franchises are still open for dealers who can qualify. If you believe you are such a dealer and can present satisfactory credentials, write today for information to Servel, Inc., Electrolux Refrigerator Sales Division, Evansville, Ind.



**ANOTHER BIG SALES AID** to Kerosene Electrolux dealers is a fleet of demonstration cars which is touring the farm and rural communities of the country ... securing profitable prospect leads.

**READ WHAT KEROSENE ELECTROLUX DEALERS WRITE ABOUT THE REAL COOPERATION OFFERED BY THE FACTORY**

*W. H. Carley, Hart, Texas*—"The leads you are furnishing are quite valuable. I will have an average of 75% sales on these leads."

*Harry E. McConnell, Los Angeles*—"The Kerosene Electrolux has gone over beyond our expectations, and we expect to have a banner year, due to the prospects and advertising from the factory."



**SERVEL, INC., ELECTROLUX REFRIGERATOR SALES DIVISION, Evansville, Indiana**



# Review of New Products

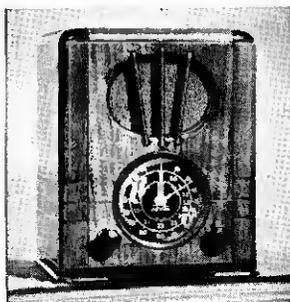


Arvin Rhythm Queen

## NOBLITT SPARKS

Fourteen models in nine different cabinets are offered for the coming season by Noblitt Sparks Industries, Inc., Columbus, Ind. These new Arvin sets will be known as the "Rhythm" series. They are refreshingly styled in a modern yet restrained manner.

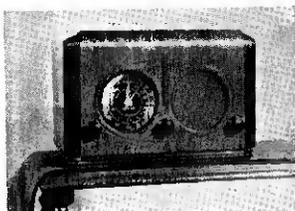
Six consoles and 8 table models, including 4 models for



Arvin Rhythm Baby

6 volt battery operation and 2 small a.c.-d.c. portable models, make up the line. The prices range from \$19.95 to \$150.

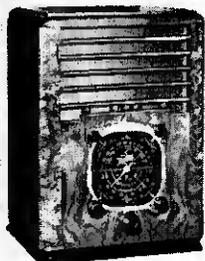
Huge, black, reverse-lighted dials avoid glare and are easy to read. The "traveling spotlight station finder" makes station-finding simple. All-wave reception is provided on 5 models and police or foreign shortwave service supplements the standard band on all other models.



Arvin Rhythm Belle

"Electric eye" precision tuning is a feature on the two largest sets. New octal base "G" type tubes used in all

models of 6 or more tubes permit either glass or metal tubes to be used. Other features are: dual ratio drive for quick accurate station finding, true fidelity amplifier circuits, automatic built-in aerial tuning system in all-wave models.—*Radio Retailing*, June, 1936.

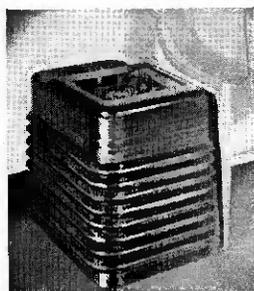


Zenith 6-S-128

## ZENITH

"Accent on cabinet design and dials" is the keynote of the 1937 line of the Zenith Radio Corp., 3620 Iron St., Chicago, Ill. The furniture in many models is along modern lines but quite different from the ordinary run of "modern" treatments. The "zephyr" or horizontal bar effect is used extensively in both the table and console models with the grille almost entirely concealed by this unusual design.

Of particular interest is the arm chair radio, illustrated, with the dials recessed and protected by a polished glass panel which slides out of sight

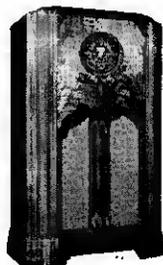


Zenith 7-D-148

when the set is in use. The zephyr styling is used in this model.

Certain cabinets are available, at slight extra cost, in ebony, bone white and maple.

Technically speaking, the new Zeniths offers the following: improved overtone amplifier, acoustic adapter, "privacy plug-in" (so the hard-of-hearing may use headphones with separate volume control while others use the loud speaker). An extension speaker in an-



Zenith 5-S-151

other room may also be connected by means of this feature.

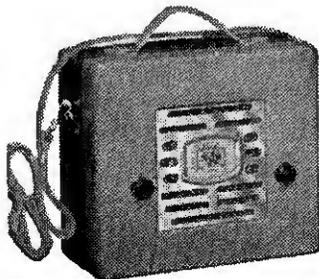
The new dial with its four knobs, one on each corner, will attract attention. There is a knob for band selection, sensitivity control, voice-music-high fidelity control and volume control. In addition, there is a split-second relocator to enable the listener to quickly return to stations previously heard; lightning finder (Einde spinner method) and target tuning.

Metaglas tubes are used in all but the farm sets.

There are 20 sets in the a.c. line priced from \$39.95 to \$139.95. A.c.-d.c. models run from \$29.95 to \$84.95. In addition there are 3 Stratosphere sets and two high fidelity consoles. For farms, the sets are priced at from \$39.95 to \$89.95. An auto-radio and two "boat and trailer" radios, the latter with water-resistant finish, complete the line.—*Radio Retailing*, June, 1936.

## SIMPLEX Sportsman

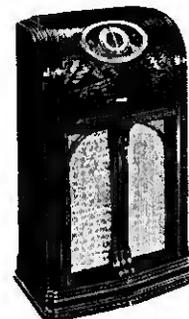
A 4-tube portable battery superheterodyne, light and compact, which can be carried like a camera, may be obtained from the Simplex Radio Co., Sandusky, Ohio. Batteries and aerial are self contained. Tunes from 540 to 1,750 kc. The cabinet is finished in waterproof airplane type luggage material and has both shoulder strap and handle. \$26.50, less batteries.—*Radio Retailing*, June, 1936.



Simplex "Sportsman"

## ADMIRAL AM6

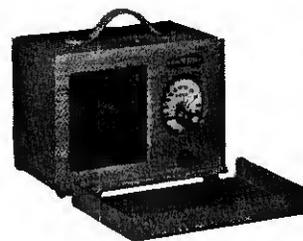
Featuring a tilted dial and "fly wheel tuning" (a flick of the finger and the pointer moves), the Continental Radio & Television Corp., 325 W. Huron St., Chicago, announces de luxe console Model AM6. This receiver tunes in four bands from 150 to 375 kc. and from 540 to 18,000 kc.; has a phonograph jack, plug-in heavy duty dynamic speaker, automatic tone control (minimum noise between stations),



Continental Admiral AM6

11-inch oval dial, visual station indicator, visual wave-band indicator, "second-hand" for micro-tuning.

The tube lineup includes two 5W4 rectifiers, three 6K7 i.f. and r.f. amplifiers, a 6A8 first detector and oscillator, a 6Q7 diode detector, a.v.c. and first audio tube, a 6G5 visual indicator and two 6L6 push-pull beam power amplifiers capable of delivering 10 watts of undistorted output. Sensitivity, 2 microvolts absolute.—*Radio Retailing*, June, 1936.



Freed Battery Portable

## FREED Portable

A compact traveling-case radio complete with self-contained aerial and housed in an attractively covered case is being made by the Freed Mfg. Co., Inc., 44 W. 18th St., New York City. Tuning range, 540-1,750 kc. Works on a.c. or d.c. Weight 7½ lb. List price \$25. — *Radio Retailing*, June, 1936.



RCA-Victor R99 Phonograph

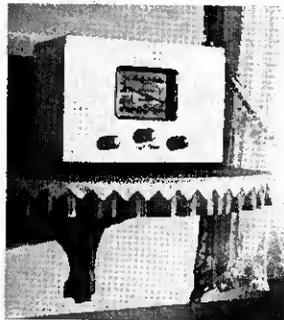
**RCA VICTOR**

In the regular a.c. line just brought out by the RCA Mfg. Co., Inc., Camden, N. J., there are 28 models under \$100. Several sets go down to 60,000 kc. where two way police conversations may be heard. All sets use metal tubes. Many have the Magic Eye and Magic Brain, as well as phonograph terminal.

New this year is the "Magic Voice" which eliminates "boom" from low notes and allows only the desired "controlled" notes to radiate into the room.

There are 8 consoles, 17 table sets, 3 radio-phonograph combinations, a high-fidelity console phonograph with dynamic amplifier, a radio record player and four farm radios.

In the table line there are 7 a.c.-d.c. jobs, 8 straight a.c.



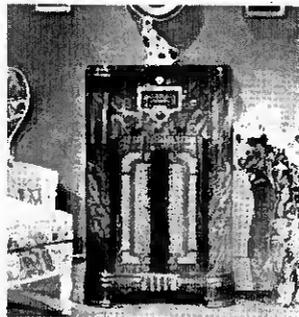
RCA-Victor Model 5X4

sets and 2 farm models. The following are of particular interest from the stand point of design: Models 5X4 and 4X4, especially made for the kitchen and finished in porcelain white lacquer with black base (see illustration); Model 5X, in a "jewel-like" cabinet finished both back and front with removable back and self-locking switch and Model 5X3, designed expressly for the office.

The consoles range from the simpler "tailored" models to the more ornate sets with inlays, stripings, etc.

The de luxe combination of the line is Model 9U-2 with Magic Voice, automatic record changer, tuning range down to 60,000 kc., 12 in. speaker. The cabinet is low and long (34 in. high x 46½ in. wide) and

the top is hinged in two sections with the radio tuned from the top. The high fidelity straight phonograph, Model R-99, illustrated, has dynamic amplifier and employs 7 tubes. Audio-frequency response from 50-7,200 cycles. The record player, Model R93-2, is a portable instrument for both 10 and 12 in. records, to be attached to any a.c. radio.—*Radio Retailing*, June, 1936.



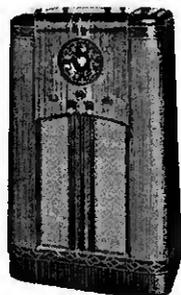
RCA-Victor Model 8K

**CROSLEY**

The Phantom Conductor (Auto-Expressionator) introduced by the Crosley Radio Corp., Cincinnati, Ohio, earlier this year, has been further developed and refined so that it now embodies a full size radio tube instead of two small bulbs.

Multivox control, an entirely new feature in the deluxe 1937 sets, permits the listener to select the type of audio response desired. When the Phantom Conductor is thrown into operation by means of the Multivox Control, the volume range is automatically increased, restoring more natural expression to the program.

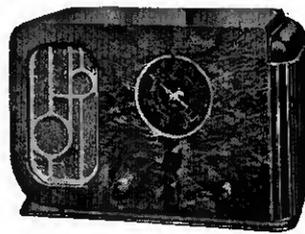
New and distinctive designs characterize the cabinets of this season's sets. There are fifteen models ranging from 5



Crosley Model 167

to 13 tubes in the a.c. line, 11 models in the battery series and 2 Roamio auto-radios.

In the de luxe 13 tube radio, the Mystic Hand is incorporated. By means of this feature, the set is automatically tuned to the proper frequency. The operator turns the dial hand to within 20 kc.



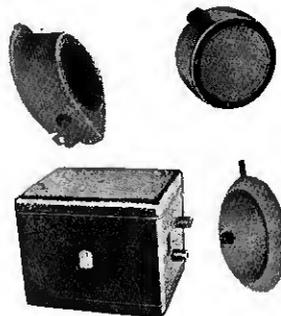
Crosley Model 495

on either side of the station setting and the Mystic Hand completes the tuning with accuracy.

The ceramic dials on the new Crosleys are greatly simplified and the fewer markings are enlarged. Logging has also been simplified. The Dual-matic dial drive makes it possible to turn the station selector fast or slow without the use of double knobs. The tuning unit is mounted on a small sub-chassis which is floated in the main chassis pan by live rubber mounting sleeves, to prevent vibrations.

In the compact line there are:

The table sets, which include portables, uprights and the new "side-speaker" types, range in price from \$19.99



Crosley Auto-Radio and Speakers

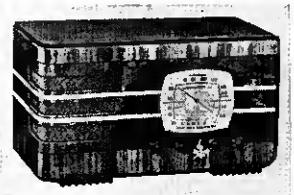
to \$49.95. The consoles run from \$49.95 to \$167.50. In the battery line the table sets are from \$34.50 to \$69.95 and the consoles, \$49.95 to \$89.95. The auto-radios are \$39.95 and \$54.95, the latter adaptable to header or under-dash speaker or a combination of both.—*Radio Retailing*, June, 1936.

**CARTER Converters**

6, 12, 32 and 110 volts d.c. may be converted into 60 cycle, 110 volt, a.c. with the new converter of the Carter Motor Co., 369 W. Superior St., Chicago, Ill. It is extremely small and compact and has an output of 40 watts. The case is provided with vents for air cooling and the armature is dynamically balanced. The special bearings require no oiling. Size 4x5x2½. —*Radio Retailing*, June, 1936.

**EMERSON**

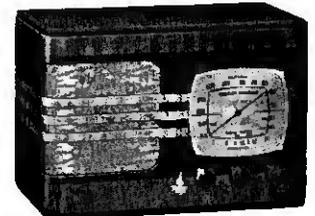
A "Gemloid" dial—golden-toned cloisonne effect with a jewel-like sparkle—is being introduced by the Emerson Radio and Phonograph Co., 111 Eighth Ave., New York City, in its 1937 line. This is



Emerson Model F133

a large dial (illustrated) with figures that may be read readily and easily.

Innovations which will appeal both to technically-minded men and style-conscious



Emerson Model B131

women have been incorporated in this line of "Harmonized Unit" radios.

Priced from \$14.95 to \$99.95, the new series includes a.c. and a.c.-d.c. sets, portable battery radios, farm models, auto-radios and combination radio-phonograph receivers.

In this price range are sets covering the standard and shortwave American bands; also the foreign shortwave and ultra longwave bands.

Twenty-five sets make up the complete line.

Illustrated is the new dial; Model B-131, 6 tubes, a.c.-d.c., American, foreign and police bands, \$29.95 and Model F-133, 6 tubes, ac-dc, American, foreign, police and weather, Gemloid dial, \$44.95.—*Radio Retailing*, June, 1936.



Emerson Gemloid dial

*Now—*

# 1 1/2 MILLION MORE FRIGIDAIRE

have been sold  
than any other make!

*Proof*

that Frigidaire outlets are profiting handsomely by the greatest public acceptance ever awarded any refrigerator

● The men who sell Frigidaire in the field are setting new marks of achievement this year. They are climbing with Frigidaire to new peaks of leadership.

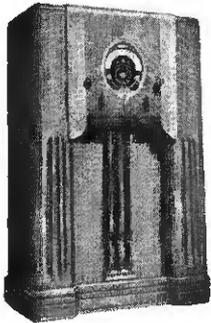
We are proud of this overwhelming leadership. Not alone because of the supremacy in sheer numbers which it represents. But because it signifies that we have kept faith with our orig-

inal aim and principle—to make not merely a good refrigerator, but the world's finest.

“One and one-half Million More Frigidaires than any other Make” is to us a deep tribute of confidence from the buying public. And an inspiring reminder of record-breaking sales accomplishment by Frigidaire outlets everywhere in the world.

FRIGIDAIRE CORPORATION, Dayton, Ohio



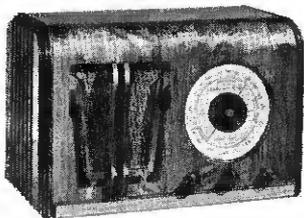


F-M Model 91C4

**FAIRBANKS MORSE**

A bowl shaped device, the "Tone Projector," is incorporated in some of the new sets of Fairbanks, Morse & Co., Indianapolis, Ind. It is mounted ahead of the speaker, deflecting and diffusing some of the higher frequencies and causing them to be projected over a very wide angle. In this way, persons sitting to one side may get the advantage of the highs as well as the person sitting in front of the receiver.

F-M's "Semaphore" dial is incorporated in one table model and two consoles. The "great circle" dial is used in the lower price range brackets. In the Semaphore dial the window at the top gives positive band identification. These bands come into view one at a time. The center circle is the shortwave separator—the indicator is a traveling light which acts as a band spreader for logging and relocating foreign stations accurately. A circle on the left marked "volume"



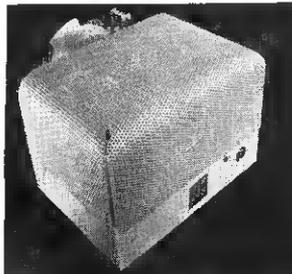
F-M Model 57TO

gives visual volume control. A spot of light travels around this circle indicating the degree of volume. A small circle on the right gives visual tone control.

In five consoles, beginning with the \$69.95 model, the "Turret shielded chassis," is employed. The chassis operates inside an "electrically shielded cage" (see illustration). In addition, a metal base completes the shielding of the chassis.

Model 57TO, 5 tubes, 540-7,500 kc., cabinet finished on all sides, is \$29.95; 58T1, 5 tubes, 540-1,750, 2,350-23,000 kc., \$39.95; 72C2, 6 tube "turret shielded" chassis, tone pro-

jector, 540-1,750 and 2,350-23,000 kc., \$69.95; 91C4, 9 tube "turret shielded" chassis, tone projector, semaphore dial, 4 bands including ultra short-wave to 70,000 kc., \$99.95, and, 12C6, 12 tube "turret shielded" chassis, tone projector, semaphore dial, 5 bands to 70,000 kc., \$149.95.—*Radio Retailing*, June, 1936.



F-M Turret Shielded Chassis

**AMERICAN BOSCH**

"Automatic Maestro," a new development from the American Bosch laboratories, is featured in the 1937 line being announced by the United American Bosch Corp., Springfield, Mass. Also introduced

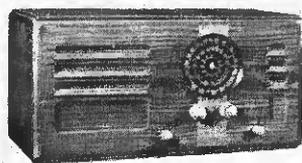


American Bosch 625 and 650

is the new "Band Stand Baffle" which, the release reads, "is as resonant as the shell in the band stand."

There are 8 console and 8 table or personal models in the series ranging from 5 to 12 tubes. All sets are multi-wave. Cabinets are distinguished by super-size dials in all models and new easy tuning features. Metal tubes are used throughout.

More complete specifications are not available as we go to press but will be given in the July New Merchandise Section.—*Radio Retailing*, June, 1936.



American Bosch Model 660T

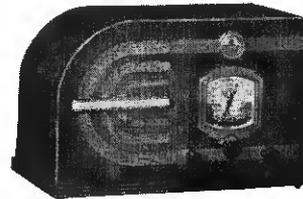


Troy Model 75PC

**TROY**

Eye appeal as well as ear appeal is being stressed in the new sets of the Troy Radio Mfg. Co., 1142 S. Olive St., Los Angeles, Calif. The cabinets are distinctive and individually styled. Many of the sets may be had in white as well as walnut.

Particularly interesting is

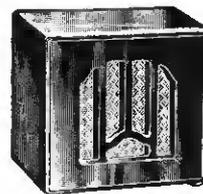


Troy Table Model

Model 75PC, illustrated, a portable phono-radio combination with RCA motor and pick-up, removable top and 5 tube superhet chassis. \$39.95.

The complete line includes one 4 tube t.r.f. radio, four 5 tube and two 7 tube superhets for a.c., two 5 tube receivers for a.c. or d.c. operation, an auto-radio and a battery set.

In the a.c. line the prices range from \$14.95 to \$59.50; a.c.-d.c., \$24.95 and \$34.95; auto-radio \$29.95; battery model, \$20.95.—*Radio Retailing*, June, 1936.



**Extension Speakers**

For extension use on home or automobile radio sets as well as for hotels, schools, announcing systems and other multiple-unit p.a. installations, the Oxford-Tartak Radio Corp., 915 W. Van Buren St., Chicago, announces a new series of improved magnetic speakers for midget a.c., a.c.-d.c. and battery sets. They are available in 5, 6½ and 8½ in. models. — *Radio Retailing*, June, 1936.

**Phonette**

A high quality radio attachment for reproducing musical recordings in combination with a radio, known as the "Phonette," is offered by the Electro Acoustic Products Co., Ft. Wayne, Ind., a subsidiary of the Magnavox Co.

It is compact in design and may be easily installed. Consists of a constant speed self-starting motor, turntable and crystal pick-up, housed in a walnut cabinet. Available for a.c. or a.c.-d.c. operation.—*Radio Retailing*, June, 1936.



**C-D Condensers**

Cornell - Dubilier Corp., Bronx Blvd., New York City, announces two lines of tubular condensers. They are the improved Tiger tubular condensers and the improved cub tubular condensers.—*Radio Retailing*, June, 1936.

**Velocity Mikes**

The microphone series of the Electro-Voice Mfg. Co., Inc., 324 East Colfax Ave., South Bend, Ind., varies from the conventional type inasmuch as cavity resonance is greatly reduced by the use of heavy woven mesh screen, open at the sides. Hum pick-up is completely eliminated by the use of a balanced winding transformer, it is claimed. The frequency response is substantially flat from 30 to 12,000 c.p.s. It is complete with cradle and 20-ft. cable.—*Radio Retailing*, June, 1936.



# 4 CARLOADS OF EVIDENCE!



## HOTPOINT REFRIGERATOR DEALERS ORDERING BY THE CARLOAD!

● Profits by the *carload* for Hotpoint Refrigerator dealers on the west coast! And it's but a sample of the business Hotpoint Refrigerator dealers are enjoying in *all* sections of the country.

It's common knowledge in the industry that the Hotpoint Refrigerator has *arrived* and is going places fast! All eyes are on Hotpoint. Every day the Hotpoint Refrigerator franchise is becoming increasingly valuable. Write or wire for particulars! Hotpoint Refrigerator Division, Section RR 6, General Electric Co., Nela Park, Cleveland, Ohio.

**Hotpoint**  
 MANUFACTURED BY GENERAL ELECTRIC  
**ELECTRIC REFRIGERATORS**



made right  
sold right

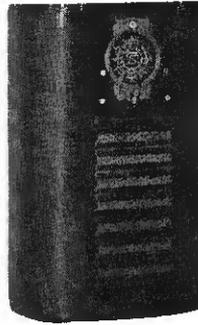
"We carry only Tung-Sol tubes. In this line we find everything that meets the demands of our trade."

BELMONT RADIO SERVICE, INC.  
Wenatchee, Wash.

There are still desirable locations where independent radio retailers and service organizations could qualify as Tung-Sol retail agents. Write our nearest sales office.

**TUNG-SOL**  
Flow radio Tubes

TUNG-SOL LAMP WORKS, INC.  
Radio Tube Division  
SALES OFFICES: Atlanta, Boston, Charlotte,  
Chicago, Dallas, Detroit, Kansas City, Los  
Angeles, New York.  
General Office: Newark, N. J.



Grunow Model 885

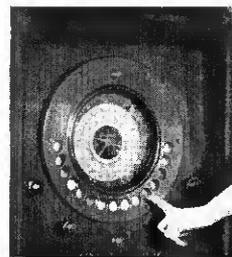
**GRUNOW**

"Teledial" tuning makes its appearance in the line of 1937 Grunow radios of the General Household Utilities Corp., 2638 N. Crawford Ave., Chicago. This device (see illustration) enables anyone to dial 15 stations perfectly in less than 15 seconds.

An entirely different type of cabinet design eliminates tone distortion due to cabinet resonance, Grunow states.

Thirty-six models make up the series, six of them being designed for farm, camp or boat use, and prices range upward from \$17.95. Sensing the trend toward larger sets which characterized sales during 1935, Grunow has concentrated on console cabinets, two-third of the models being of this type.

All have large airplane type dial and, although an "electric eye" has made its appearance on the 7, 8 and 9 tube receivers, the "clock type" tuning continues to be a feature on the majority of models. Triple speakers, two 6 in. and one 12 in., are used in the higher



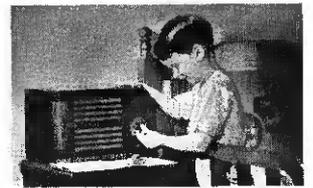
Grunow "Teledial"

priced models, while 8, 10, and 12 in. speaker equipment is a feature of the balance of the line.

Chassis specifications include automatic antenna tuning, 3 and 5 position tone control, a.v.c., dual audio channel, full floating condenser gang and chassis, mechanical band spread and dual ratio Vernier drive. The frequency range varies according to model although most cover from 550 to 18,000 kc. Nearly all use metal tubes.

A complete line of motor

car sets will be made this year. Prior to this time, Grunow has manufactured auto radios for a prominent car builder. Three models, priced at \$49.95, \$59.95 and \$64.95, and offering a choice of three speaker combinations, will be built. — *Radio Retailing*, June, 1936.



Grunow Model 564

**PHILCO**

Favorite American stations may be tuned-in automatically by twirling a dial on some of the 1937 sets of the Philco Radio and Television Corp., Philadelphia, Pa. This dial may be seen on the illustrated Model 116X DeLuxe.

Octal base tubes are used throughout. Acoustic clari-

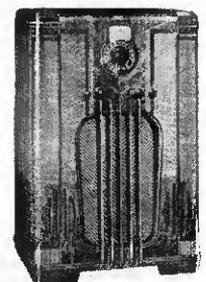


Philco Model 650B

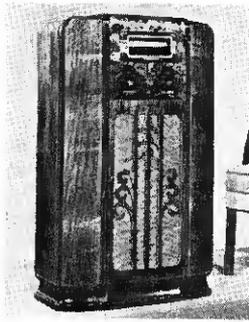
fiers, automatic aerial tuning, inclined sounding board, wide-angle sound diffusion—these are a few of the high lights of the de luxe models.

Table Model 650B, shown, is an 8 tube set with spread-band dial on which stations are named, located in color and spread three times farther apart. \$79.95.

Philco's cabinets follow the general trend toward the conservatively modernistic. Straight a.c., a.c.-d.c. and battery sets are included. One- to five-band models are available. — *Radio Retailing*, June, 1936.



Philco 116X DeLuxe

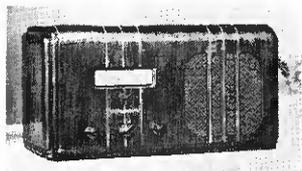


GE Model E105

**GENERAL ELECTRIC**

"Focused Tone," made possible by new, simplified color tuning methods, automatic frequency control, silent tuning and other advances which assure fidelity of reproduction and peak performance, is featured in the 1937 series of the General Electric Co., Bridgeport, Conn. The line embraces 18 metal tube receivers—8 table models, 8 consoles and 2 combinations. All are equipped for both standard and short-wave reception and several have extended tuning ranges for ultra shortwaves.

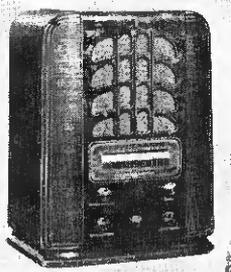
The "Colorama" dial is



GE Model E72

an interesting development. Through color control, the dial changes from red to bright green when a program is in perfect Focused Tone. The bright green also gives the signal that the station is strong and free from noise. When the dial shows dull green or red, reception is distorted.

Automatic frequency control lines up the receiver on its



GE Model E101

"peak of resonance" and automatically selects those stations which furnish the best reception.

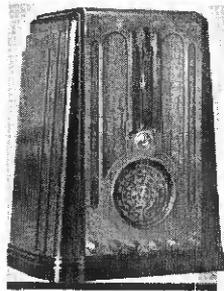
A Local Station Personalizer provides custom-made local station identification on a separate scale placed directly below the broadcast scale. The Personalizer lists only that group of American stations

most prominent in each section of the country, simplifying local tuning.

Silent tuning, together with the Colorama dial, permits tuning without noise. When the knob is in the silent position, the speaker is cutout.

Prices range from \$29.95 to \$195. The combinations are \$99.95 and \$295.

Five sets for the farm—one a standard 2 volt job and four for 6 volt operation—are also offered. Price range \$27.50 to \$84.50.—*Radio Retailing*, June, 1936.



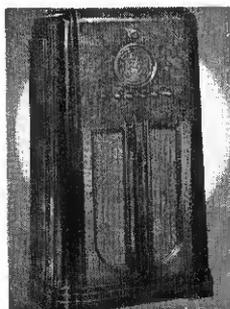
**FADA**

Bakelite and plastic cabinets in old ivory, mahogany and a combination of black and gold have been included in the 1937 line of the Fada Radio and Electric Co., Long Island City, N. Y.

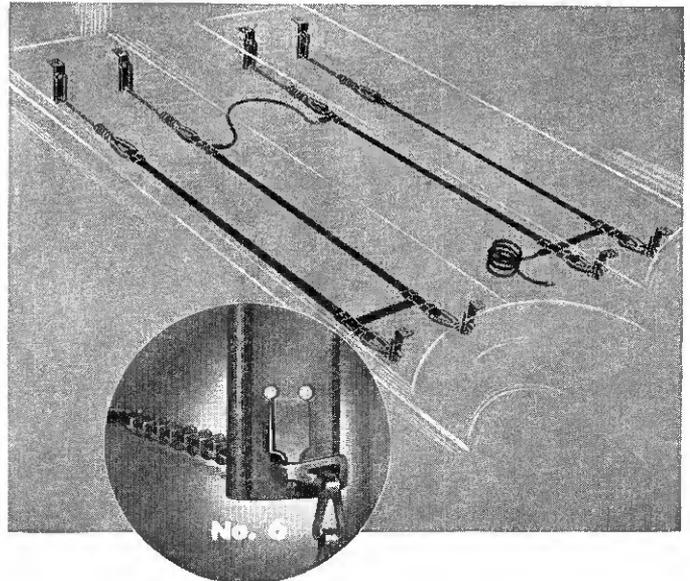
Technical features include "free wheeling" tuning (the dial turns speedily to the right for quick station finding and slowly to the left for accurate tuning), reception clarifier with Flash-O-Graph for individual station adjustment, background filter, signal lens, compensated volume control, variable selectivity in three positions — sharp, medium, high, new indirectly lighted dial with each band identified by color and phono switch on volume control.

All models are all-wave — continuous from 525 kc. to 18.5 mc. Long wave 2,000 meter band optional.

The streamlined cabinets come in choice walnut woods as well as the Bakelite. Price range, \$19.99 to \$275.—*Radio Retailing*, June, 1936.



**THE MOST QUICKLY INSTALLED  
UNDER-CAR ANTENNA**



**1 OF 12 EXCLUSIVE FEATURES**

Chain permits easy adjustment to any Car Length. Positive Lock insures tension.



INLANTENNA is the most quickly installed under-car antenna ever built. There are no holes to drill—adjustable brackets fit perfectly any under-car construction. The sturdy, adjustable chain furnishes accurate length—positive lock and tension. And because of INLANTENNA's design and more rugged construction there is no after service.

*Completely Rubberized*

INLANTENNA is weather, abrasion and rust-proof—the most durable under-running board antenna ever developed. The continuous metal strip under each running board is completely jacketed with rubber especially compounded to resist moisture and ice formation. Connections for the shielded lead-in and heavy-duty cross lead are soldered, tested and sealed by rubber boots. Insulator links are rubber moulded Bus Tire Cord to repel moisture and insure insulation. Springs and brackets are rust-proofed. The perfectly shielded lead-in wire and cross lead are

heavy-duty, low loss insulated.

*300,000 in Use*

Grueling tests on automobile proving grounds and by leading radio manufacturers, as well as the experience of 300,000 motorists prove conclusively that INLANTENNA's rubber coating is impervious to water, gravel, calcium chloride, salt, tars and oils. This experience also proves that INLANTENNA's design and construction provide better reception, greater sensitivity and amazing signal pick-up under all conditions. It eliminates directional effects—weather and road interference. INLANTENNA installed is two to four inches from any metal. It is least visible—vibration and rattle-proof.

Adopt INLANTENNA. Leading automobile and radio manufacturers have approved and are using INLANTENNA as the only permanently weather and rust-proof antenna. It comes complete and individually boxed with instructions. Available through your present sources.

**THE INLAND MANUFACTURING COMPANY**  
A GENERAL MOTORS SUBSIDIARY  
**DAYTON, OHIO**

**YOU BELONG IN THIS PICTURE**



**OUTDOOR SUMMER CALLS FOR Magic Magnet Extension Speakers**

**T**HE tremendous extension speaker market, practically untapped and highly profitable, is opened to the servicing field for the first time on a practical basis by the Cinaudagraph Magic Magnet Speakers.

Every owner of a radio receiver, (and there are some 22,000,000 in America!) is a prospect. For porch, garden, bedroom, for every spot not reached by the set. They're a cinch to sell—these Magic Magnet Speakers with their high fidelity characteristics, sturdy construction, and simple installation features—only two wires being required for hook-up.

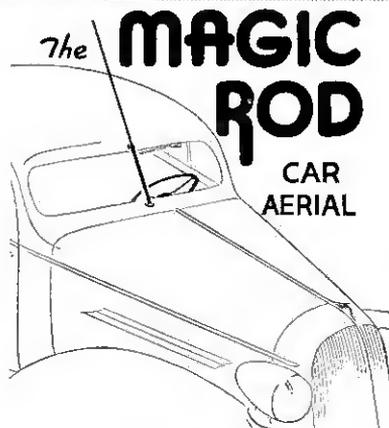
Extension speakers have proven a boon in England. Why not here? Just try selling your customers on the idea. You will be surprised at the response. *Details sent on request*

**CINAUDAGRAPH CORPORATION**

Speaker Division, Dept. "R"

Stamford, Conn.

**CINAUDAGRAPH**



The **SOLUTION** to the **CAR AERIAL PROBLEM**

**THE BIGGEST CAR RADIO ITEM YET**

**BE THE FIRST IN YOUR TOWN TO INSTALL A MAGIC ROD—AND WATCH THE RESULTS**

**PROVE THESE FACTS FOR YOURSELF:**

The MAGIC ROD is the most efficient type car aerial on the market. MORE stations—MORE volume—lowest noise level—isolated from motor and wheel static—no kickbacks from road hazards—smart, neat, and trim—easiest to install—very low price—handsome profits for dealers.

Dealers and distributors: Write or wire for full story and discounts.

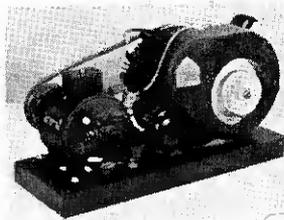
**\$3.50**

BLACK  
BAKED  
ENAMEL

**RADIO ELECTRIC SERVICE**  
1918 NEWTON • SAGINAW, MICH.

**\$4.50**

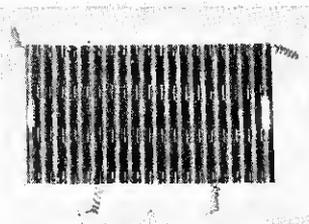
Chromium  
Plated



**PIONEER Generator**

A full size a.c. 110-volt, 300-watt generating plant retailing at \$79.95 may be obtained from the Pioneer Gen-E-Motor Corp., 466 West Superior St., Chicago, Ill. Has a 7½ volt direct current winding expressly designed for charging all 6-volt batteries. The d.c. will run any 6-volt electrical device requiring not more than 50 watts to operate.

This "Blue Diamond" unit is ideal for operating radio units and sound systems. Furnishes plenty of a.c. to run all radio equipment and enough d.c. to keep ignition batteries charged. — *Radio Retailing*, June, 1936.



**BURGESS Batteries**

The "stick" batteries of the Burgess Battery Co., Freeport, Ill., are now held in a weave of ribbons and connected by flexible leads which permit them to be spread, rolled or folded into various spaces. Thus they may be folded to accommodate themselves to odd shaped shelves or compartments. They are particularly useful for portable sets and body receivers that are carried on the person.

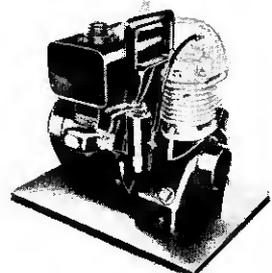
Burgess also offers A and B midget batteries for portable use. Especially useful in transceivers.—*Radio Retailing*, June, 1936.

**A-R Accessories**

Insuline Corporation of America, 23 Park Place, New York City, offers for the 1936 season a complete line of auto-radio antennas and accessories. Aerials for practically every type of installation are included, as well as suppressors, silencers, filters, etc.—*Radio Retailing*, June, 1936.

**BRIGGS & STRATTON Power-Charger**

A 6 volt, 200 watt power-charger — a complete electric starting gasoline motor powered generating plant expressly engineered for 6 volt radios and 6 volt lights—has just been developed by the Briggs & Stratton Corp., Milwaukee, Wis. The added convenience of electric lights, up to 200 watts, for home, camp, boat is available. In addition it will lighten many chores by running small equipment such as washing machines, pumps, grindstones, churns, etc. Power take-off is designed for a standard V-belt. \$59.50.—*Radio Retailing*, June, 1936.



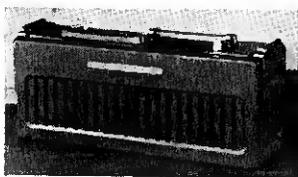
**CONTINENTAL Charger**

A new 6 and 12 volt battery charger and auxiliary light plant unit is announced by the Continental Motors Corp., 12801 Jefferson St., Detroit, Mich. The engine has a single vertical cylinder, air cooled by fan built on crank shaft; 4 cycle, "L" head type; Lynite die casted piston; three rings; oil capacity of 1 pt.; gasoline tank capacity of two quarts. Has an output of 212 watts and will supply sufficient current to operate seven 25-watt, 6-volt bulbs without taking any energy from the battery while the generator is running. Designed to govern the speed of the engine at 2,100 r.p.m. electrically.

The 6 volt, 212 watt unit carries a list of \$55. The 12 volt job, suitable for boats, is \$57. — *Radio Retailing*, June, 1936.

**SHURE Products**

Among the new additions to the line of Shure Brothers, 215 W. Huron St., Chicago, are a 3B "Economy" carbon microphone listing at \$5.50; crystal microphone volume controls; Model 75A spherical crystal microphone; Model A80A stand switch, and new plugs, receptacles, cable fittings and other accessories.—*Radio Retailing*, June, 1936.

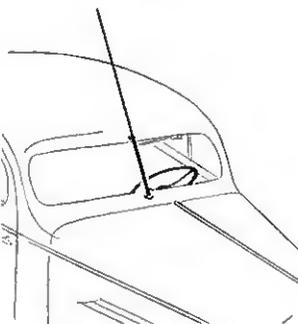


**GLOBE Radio A-Battery**

The Globe line of radio batteries made by the Globe-Union Mfg. Co., 900 E. Keefe Ave., Milwaukee, Wis., includes 2, 6 and 12 volt types. All are furnished in one-piece molded containers with bail handles and positive contact, non-corroding terminals.

By special arrangement with RCA, Globe batteries will be supplied for all RCA battery operated sets to be used in conjunction with a Briggs & Stratton charging unit. The batteries best suited for this radio service are No. 89 with a capacity of 150 a.h. and No. 127, capacity, 300 a.h.

The radio rates of other big sellers in the radio field are 180 a.h. for the type 94 and 100 a.h. for the 63.—*Radio Retailing*, June, 1936.



**MAGIC ROD Car Aerial**

For steel top cars, the Radio Electric Service, Saginaw, Mich., has developed the "Magic Rod" aerial. The design is simple. A two piece rod of fine steel is mounted on the car where its position gives maximum reception. It is rigid enough to maintain this position yet so flexible that it permits free passage of the car under objects that afford only a slight top clearance. \$3.50 and \$4.50.

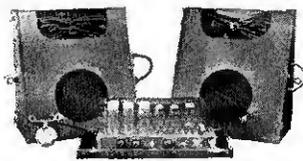
Due to location and height it minimizes ignition noises, wheel static and other interference caused by the car itself, the maker states.—*Radio Retailing*, June, 1936.

**EBY Battery Adaptor**

Added flexibility in making B and C connections to sets of the Philco battery types is now possible by the use of a battery adaptor put out by Hugh H. Eby, Inc., Philadelphia, Pa.—*Radio Retailing*, June, 1936.

**OPERADIO P. A. System**

Model 110-R portable sound system of the Operadio Mfg. Co., St. Charles, Ill., is designed for the larger type portable installations such as outdoor gatherings, auditoriums, etc. It features dual speakers utilizing the latest Operadio development, the Acousti-Reflex principle. Comes complete with crystal contact mike with hanging fixture. Power output is 20 watts Class "A." Mike and phonograph inputs may be mixed.—*Radio Retailing*, June, 1936.



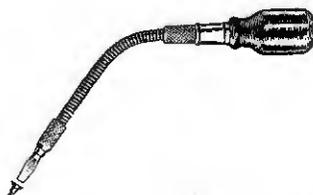
**IRC Resistor**

An economical, completely insulated wire wound  $\frac{1}{2}$  and 1-watt resistor, similar in size and appearance to the IRC Insulated Metallized units has been announced by the International Resistor Co., Philadelphia, Pa. Available in resistance values of 0.25 to 500 ohms and 0.5 to 2,000 ohms respectively with lengths of  $\frac{3}{8}$  and 1  $\frac{1}{2}$  in.—*Radio Retailing*, June, 1936.



**Flexible Screwdriver**

Where the screw cannot be reached by a straight or off-set driver, the flexible-shaft screwdriver of the Commonwealth Products Co., 401 Broadway, New York City, fills the bill. It has fluted wooden handle, shaft of laminated steel wire and tempered steel blade. Overall length, 8 in.—*Radio Retailing*, June, 1936.



**CASHING IN!**

*A bigger tube business with bigger profits . . . read how he did it!*

● He put in a line he could guarantee 100%. Tubes that have received 80 separate tests before they left the factory! He sold his customers the best tube money could buy . . . Built himself a reputation for *quality*, a reputation that brought new customers in and old ones back!

He sold tubes that brought him a *bigger* margin of profit. A line whose list prices were always fair . . . tubes backed by a definite written guarantee.

He put his tube business on a safe, profitable basis with Sylvania! You can do the same. For full sales and technical information, write to the Hygrade Sylvania Corporation, Emporium, Pa.

**SYLVANIA**

**THE SET-TESTED RADIO TUBE**

*Check any other line against Arcturus*

TYPE of TUBE	ARCTURUS	OTHERS
GLASS	 ✓	
"G"	 ✓	
METAL	 ✓	
METAL (TO REPLACE OLD GLASS TUBES)	 ✓	

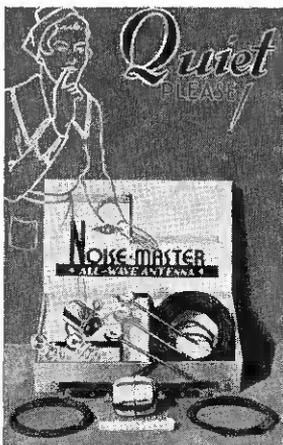
**ONLY ARCTURUS gives you ALL 4**

The most complete tube line in the industry — ARCTURUS — gives you 4 separate avenues to sales and profits. Unless you stock Arcturus Tubes, you're missing those additional profits that should be yours.

*For full details of the 4-WAY Arcturus line and the new 'Coronet' Metal Tubes write:*  
ARCTURUS RADIO TUBE CO., NEWARK, N. J.



**ARCTURUS 'CORONET' METAL TUBES**



**"Noise-Master"** makes every receiving set a BETTER set. Electrically AUTOMATIC in operation. Eliminates "man-made" static on both broadcast and short-wave lengths.

List price . . . **\$6.75**

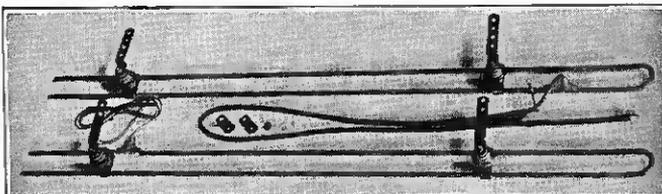
Also available with special transformers for European broadcast bands. . . list, \$7.00

**CORNISH WIRE CO., Inc.**  
30 Church St., New York City

**HOME RECEPTION IN AUTOMOBILES**

with "LONG-RANGE TWINS" Aerials

Sealed in Leak-Proof Rubber

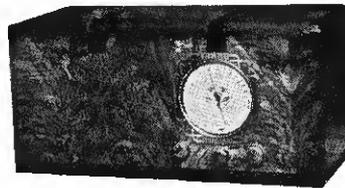


**SIX NEW FEATURES ELIMINATE SIGNAL LEAK IN AUTO AERIALS**

93% Signal Strength Efficiency according to Certified Laboratory Tests

JUST OFF THE PRESS—Free Copies Available—'AERIAL NEWS' All About NEWEST DEVELOPMENTS In Automotive Antenna. Write for yours today.

**WARD PRODUCTS CORP.** 2129 Superior Ave. CLEVELAND, O.



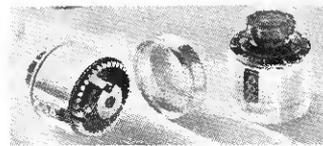
**Bookcase Radio**

A 6-tube a.c. radio of modern bookcase design has been placed on the market by the Lafayette Radio Mfg. Co., 100 Sixth Ave., New York City. Known as Model D-8, it covers the 18-50, 66-187 and 200-560 meter bands. \$19.95.—*Radio Retailing*, June, 1936.

**GENERAL Volume Control**

Type 653 volume control of the General Radio Company, 30 State St., Cambridge, Mass., has been redesigned to afford even greater utility for all types of mixer circuit use. These controls are particularly adapted for sound equipment.

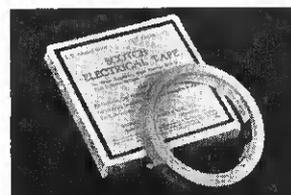
The electrical and mechanical improvements include: all beryllium-copper contacts and switch arms, removable dust cover, finger index button on knob, improved terminals and smaller depth. The 50, 200, 250 and 500 ohm sizes sell for \$12.50.—*Radio Retailing*, June, 1936.



**Scotch Tape**

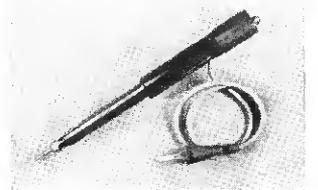
Scotch electrical tape, used by radio manufacturers for years, is now available to service men in 1/2 in. x 10-yd. rolls.

Scotch electrical tape is pressure sensitive, that is, no moisture is required to seal it. Unlike friction tapes, it adheres to any surface, smooth or irregular. The adhesive used is non-corrosive, coated on a specially developed paper backing, the entire tape having high tensile strength, flexibility and dielectric strength; minimum corrosion and exceptional thinness.—*Radio Retailing*, June, 1936.



**Handiprobe**

A pocket analyzer for radio diagnosis and trouble-shooting has been placed on the market by Burton-Rogers Co., 755 Boylston St., Boston, Mass. It makes fast, accurate tests for open or short circuited condensers in shooting trouble for low volume (or no volume), excessive oscillation or distortion. It also provides a handy means of testing for: presence or lack of voltage on filament, plate or screen arteries; open or short circuited bleeder resistors and cathode resistors; continuity of any receiver circuit, etc. Net price to service men. \$2.67.—*Radio Retailing*, June, 1936.



**TRIAD Ballast Units**

Three distinct types of ballast resistors are being made by the Triad Mfg. Co., Inc., Pawtucket, R. I.

The M series is similar in appearance to the metal radio tube; the MG types are physically similar to the standard MG series of tube and internally of the same construction as the M type, having an octal base for connections; and the G series, in the FT-12 glass bulb with connections made to a standard small four-prong base.

In addition to the regular series, there is another type available which permits a ballast action on the pilot light.

Due to the fact that line voltage requirements vary considerably in different areas, Triad is prepared to make any ballast resistor required.—*Radio Retailing*, June, 1936.

**PIONEER Dynamotor**

A dynamotor especially adapted for use in two-way police intercommunicational radio systems has been developed by the Pioneer Gen-E-Motor Corp., 466 W. Superior St., Chicago. This dynamotor carries the trade name "Silver Band" and it is available in sizes suitable to police car, motor-cycle or home station use.—*Radio Retailing*, June, 1936.

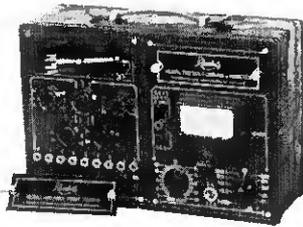
**F-M Washers, Ironers**

A new line of washers is announced by the Fairbanks, Morse & Co., Home Appliance Division, Indianapolis, Ind.

This washer line consists of five electric washers and two gas engine powered models. New streamlining with "dome" style lids add to their attractive appearance. These washers are equipped with the improved F-M hydrotor having six vanes to give multi-zone washing action and preventing tangling. Finished in gray and black.

To complete the line of home laundry equipment, three ironer models are also available.—*Radio Retailing*, June, 1936.

may be used for a desk stand. Obtainable in gunmetal or chrome finish.—*Radio Retailing*, June, 1936.



**READRITE Tester**

One of the outstanding items of the new "Ranger-Examiner" line of radio servicing instruments of the Readrite Meter Works, Bluffton, Ohio, is the Model 640-740 combination free point tester and volt-ohm-milliammeter. This instrument is adaptable for any purpose in voltage, current or resistance testing, either by direct contact with sockets or by the free point method.

It has a Triplett precision indicating instrument with scale readings: A.C. and D.C. volts, 10-50-250-500-1,000 at 1,000 ohms per volt; 1-10-50-250 ma. low ohms scale 0-300; high ohms to 100,000 with provision to increase the scale in 100,000 ohms steps by adding external batteries.—*Radio Retailing*, June, 1936.



**Coronet Tubes**

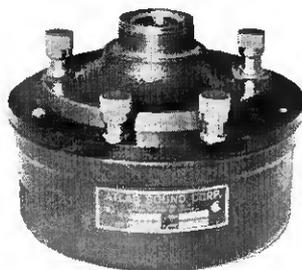
Type 6N6, 6R7, 25A6 and 25Z6 Coronet metal tubes have been added to the line of the Arcturus Radio Co., Newark, N. J.

The 6N6 is a duplex-triode power output tube, and the 6R7 is the duplex-diode triode, somewhat similar to the type 75 but with a mutual conductance of 1900 and a mu of 16.

The 25A6 and 25Z6 replace the 43 and 25Z5 respectively.—*Radio Retailing*, June, 1936.

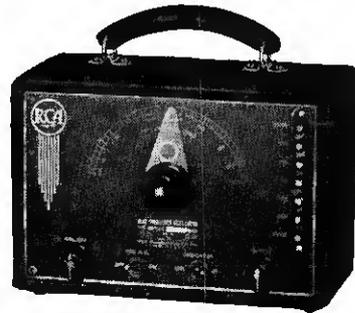
**AMPERITE Banquet Stand**

The smooth, positive action of the new banquet stand of the Amperite Corp., 561 Broadway, New York City, is due to the ball bearing clutch. A 1/4th turn with the tip of the fingers is all that is necessary to tighten the stand securely. Once tightened, it will not "creep" yet the ball bearing permits the microphone to be rotated without loosening the clutch. By removing the rod, the base



**NEW AUDIO OSCILLATOR**

RCA Beat Frequency Oscillator offers unusually wide range, 30 to 15,000 cycles. Entirely AC operated. Tapped output transformer, 5,000, 500, or 250 ohms; balanced to ground. Easily calibrated at 30, 60, 120, 180, 240 cycles, with neon indicator. Uses four new-type acorn tubes, one rectifier; tubes alone list at \$20.35. Price complete, including tubes, \$64.50, f.o.b. Camden



Here is a new RCA Beat Frequency Oscillator of the compact, portable type, offered at an unusually attractive price. This instrument was originally intended for radio service work, but its characteristics are such as make it also suitable for a wide range of laboratory purposes. In mechanical engineering, the Oscillator is invaluable in connection with the RCA Vibration Pick-Up and the RCA Oscillograph, to determine the frequency of a given vibration. Also useful in drawing fidelity curves of receivers, transformers, amplifiers, checking speakers for rattle, determining filter characteristics and similar frequency tests. Write for technical information.

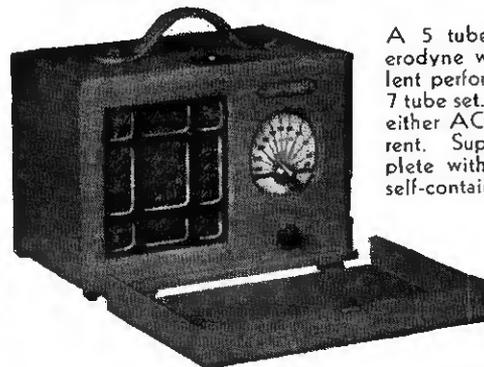


Parts Division, RCA MANUFACTURING CO., Inc. Camden, N. J. • A service of Radio Corp. of America

**RCA BEAT FREQUENCY OSCILLATOR**

**INCREASE YOUR SUMMER RADIO BUSINESS WITH THE NEW**

*Freed-Eisemann*  
**5 Tube Portable Superheterodyne Set**



A 5 tube Superheterodyne with equivalent performance of a 7 tube set. Works on either AC or DC current. Supplied complete with tubes and self-contained aerial.

List Price  
**\$25.00**

The newest radio for summer sales—an ideal portable set in attractively styled traveling cases.

This new radio will produce surprisingly increased sales for aggressive radio merchants all through the summer season. Available with three different colors of airplane cloth covering—brown, blue or natural linen—or five different shades of fabricoid covering—brown, blue, green, black or red. Easy to carry on vacation trips—weighs only 7 1/4 pounds. Size: 10" x 7 1/2" x 7".

Write for literature and prices on other FREED-EISEMANN models.

**FREED MANUFACTURING CO., INC.**

44 West 18th Street

New York, N. Y.

**339 De Luxe Analyzer**

**89 De Luxe Tube Tester**

**I WILL GIVE YOU BOTH THESE SUPREME INSTRUMENTS FOR ONLY \$9<sup>50</sup> DOWN + \$8<sup>49</sup> PER MONTH**

*Your Parts Jobber*

**189 SIGNAL GENERATOR**  
 Supreme 189 Signal Generator — both modulated and unmodulated — self-contained 400 cycle audio oscillator — unusual frequency stability through special electron-coupled circuit — carrier frequencies directly calibrated. Only \$4.00 DOWN and \$3.86 PER MONTH.

It is no longer necessary to save money to buy a SUPREME. Get the instrument now and pay for it on the easiest possible terms while you use it. Ask your Parts Jobber or write the factory about the S. I. C. Easy Payment Plan. Everybody's doing it!

**SUPREME INSTRUMENTS CORP. GREENWOOD MISS., U. S. A.**  
 EXPORT DEPT., ASSOCIATED EXPORTERS CO., 145 W. 45th STREET, NEW YORK, N. Y., CABLE ADDRESS: LOPREH. N. Y.

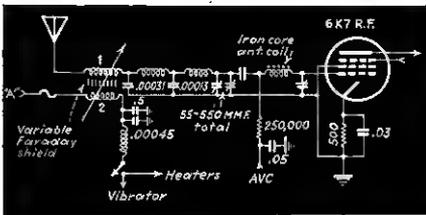
# SERVICE

DESIGN • REPAIRS • INSTALLATION

## NEW CIRCUITS

### Variable Faraday Shield

A Faraday shield, device through which r.f. may pass freely between two coupled coils by induction while electro-



static coupling is nullified by the grounding action, is used in a novel fashion in the Magic Eliminode section of certain new Motorola auto radios.

Noise picked up by the hot "A" lead tending to flow through coil 2 to the heaters or vibrator is "bucked out" by proper adjustment of coil 2 with respect to coil 1, connected in the antenna circuit. The shield consists of a slotted metal sheet between these two coils, which remain fixed with reference to each other to avoid phase distortion. Coupling may be varied by closing or opening the slots in this shield by variation of a "shutter."

The two r.f. chokes and associated condensers in the antenna lead, following coil 1, remove odd phase components of ignition interference and sometimes completely remove such interference entirely when it is of low intensity. High gain in the input circuit is achieved by use of an efficient iron-cored antenna coil, tuned by the usual gang condenser section.

Because suppression of noise originating in the "A" input circuit is bucked out by the action of coils 1 and 2 the hot "A" lead should under no circumstances be by-passed as this nullifies the bucking action.

Used for some time in amateur communication receivers and especially valuable where balanced, matched impedance antenna systems eliminate inductive noise pickup by downleads and electrostatic coupling must be avoided (noise picked up electrostatically by the line is otherwise fed to the input circuits through

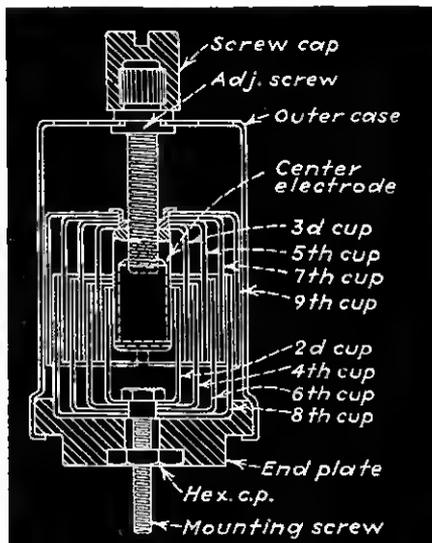
capacity between antenna and input circuit coils), this is the first example of Faraday shield application we have seen in commercial receivers designed for the general consumer.

### Coaxial Trimmer

Here is a sketch showing the mechanical details of a new 9-cup, air-dielectric, coaxial type trimmer condenser designed by Meissner. Mounted in a Bakelite container attached to a combination cover and mounting bracket available in a variety of styles this trimmer provides automatic friction locking at any capacity setting within its range, has no backlash and is noiseless in operation.

Adjustment of capacity is secured by rotation of a fillister-head screw located in the cover plate, which causes the cylinders to move axially with respect to each other. Capacity variation is substantially linear. Nine turns of the adjustment screw are required to cover the complete range. The movable electrode operates as a piston in the bakelite body and provides a seal to prevent the entrance of any foreign matter.

A relatively large area of compara-



### LOOK FORWARD . . .

Acoustic Compensators . . . . .	page 11
Frequency Allocations . . . . .	page 11
Time Is Money . . . . .	page 20
Dials on Display . . . . .	page 23
What We Hear . . . . .	page 27
News of the Industry . . . . .	page 29
1937 Sets . . . . .	page 51
Free Estimate Defense . . . . .	page 76

tively thick dielectric (air gap) is used so motion of a few thousandths of an inch produces a barely perceptible capacity variation, giving good vernier action. The unit shows no measurable drift on test equipment sensitive to 0.1 mmf. increments when subjected to temperature excursions of 150°F, 100 hours of intensive vibration or 100 hours of exposure to 95% relative humidity at 76°F.

### New Tubes

Hygrade-Sylvania supplies data on the following new tubes:

1E7G A 2 volt, 0.240 ampere filament type double pentode power amplifier, glass with an octal base. Screens hooked together internally. Suppressors connected together and to filament. Ratings and characteristics are:

Plate voltage . . . . .	135
Screen voltage . . . . .	135
Grid voltage . . . . .	-4.5
Plate current (per sect.) . . . . .	7.5
Screen current (per sect.) . . . . .	2.1
Plate resistance . . . . .	220000
Mutual conductance . . . . .	1600
Amplification factor . . . . .	350

Typical operating conditions, both sections in Class A push-pull:

Grid voltage . . . . .	-7.5
Plate current (total) . . . . .	6.5
Screen current (total) . . . . .	2.0
Load resistance (p. to p.) . . . . .	24000
Power output . . . . .	0.650
Harmonic distortion . . . . .	5

Cheer, all you builders of portables and ultra-high frequency mobile equip-

ment! Compare with 1F4 and 33. Base connections, looking at bottom and reading clockwise after the locator pin; Screens, filament, plate 1, grid 1, grid 2, plate 2, filament, open.

6J5G A 6.3, 0.3 ampere heater type general purpose amplifier, glass with octal base. Same amplification factor as 6C5 and 6C5C but more mutual conductance, less plate impedance and only one-third the output capacity, making it swell for ultra high frequencies. Operating conditions, Class A amplifier, are:

Plate voltage .....	250
Grid voltage .....	-8
Plate current .....	9
Plate resistance .....	7700
Mutual conductance .....	2600
Amplification factor .....	20

Base connections, reading clockwise after locator: Open, heater, plate, open, grid, omitted pin, heater, cathode.

6K5G A 6.3 volt 0.3 ampere heater type high-mu triode similar to the triode section of the 6Q7G but with more mutual conductance and corresponding reduction in plate impedance. Amplification factor somewhat lower than the 6F5 or triode section of a 75. Class A operating conditions:

Plate voltage .....	250
Grid voltage .....	-3
Plate current .....	1.1
Plate resistance .....	50000
Mutual conductance .....	1400

Base connections, reading clockwise after locator: Open, heater, plate, open, open, omitted pin, heater, cathode. Top cap is grid.

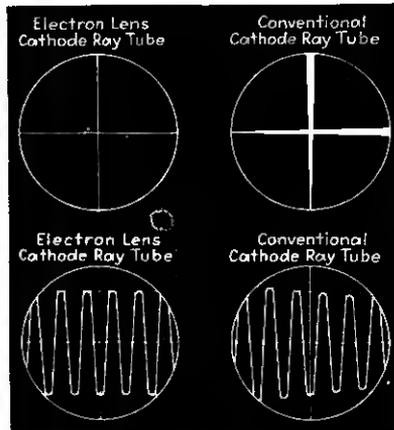
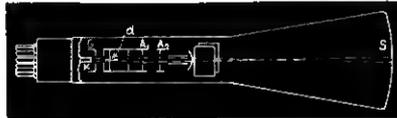
5Y4G Fullwave rectifier identical to an 80 except base is octal with following connections, looking at bottom and reading clockwise after locator pin: Open, open, plate, open, plate, open, filament, filament.

5X4G Fullwave rectifier identical to 5Z3 except base connections are: open, open, plate, open, plate, open, filament, filament.

6X5G Fullwave rectifier identical with 84 except for base connections which are: open, heater, plate, omitted pin, plate, omitted pin, heater, cathode.

6B4G A 6.3 volt, 1 ampere filament type power amplifier triode identical with 6A3 in characteristics. Base connections: Open, filament, plate, open, grid, open, filament, open.

6K6G A 6.3 volt, 0.4 ampere heater type intermediate power pentode identical with 41. Base, like all other tubes described above, is octal. Glass envelope. Connections, looking at bottom and reading clockwise after the locator: Open, heater, plate, screen, grid, omitted pin, heater, cathode.



### Electron Lens

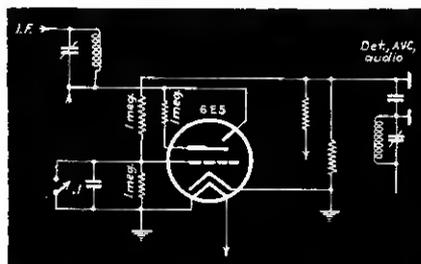
Electrons from cathode "K" in the Na-ald Models EC3 and EC3B electron lens cathode ray tubes are focused into the small opening "d" so that the actual shape of the object aperture is reproduced on the screen "S". The intensity of the beam is controlled by the voltage on grid "G". Electron lenses A1 and A2 act as compound lenses focused by the voltages applied. This construction, according to Alden Products, results in a fine, "penpoint" trace.

Electrostatic shielding between horizontal and vertical deflecting plates prevents coupling effects in the electron lens structure and avoids "keystoning" distortion, shown in the pattern diagrams.

### 6E5 Hi-Fidelity Switch

Certain Fairbanks-Morse Model 90 receivers and Number 110 chassis are equipped with a 6E5 tuning indicator and it will be noted that the switch shown in the diagram, operated simultaneously with the "3rd Dimension" control, renders this indicator inoperative when the set is used in the high-fidelity position, removing from the 6E5 grid bias ordinarily obtained from the a.v.c. circuit.

The .1 mfd. condenser simply by-passes any audio which might otherwise reach the 6E5 grid to ground, keeping a.f. out of the indicator.



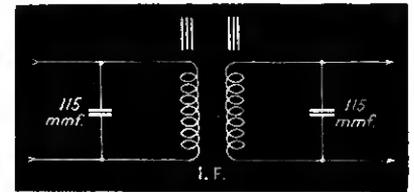
### New 6H6 Rating

The direct current output rating of the 6H6 has been increased to 4 milliamperes, maximum, for either full or half wave operation. The a.c. voltage per plate remains at 100 volts RMS minimum. This higher current rating permits the use of the tube in a wider variety of circuits than heretofore. The use of this type as a power rectifier to furnish a fixed C bias to a power amplifier is suggested.

### Permeability Tuning

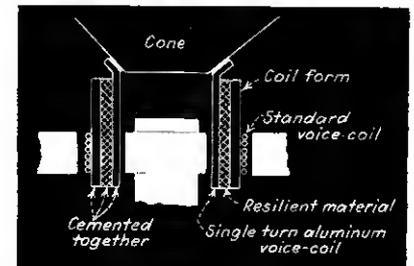
I.f. stages of RCA auto-radio Models 5M, 6M and 6M2 are permeability tuned. That's what the tricky gadgets shown above the windings in the diagram indicate.

The transformers and their associated fixed condensers resonate at approxi-



mately 262 kc. Variation of the position of the moulded iron cores within the coils provides the alignment adjustment.

You'll find this in certain of the home models too. The T6-11 and C6-12, for example.



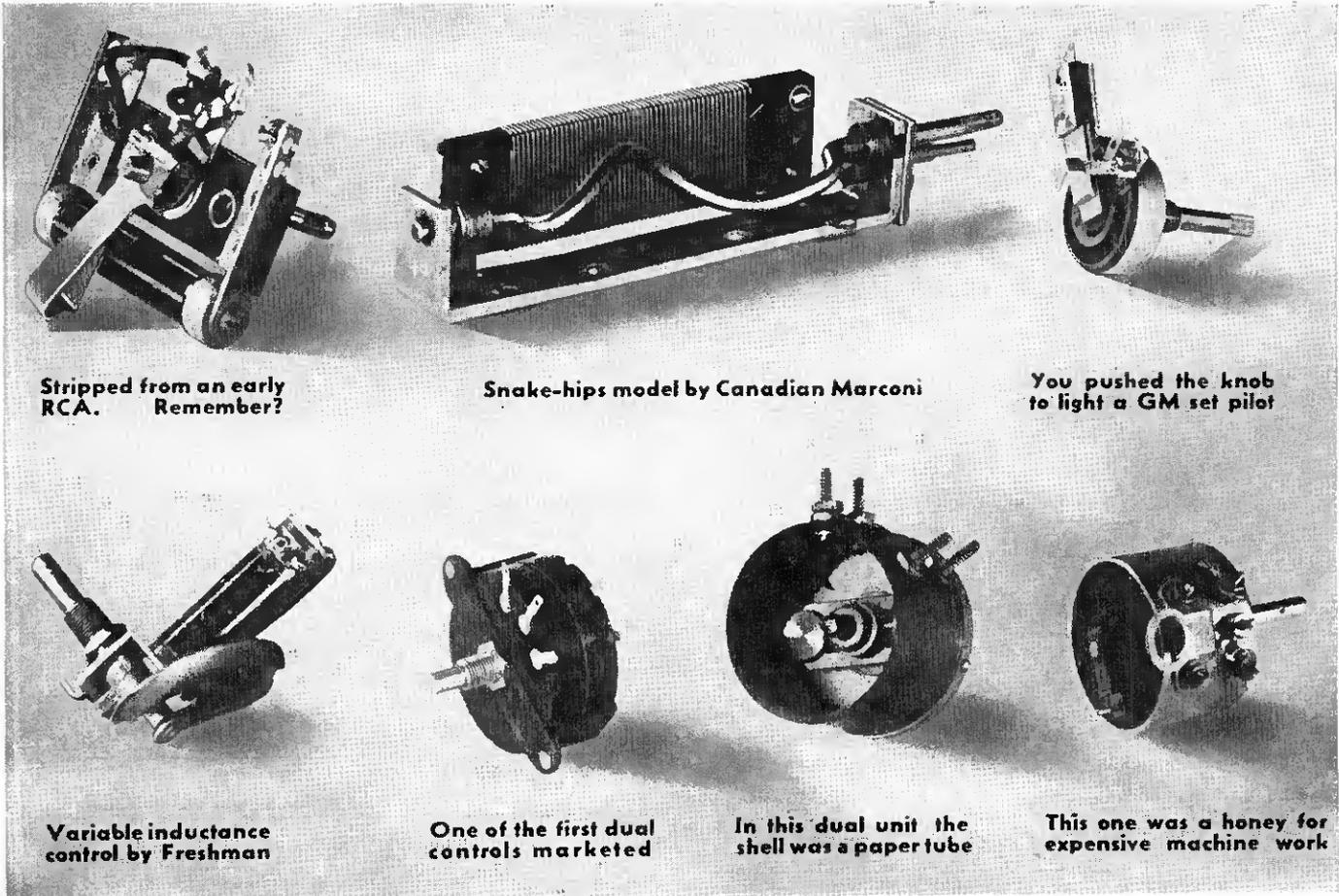
### Double Voice-Coil

Because double voice-coil speakers, irrespective of design detail, have interesting possibilities as a means of reproducing both high and low audio frequencies faithfully in one unit we publish this cross-section view of the Maxnavox "Duode," made in England by Benjamin Electric.

A standard voice coil consisting of copper wire wound on the usual insulating form is coupled electrically through a suitable matching transformer to the receiver. A single-turn aluminum voice coil, or inner sleeve, is coupled mechanically to the standard voice-coil and fastened, as well, directly to the curvilinear cone.

At low frequencies the copper-wound coil drives the cone through the resilient

## CONTROLS THAT TIME HAS PASSED BY



Stripped from an early RCA. Remember?

Snake-hips model by Canadian Marconi

You pushed the knob to light a GM set pilot

Variable inductance control by Freshman

One of the first dual controls marketed

In this dual unit the shell was a papertube

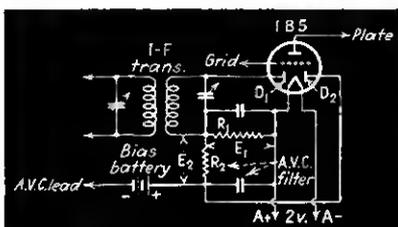
This one was a honey for expensive machine work

(Collected for Radio Retailing by the Yaxley Mfg. Div., P. R. Mallory & Co., Inc.)

material. The degree of resilience is small enough to avoid appreciable mechanical loss. At high frequencies, above 5,000 cycles, the mechanical driving force provided by the copper-wound coil becomes progressively less. Current is, however, induced in the aluminum sleeve voice-coil with increasing efficiency so that this inner sleeve takes up more and more of the driving load.

### Delayed AVC

Here is a diagram of a simple avc circuit that delays avc action in battery-type receivers until the carrier voltage at the detector exceeds a certain value. This circuit uses the filament voltage of the 1B5 as the delay voltage; hence, no separate battery is required for delay purposes.



When no signal is received diode  $D_2$  is positive with respect to the negative side of the filament; therefore, current flows through  $R_1$ ,  $R_2$  and the  $D_2$  filament circuit. When the carrier voltage at the detector exceeds  $E_1 + E_2$ , the avc diode  $D_2$  does not conduct; full avc voltage is then applied to the controlled tubes. No avc action occurs until the carrier voltage at the detector equals  $E_1 + E_2$ .

The voltage drops across  $R_1$  and  $R_2$  must be considered when the bias applied to the controlled tubes is determined, according to Radiotron.

### 5V4G

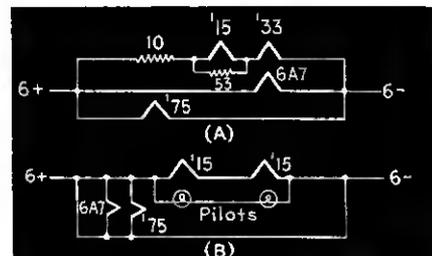
The 5V4G, a new tube on which Hygrade-Sylvania forwards data, is a 5 volt, 2 ampere, heater type, fullwave rectifier of the glass type using an octal base. It is identical to the older type 83V.

Note that while only four connections are made from elements to base pins this tube comes through with 8 pins. Connections, looking at the bottom and reading clockwise after the locator are: open, filament, open, plate, open, plate, open, filament.

### 6 and 2 Volt Tubes in Same Chassis

Should one or more of the tubes fail to light in Tatro Model 4626, tracing the heater circuits might give you a bad half hour as tubes of the 6 volt and 2 volt series are used in the one chassis to keep current drain to the minimum and the required series and parallel tube and resistor arrangement is somewhat complicated. It is shown in Fig. A.

A similar arrangement is used in the new models 5636 and 6236, in which pilot lights take the place of the resistors. Failure of either pilot will, of course, raise the devil with voltage and current distribution. See Fig. B.



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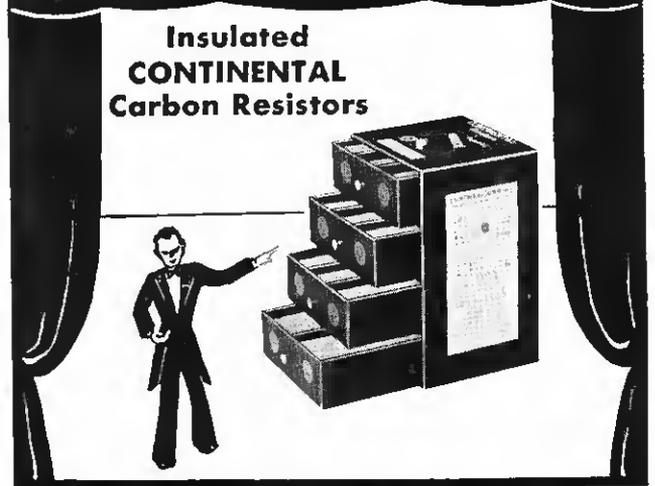
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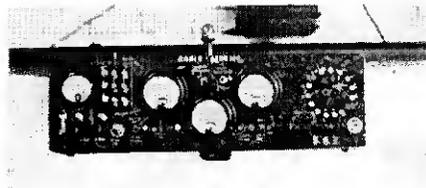


74 Washington St., Brooklyn, N. Y.

**Auto Radio Analyzer**

By Paul Freed

This season, in order to improve our special auto radio installation and repair department, we designed and built a compact test instrument. With this instrument, a factory-made tube-checker and analyzer, a vibrator tester, an os-



illator and other purchased equipment, we believe we can give more rapid and efficient service to the general public and to the dealers, car agencies and auto supply houses whose work we handle on a contract basis.

Throw bench switch "B" to the right and the 6 volt battery is in charge position. The charger automatically connects to the a.c. line and a panel pilot light goes on as a reminder. The 6 volt panel circuit is dead.

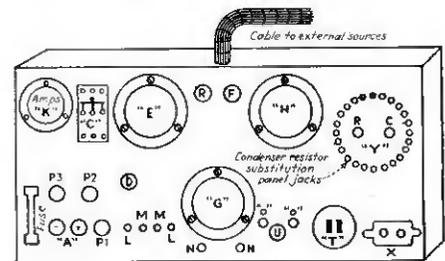
Throw bench switch "B" to the left and the 6 volt battery is connected to the panel circuit. Now the charger and its associated pilot go dead. Throw panel switch "C" to top position and panel posts "A" become 6 volts hot, and the associated pilot lights up. Automatically, meter "E" goes into voltage test position, available at test prods "L". Connect set under test to posts "A" and ammeter "K" immediately shows continuous amperes input to the set. Throw up switch "F" and 10 volts may be measured on meter "G", indicating battery condition.

For continuity tests, throw panel switch "C" to bottom position, which throws meter "E" into ohmmeter position, 100,000 to 100 ohm scale. Auto-

matically the 6 volt panel circuit goes dead, its pilot goes out, the set goes dead and there is no chance for forgotten high voltage to wrap the ohmmeter needle around the stop. For readings 100,000 ohms to 5 megohms, use external 350 volt d.c. pack in series with a 350,000 ohm resistor and jacks "M", leave posts "L" open. For readings of 1 to 300 ohms, short out posts "L" and insert test prods in jacks "M".

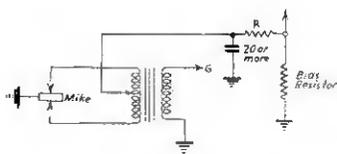
For an output meter, use tip jacks "M" of meter "G" in series with external rectifying and coupling unit. Meters "G" and "E" are Weston 301, 1 mil. movement types. Meter "H" is a 0-100 mil. movement instrument of the same type. Meter "K" is a similar 0-15 ampere movement.

For vibrator tests connect tip jacks "N" and "O" of meters "G" and "H" to respective posts on Radiart P-6 vibrator-transformer-buffer analyzer or



equivalent, which has its own built-in ammeter. Read amperes input, volts output and rectifier milliamperes. Switch "F" must be in 300 volt position for vibrator readings on meter "G", or external voltage readings available at jacks "N". Buffer condensers are available at jacks "Y".

Use socket "T" for any 110 volt a.c. source necessity. Use panel jacks "X" to connect your bench speaker to set under test. Various condensers and resistors for rapid substitution of defec-



**Mike Current**

By Paul E. Grivet

Microphone current may be secured from almost any amplifier by placing a resistor (R) in parallel with the output tube bias resistor, or driver tube bias resistor. The added resistor should be a value which will permit about 10 ma. to flow in the shunt circuit, by actual measurement.

The accompanying circuit shows such a good hookup for a double-button carbon microphone. In this case the input transformer tends to balance out any existing hum because the mike current divides and flows in opposite directions in the two halves of the winding. However, be sure to use at least 20 microfarads of filter condenser in the position shown.

The value of the original bias resistor must be increased until the voltage across the new combination is the same as that measured before changes were made. If the output tubes are operating in Class-A-Prime or Class-B use the driver bias voltage.

**Centering Cones Without Center Screws**

By George P. Dey

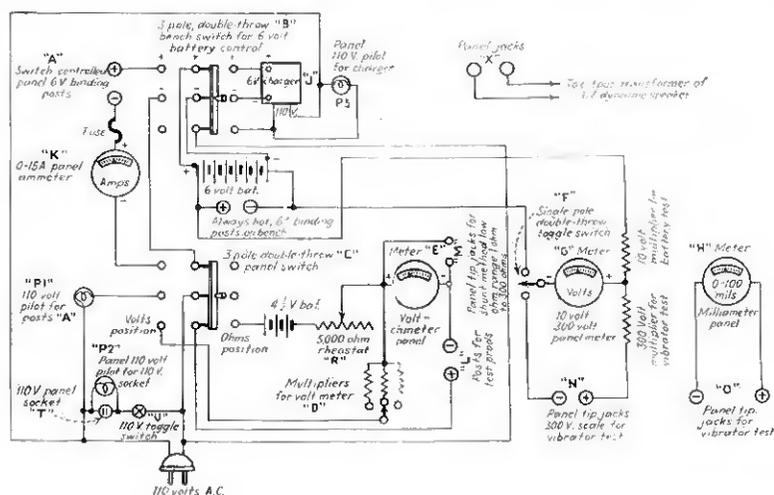
The difficult cones to center, we have found, are those without center-screws through the spider, i.e., those with extended-side spiders. Cutting flaps in the cone with a very sharp knife, placing shims around between the voice-coil and the center pole, lifting the flaps and working through the holes with ordinary Spintites is a simple solution.

When the job is finished turn the flaps down and permanently seal the breaks with Du Pont Cement.

**Neon Sign Noise**

By E. A. Wight

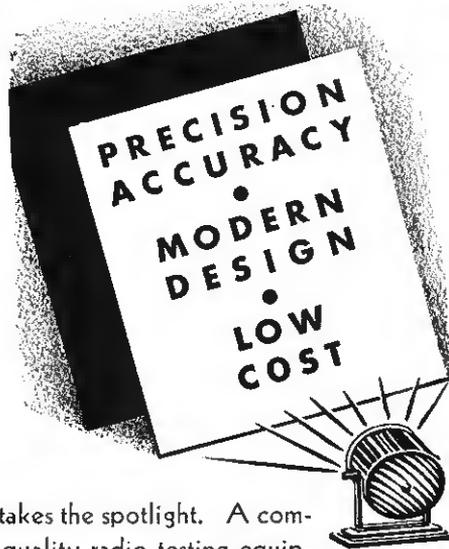
Dealers who use neon signs and find that the interference from them makes it difficult to demonstrate radios will be interested to know that the noise may frequently be eliminated by wrapping the letters with very fine wire, small enough to be invisible from a few feet away, and grounding this wire.



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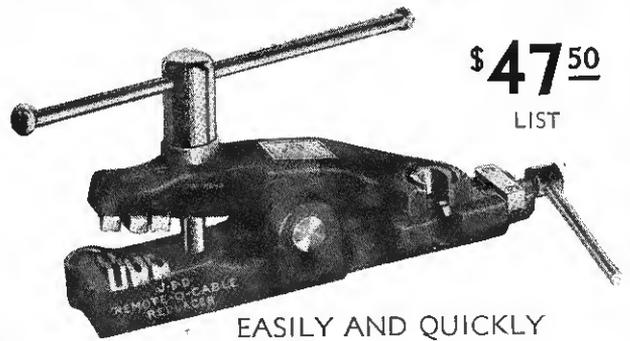
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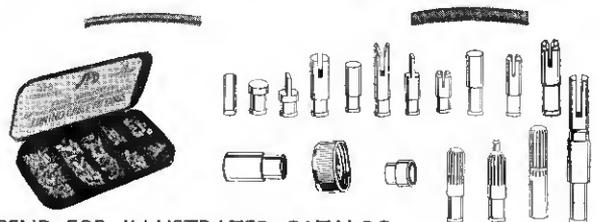
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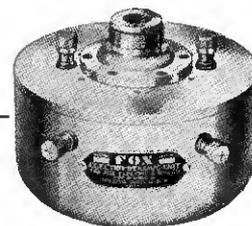
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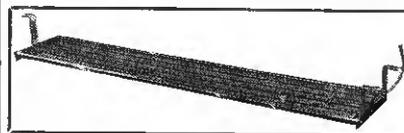
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tive components are available at panel jacks "Y". Arrange widely used tools on a special tray at the right side of bench top so that no time is lost searching for needed tools.

## Auto Pack Ear-Tests

By Joel Tall

Auto-radio vibrators are divided into two general classes, synchronous and non-synchronous. Failure is about equally common in both types but the non-synchronous devices are most easily repaired. It is, however, generally best to replace them if the customer can pay since it is rarely possible for the serviceman to restore the original finish to the contact points and obtain accurate spacing of the reeds.

In the great majority of sets using synchronous vibrators no station signal, accompanied by a growling hum, is a sign of a shorted vibrator by-pass condenser. No sound at all except the mechanical buzz of the vibrator may indicate an open circuit in the vibrator output or, in some instances, an open or shorted filter condenser. An uneven, rippling hum, accompanying the station signal, is indicative either of a poorly adjusted (synchronized) vibrator or an open filter. A crackling, sparking noise with the signal is generally due to arcing contacts, or arcing in the by-pass condenser or at its terminals. Sometimes, too, this same noise is due to poor grounding of the vibrator shield. A loud, clattering, mechanical vibrator noise is generally due to mal-adjustment of the vibrator. These sounds are sometimes heard in combination.

In both synchronous and non-synchronous types the most usual trouble is the burned or jammed starting or "A" contact, resulting in burned out fuses and a touchy car owner.

Non-synchronous vibrators, if not troubled with the above symptoms, generally are subject to only three or four major ills. Hash is caused by a leaky rectifier tube plate by-pass or an open in this condenser. Very low volume, accompanied by a hum, is caused by a short or very low resistance short in the same condenser. Good volume, with a little hum, is due to loss of filter capacity. Poor adjustment of contacts results in the vibrator drawing more current than it should and, in excess vibrator noise, both mechanical and electrical. In the cheaper types of non-synchronous devices improper adjustment results in soldered leads melting off on account of the heat, and in burned reeds, around the contacts.

In both types, individual makes give certain peculiar troubles.

In sets using dynamotors, or motor generators very little trouble is encountered as a rule with power sup-

plies. Sometimes poor grounding of the generator produces grief. If the generator is not grounded to the same point as the set ground there sometimes is a generator whine, generally high-pitched, received through the speaker. If the generator polarity is reversed the output voltage will be reversed and the generator will labor, running about one-half its normal speed. Too much lubrication is poison to a generator. Just enough should be used to keep the wick saturated. A light vaseline will do the trick nicely. When cleaning a generator be careful to get brushes back correctly. There is a difference in resistance between "A" side and "B" side brushes of some jobs.

## Tubes For Trial

By Joseph Kahane

Many servicemen have occasion to remove new tubes from boxes to try them in receivers. As a result, the average shop accumulates unsightly, unsealed boxes.

Cut a slit with a razor blade in each of the four corners of the bottom side, in the direction of the arrows.

## Oil Burner Noise

By E. A. Wight

Complaints about noise from oil burners, when these devices start up, may usually be corrected by placing an automobile suppressor on the high tension lead to the ignition.

## Muffler Ground

By S. J. Pensock

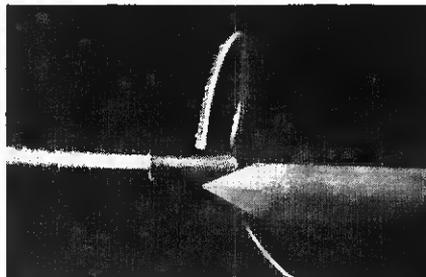
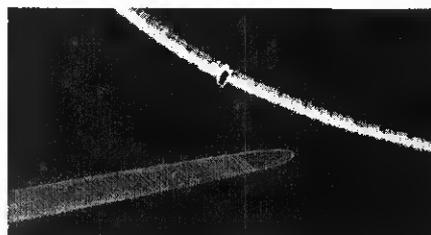
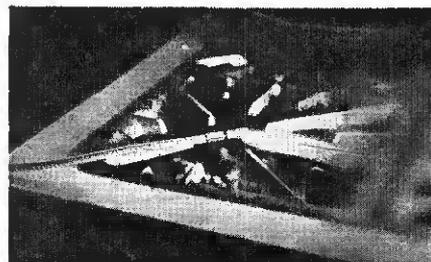
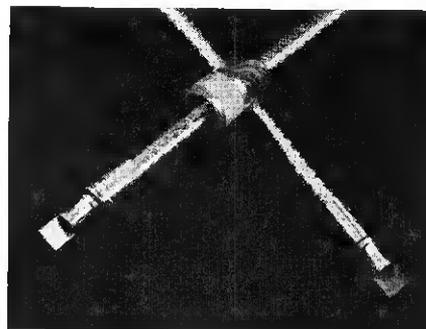
On most cars using underneath antennas it is advisable to ground the muffler to the frame. The exhaust pipe frequently picks up noise, transfers it to the antenna if this is not done.

## Shortening Auto Cable

By Ben South

Auto dial cable supplied with receivers is usually in 24-inch lengths. When tuning escutcheons are dash-mounted this leaves considerable slack, which gets in the way and creates unnecessary play. Shortening cable without prepared segments requires a "system" if the spiral torque type wire is not to unravel. The following method is safe, if slow.

Always shorten the end nearest the chassis because its collar is the easiest to remove. This end is at the left in the



first photo. Heat the end over a burner. Use care in pulling it off and do not squeeze the slotted end of the stud. It comes off hard even when hot. Then pull the cable out of the casing, as shown in the second photo.

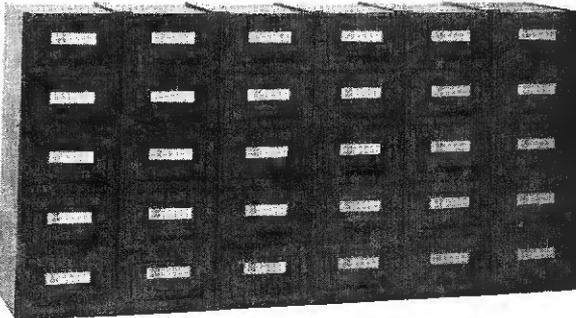
Determine the required length and file around the casing to make a clean cut. A hacksaw leaves too ragged an end. See third photo. The light metal sleeve on the casing may be removed with pliers and slipped on the freshly cut end of the casing.

Insert the cable and note where it comes through the casing. Sweat solder into the cable at this point and carefully file it apart. Ream out the stud and sweat solder into the clean hole. Also apply solder to the cable, as shown in the fourth photo and slip the stud on. File away any excess solder which might make the action bind. I always charge a dollar extra when there is a request to shorten a cable and if you try it you will find that 20 minutes is good time and that it is, therefore, worth a buck.

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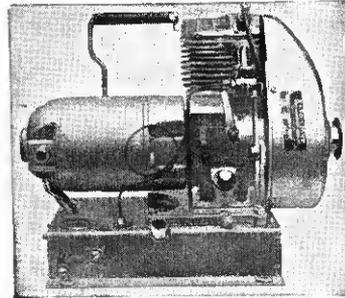
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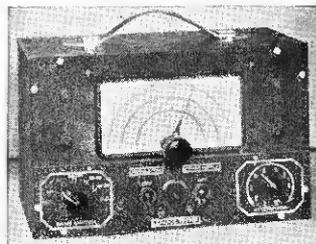
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### AK 37, 40, 41, 42, 43, 44, 53, 54, 55, 55C, 60

Installing volume control strips . . . Connect replacement strip across 110 volt, a. c. line in series with a 75-watt lamp for one minute. This will make the strip pliable so that it can be inserted in the control shell without breakage.

### AK 55 TO 67

Fading, intermittent reception . . . Often due to poor connections at various tubular condensers. Also, resistors are mounted on insulating strips, the connecting lugs being integral parts of these strips. Resistors of metallized variety with solder ends are soldered to rather gingerly by factory to avoid melting and poor connections frequently develop. Test all resistor connections mechanically and electrically, moving them while ohmmeter is attached. Connect ohmmeter prods to lugs rather than to resistors.

### AK 145

Audio squeal, unaffected by touching 2A7 or 58 grid caps but aggravated by touching 2A6 grid cap . . . Unsolder, remove and throw away metal clamp around 2A6 grid lead at point of grounding. Solder the wire twisted around the grid lead to the point at which clamp was soldered. It is impossible to detect this trouble with instruments.

### COLONIAL 31AC.

Set dead, no bias on r.f. tubes even though bias resistor checks ok . . . Diagram shows r.f. filament winding in power transformer as being center tapped. Actually, a center tap wire wound resistor is, sealed in the transformer case and these open up. Replace with an external 10 or 20 ohm center tapped resistor mounted on transformer terminals.

### CROSLEY 8H1

Excessive hissing between stations . . . Change 6F7 cathode resistor, a small, flexible type mounted on the back of the chassis, from 500 to 250 ohms. Also, shunt a 2,000 ohm resistor across the cathode bias resistor of the 6D6, nearest the power transformer.

### CROSLEY 171

Q. A. V. C. won't work, poor volume . . . Bad section in candohm resistor part number W28471.

### CROSLEY 148

Intermittent reception . . . High resistance short often develops in the padding condenser due to entry of dust and dirt. Clean with carbon tetrachloride.

### CROSLEY 148-FIVER.

Set dead below 1,200 kc., volume control inoperative after half revolution, oscillation over entire band . . . Suspect the 6-8 electrolytic and substitute another for test as it sometimes shows up ok with respect to leakage and still causes trouble. Use a higher breakdown type.

### CROSLEY 515

Weak, or intermittently weak . . . Section 7Z (.02, 200 v., 6D6 cathode bypass) of part W28623 dual tubular condenser is probably at fault regardless of how it may test. Snip leads and substitute a single replacement unit.

### CROSLEY 814

Distortion, poor volume and sometimes no signal . . . Open 10,000 ohm candohm resistor section. This is from screens to ground.

### EDISON R4

Installing dial cable . . . Remove two gang condensers on the left, also tuning mechanism and dial. Tearing of the cable is often due to insufficient turns on drum shaft. Drum should have 4 or 5 turns on it. No reception . . . Aluminum wires on cone sometimes open up.

### EDISON R6, R7

Pronounced rumbling or drumming when very low-frequency bass is being reproduced . . . Voice-coil strikes field housing at bottom of voice-coil passage. Remove speaker head assembly and insert thick, cardboard washer to give the coil more travel distance.

### EVEREADY 50

Economical repair when high resistance section of dual volume control burns out or goes bad mechanically . . . Remove defective section and substitute a 50,000 or 75,000 ohm, 2-watt fixed resistor. Control will be satisfactory in most locations.

### GENERAL ELECTRIC A54.

Oscillation or distortion at low fre-

quency end of broadcast band when tone control is in high, counter-clockwise, position and not when it is in low . . . May be due to open in capacitor C27 or high resistance solder joint to this condenser.

### GENERAL ELECTRIC A63, A65.

Distortion . . . Open or partly open 6F5 plate resistor, R8 in diagram, 250,-000 ohms.

### GENERAL ELECTRIC A67.

Noise, resembling interference gradually becoming distortion . . . Defective 500,000 ohm, 6F6 grid resistor. Sometimes hard to locate as it measures correct value when set is turned off.

### GENERAL ELECTRIC A64, A66, A67.

Severe a.c. hum . . . Accidental contact between high voltage a.c. terminal of the 5Z4 tube socket and the electrostatic shield of the cartridge by-pass condenser C23 causes a hum unlike poor filtering.

### GENERAL ELECTRIC J107.

Stuttering, volume same as when AVC tube is pulled out . . . Replace C38, C21, C19, C36, C35. These are, in the same order, 10 mikes at 200 volts, .5 at 600, .1 at 600, 10 at 400 and 10 at 400. Trouble is due to high resistance short between capacitors.

### GENERAL MOTORS 120, 130, 140.

Weak reception or dead set in serial numbers below 29100A or 1700B, all voltages, condensers and resistors apparently ok . . . Strap a 200 ohm, 10 watt resistor across the 240 ohm section of the voltage divider used for bias to decrease control grid voltage of tubes and snap up sensitivity.

### GREBE SK-4

Annoying 60-cycle hum, filter condensers ok . . . Replace 0.1 condenser mounted at detector tube.

### GRUNOW 6D.

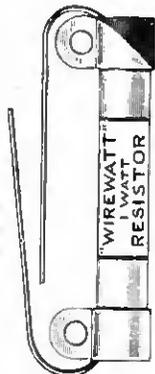
Intermittently refuses to start once it is turned off . . . Replace 75.

# "NEVER A PEEP FROM WIREWATT!"



says  
*Bill Fixit*

This wire-wound resistor rated at one watt is absolutely noiseless! And resistance values do not vary with voltage and temperature changes. WIREWATT makes many repair jobs better than new. Being the same size as composition units, WIREWATTS are useable in nearly all radio circuits. They are wound over a porcelain core, and covered with special insulating material. Resistance wire is mechanically locked and then brazed to terminal lugs. The 1½ inch tinned lead wires guarantee easy installation. WIREWATTS are made in values from 100 through 25,000 ohms. Ask your jobber or write for Catalog 14.



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MANUFACTURING COMPANY

4845 Flournoy St., Chicago, Ill.

Manufacturers of Resistors and Rheostats of All Types



The EYES have It!

YOUR eyes and the MAGIC TUBE see all, know all . . . QUICK AS A WINK!

**SOLAR Precision**

**CAPACITOR-ANALYZER and RESISTANCE-BRIDGE**

Capacity, power factor, leakage, resistance, directly on the panel. The highly sensitive No. 208 Cathode Ray Tube is used for balancing. Dials are color-coded to match settings. A refined and extended Wien bridge, built into instantly useful form for laboratory, shop and field work.

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SOLAR MFG. CORP., 599-601 Broadway, New York City

UTAH RADIO PRODUCTS CO

DALEANS ST. CHICAGO, ILL.

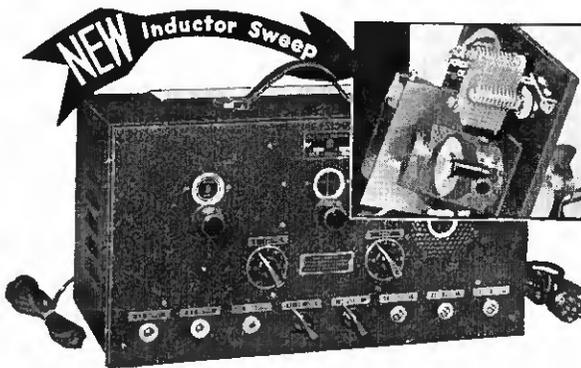
# TITAN FLASH

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NEW AND UP-TO-DATE REPLACEMENT VIBRATOR GUIDE NOW READY FOR DISTRIBUTION STOP WHERE SHALL WE SEND YOUR COPY ADVISE UTAH RADIO PRODUCTS CO - CARRINGTON P S NEW SPEAKER CATALOG JUST CAME IN STOP HAVE COPY OF THIS RESERVED FOR YOU ALSO

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**CR AGAIN**—Kendall Clough presents a great new achievement in Cathode-Ray Equipment



The "INDUCTOR SWEEP"

Frequency Modulated R-F Signal Generator

No rotating condenser—No impulse generator—No commutator

After two years of continuous research and field experience, this new method of frequency "wobble" has been developed. The copper disc, rotating in the field of the solenoid coil, provides uniform frequency sweep for all test frequencies. Eliminates all mechanical and electrical uncertainties. Ask your jobber to demonstrate or write for new announcement bulletin.

Clip and mail today.

Send at once new bulletin describing the "INDUCTOR SWEEP" Frequency Modulated R-F Signal Generator for use with the Cathode-Ray Oscillograph.

Name .....

Address .....

**The CLOUGH-BREngle CO.**

1130-C W. Austin Ave., Chicago, Ill.

1937 RADIO SET

SPECIFICATIONS

# JULY is an advertisers opportunity . . . WILL YOU BE THERE?

Radio Retailing's 12th annual tabulation of radio set specifications will be moved ahead to the July issue due to rapid manufacturing progress and consumer demand for new, smarter radio set models. It is bound to be a great issue—a yearly selling guide—chock full of lasting qualities.

**It Will Carry 1937 Radio Set Specifications**

Every worth while radio set, name and model will be listed—all important set specifications will be given. The July Radio Retailing Issue will actually be an engineering directory supplemented with editorial profit making selling material for the dealer.

**Radio Retailing July Forms Close July 1**

There is no time to lose—if you want your advertisement in the best position—send your reservations for space in today!

Radio Retailing, 330 West 42nd St., N. Y. C.

**JULY**

**ISSUE**

## MAJESTIC 90

Loud, irritating buzz occurring at short intervals . . . Frequently caused by poor connection where resistance wire of ballast unit is attached to the prong. Clean and tighten.

## MAJESTIC 90

Antenna choke tuned by a .001 condenser frequently opens up . . . Can be replaced with the good coil section of a 175 kc., i.f. transformer from an old Radiola 80. Saw through the center of wooden spool and mount good coil in chassis. A hole is already there.

## MIDWEST 16-34.

Poor selectivity and weak reception . . . This model does not hold its alignment due to shifting of windings on coils. Coat all coils with wax or liquid cement and realign all trimmers. Go over all trimmers a number of times to uncover interaction between circuits. Before realigning install a 3 or 4 plate variable midget condenser in place of the tone control assembly. Tone control assembly can be mounted on the side of the cabinet. Parallel this variable condenser to C19, which is an adjustable coupling unit between oscillator circuit and mixer grid. This condenser affects tuning of various bands and by having it variable from the outside efficiency will be considerably increased. While aligning set at 450 kc. have the newly installed condenser set at about  $\frac{1}{4}$  mesh and screw C19 to minimum. Unstable operation . . . Ground more thoroughly all shielded cables of this receiver. Double ground the three coil and trimmer frames. Do not depend on rivets. Realign.

## PEERLESS AC SPEAKER.

Fields ok but speakers refuse to operate . . . Although transformers check ok they are generally defective. Remove speaker from iron base. Remove transformer, remembering the order of the parts to facilitate replacement. Pry open heavy copper single turn secondary and slip it off. Remove screws holding iron core and slip leg holding coil out. Then remove coil. Cut off old primary, saving the form. Wind new primary using number 38 enameled wire. Scramble winding is ok. Wind on 800 ohms. Re-assemble and center cone.

## PHILCO 1936 TRANSITONE.

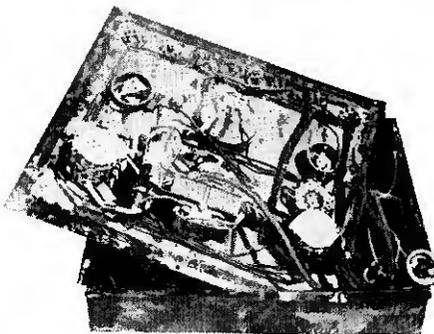
Intermittent reception . . . Loose antenna plug insulator should be filed to almost the level of the plug as it is too long, preventing good contact.

## PHILCO CUSTOM AUTO RADIOS.

Burning of wires to control head . . . Two wires coming from the tuning head are held in position by a thin clamp. This is not necessary and in some cases where the U clamp is drawn tight it punctures the insulation.

## PHILCO 59C, 59S.

Low volume, no reception on low frequencies . . . Take out antenna and oscillator coils and resolder all connections, tighten all screws on tuning condensers. Replace 6,000 ohm resistor and 1,400 mmfd. condenser. Align.



**FLOODPROOF**—Here's the way a Radiotechnic Laboratory tube tester looked after the Wade Tire Company's shop was flooded by recent high water at Pittsburgh. Believe it or not, the thing worked after it was dried out despite the fact that two fibre washers used for mechanical separation had actually dissolved!

## PHILCO 29.

Audio whistle and bubbling hum . . . Common bias by-pass, a .09, for the two 39's opens.

## PHILCO 80.

To improve volume and quality, especially in models with a star stamped on chassis . . . Change 1 meg. grid resistor to 0.5.

## RCA R27

Speaker rattle after a few months of use . . . Remove set from cabinet and glue two pieces of cork at top and bottom of place where speaker cone comes. These should be just thick enough to come in contact with the cone, forcing it back slightly.

## RCA R28.

Loud "putting" noise despite good tubes, correct voltages . . . Caused in many cases by oscillating mixer section of 2A7. Remove wire feeding screen voltage to this tube section and insert an r.f. choke in series, bypassing from the screen to ground with a .5 condenser.

## RCA 118, 211.

Intermittent operation or fading .015 coupling condenser C28 partially opens. In later production this is a .02. Replace with .02, 600 volt. Connects from 42 grid to 6B7 plate and is located under main resistance strip. Align at 460 kc.

## SILVERTONE 42.

Unsatisfactory reception from 950 to 540 kc., noise and whistles accompanying signals . . . Ground one side of the antenna coil to the chassis. Connect external ground to chassis after this is done to further improve dx reception and reduce hum.

## STROMBERG 10, 11.

Fading, making it necessary to operate volume control well up . . . Seven hundred ohm section of voltage divider opens commonly. Replace with 10-watt unit.

## TCA CHASSIS.

Used in Temple 10, Brunswick 10, Clarion 40, Bulova M501, Columbia SC31, this chassis has a tuned filter system with all inter-connections inside a can. When any section fails the entire block must be replaced. Exact duplicates are difficult to obtain so the following is sometimes used as a substitute: Connect a .0005 from the 47 control grid to chassis, a .01 from one side of switch to chassis, a 12 mike electrolytic from high voltage end of Candohm resistor to chassis, an 8 mike electrolytic from 80 filament to center-tap of high voltage winding. A tone condenser may be connected between the tone switch and chassis if desired but in most instances this has been omitted by repairmen as it is rarely used. Capacity, .02. Scratchy sound similar to defective audio transformer . . . Usually found in the Candohm. Cut wires inside unit for a considerable distance in each section with sharp knife, then solder a 10,000 ohm, 10 watt resistor across the high voltage section and a 5,000 ohm 10 watt unit across the low voltage section. The original terminals make excellent anchor lugs.

## TRAV-LER C.

Weak . . . Check yellow resistor under chassis, mounted with a red and blue resistor. Increases in value sufficiently to almost stop reception.

## ZENITH 880.

Distortion and AVC blocking . . . Shorted .0004 condenser, part 22-285 in first r.f. coil can.



Mr. F. H. Rietzke, President of CREI and originator of the first thorough course in PRACTICAL RADIO ENGINEERING.

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DEPT. RR-6

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1 inch . . . . . \$8.00  
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**New — Used — Rebuilt  
16 mm and 35 mm**

Startling low prices on projectors, screens, sound heads, amplifiers, microphones, portable projectors, arc lamps, rectifiers, generators, etc.

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**S. O. S. CORP., 1600 Broadway, New York**

**ANY CARBON MIKE REPAIRED**

Includes replacement of damaged diaphragms and repacking of both buttons with best grade of granular carbon. Both buttons are scientifically matched for like impedance! Genuine gold-leaf gold spot contacts furnished. 24 hour service.  
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IS

**Opportunity Advertising**

—to help you get what you want.  
—to help you sell what you no longer need.

**Take Advantage Of It**

For Every Business Want

See SEARCHLIGHT of this issue.

G-7

**10,000 RADIO PARTS**



Parts to cover every radio need—get them from ALLIED. Fresh, clean stocks of highest quality—all at lowest prices. Order from the new Radio's Leading Supply Guide.

**ALLIED RADIO**

833 W. Jackson Blvd. Dept. R.R., Chicago, Illinois

Send me your FREE Radio Catalog.

Name . . . . .  
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**WE ARE IN THE MARKET**

for overstock and surplus parts and sets, cash waiting. Send price and description.

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314 W. Washington Blvd., Los Angeles, Cal.

**NOW—how to repair and rewind all types of motors . .**

**ELECTRIC MOTOR REPAIR LIBRARY**

4 volumes, \$10.00, payable in easy monthly installments

THIS set of books should be on the shelf of every man who ever has to touch a motor for purposes of repairing it or changing it to meet different operating conditions. In shop language and with practical shop methods it covers every step in stripping, rewinding and connecting a.c. and d.c. motors of all kinds.

**How to change motors for different operating conditions**

Here is all the information you need in order to determine what changes various types of motors permit; to lay out new windings for specified service conditions; and to handle every step in the work with satisfactory results.

Covers all types of motors, from those used in small household and commercial appliances of all kinds, to mining and railway motors. Explains principles underlying the different types of windings; gives definite instructions for doing the various rewinding jobs. Also gives many data, tables and diagrams constantly needed by the repair man, including data difficult to get from any other sources.



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Bought separately the books in this Library would cost you \$11. By using this coupon you need pay only \$2.00 in 10 days and \$2.00 monthly until the special price of \$10.00 is paid. In addition, we give you 10 days in which to examine the books. Send no money; simply fill in and mail the coupon now; let us know your answer after you have seen the books.

McGraw-Hill Book Co., Inc., 330 W. 42nd St., N. Y. C.

Send Electric Motor Repair Library for 10 days' examination on approval. In 10 days I will send \$2.00, plus few cents postage, and \$2.00 monthly for four months, or return books postpaid. (We pay postage on orders accompanied by remittance of first installment.)

Name . . . . .  
Address . . . . .  
City and State . . . . .  
Position . . . . .  
Company . . . . .

R.R. G-36

## WARMTH FOR THE COLD CANVASSER

(Continued from page 17)

pointments is from 7 to 9 p.m. Two appointments are generally sufficient for one evening.

A rainy day is an excellent day for canvassing. The housewife stays at home and is more receptive.

Do not canvass on legal holidays or Sundays. On these days friends and relatives present increased sales resistance.

Do not permit the sign "No peddlers or beggars allowed" to deter you in your work. Prepare an approach which will signify your desire to be of service to the prospect, avoiding a straight sales introduction.

Wherever possible offer some sort of a service or souvenir. The cold canvasser who is well dressed, steps back away from the door as it opens and smiles, offering something for nothing, rarely receives a sharp turn-down.

### In the Home

Once within the home flattery of the right kind goes a long way. Tell the prospect how attractive her children are, admire her furniture.

If the husband is at home study his type, avoid entering into conversation with him immediately. A pleasant smile, a witty remark is about as good a start as I have ever found. Once the ice is broken talk business and business only.

If your prospect talks little and listens closely prompt him with questions. His answers will reveal to you whether he means business. Limit interviews to a half hour in general. More than this rarely produces sales and frequently wears out the welcome of the canvasser.

Never interrupt prospects who appear to enjoy talking. When they cease they will be more attentive to your sales presentation.

On closing sales always shake hands with husband and wife and thank them for the business. This will reduce the percentage of cancellations.

When entering a house on a rainy day always remove rubbers.

If conversation leads into channels other than business take out your

watch and mention that you have another appointment.

When in the home do not examine furnishings too closely. This creates suspicion, frequently speeding up the time of your exit.

Don't smoke unless you ask permission, particularly when interviewing the housewife alone. Cigarette stubs left in ashtrays may later prove embarrassing and make your next call difficult.

Don't ask permission to wash your hands in a customer's bathroom.

If a child is cranky, or being put to sleep, excuse yourself and call back some other time.

Any man of average mentality who cold canvasses consistently, systematically and fearlessly will create prospects. Followed up intelligently, many of these will result in sales. The most important thing for the beginner to remember, perhaps, is that there is no substitute for calls. Make them, do the best job you can on approaches and the law of averages will take care of the rest.

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# PUBLIC ADDRESS

## Sales-Promoter

### with List Prices



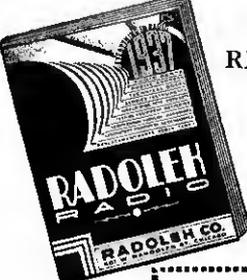
**JUST OFF THE PRESS!**

Another Radolek "Profit-builder" for you! A complete "Public Address Salesman." All prices are shown at your list selling prices. Show this book to your customers—it clinches the sale and protects your profits. Beautiful illustrations—complete descriptions. 5 to 60 watts. Everything in P. A.



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The new Radolek 1937 Radio Guide is completely revised—right up to the minute—everything in radio—at the right prices. Over 10,000 Repair Parts—a complete selection of Receivers, Amplifiers, Tubes, Tools, Books, Instruments—always in stock—ready for speedy shipment to you. You need this big Radio Parts Catalog. It's free! Send for it.



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This  
Coupon

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Send the Radolek Profit Guide Free

Send the P. A. Sales Promoter Free

NAME .....

ADDRESS .....

Service man?  Dealer?  Experimenter?

## Sour on Siffs

Zenith gives no free ocean cruises or railroad trips, no P.M.'s and no secret rebates. It sells its product on merit and treats all of its dealers alike.

We do not believe that cruises, P.M.'s or secret rebates bring any more people into the store, nor do they put more money into the pockets of prospects, nor do they send customers away better satisfied. We feel that the dealers and the public are entitled to have this dollar value put in the product.

It is our ambition to help stabilize the radio industry with a product and policies that protect the customer's purchase and the dealer's profits.

CHICAGO

E. F. McDONALD, JR.  
*Zenith Radio Corporation*

## Make Them Deliver

Have you had any complaints from dealers about chain stores cutting prices on — tubes? An automotive chain store recently opened here. They stock a couple of hundred — tubes and about 500 — tubes.

I went in to see the manager when they first opened up and asked him how come he was cutting — tubes. His prices in some cases were lower than my net. He said that — tubes were being used by all their stores as leaders at cut prices. Store clerks were trained, he said, so that if you went in and asked for — tubes selling at 29 cents to take down, not this brand but a — and high-pressure you into buying it. He said they got full — list for the — brand purchased very cheap by guaranteeing it and not the one originally asked for.

Since the 29 cent advertising has appeared it has been hard for other dealers here to get regular list. How are we to combat this price cutting? They do the same with other nationally-known lines.

CLAREMONT, N. H.

V. W. HODGE

If you, your distributor and other local dealers whooped it up for the standard brand in the newspapers, warning every customer to accept no inferior substitute, the price-cutter might be embarrassed by loss-leader business.

EDITOR.

## Free Estimate Defense

Several items in past issues of *Radio Retailing* put the practice of giving free service estimates on the pan. I believe there are two sides to this question. Take my case, for example.

I am a disabled veteran and find it desirable to service and sell from the basement of my home. The location is poor and in order to bring people in I have for

two years maintained a free home tube test and free service estimate policy, much to the annoyance of some competitors. But I feel justified in spending as much on this form of publicity as a store spends on advertising.

Were I incompetent or unwilling to go through with the offer 100 per cent then the plan would be unethical. But I never quibble as I find it pays to cast my bread upon the waters. Where there are tube sales the profit averages better than the expense of such calls as my offer applies only to the local territory. Where legitimate service jobs develop it costs me no more as I would have had to make the trip anyway. And in the very rare instances where no business results I consider it good advertising and as legitimate as any.

I readily grant that such practice could be abused by the wrong serviceman. But I am equally sure that such abuse would bear its own fruit. Let some of your correspondents wake up. Gas stations offer free air, water and battery test. Garages offer free estimates and motor checkups and department stores find that it pays to offer free parking at nearby garages. These are large and legitimate businesses.

The world is made up of two kinds of people; those who can and those who can't.

MELROSE, MASS.

WARREN F. JEPSON

## New Car Competition

"Dial Plates to Match the Car" (April) will not solve the auto-radio problem for the radio dealer so long as automobile dealers practically give them away as an added inducement in making a sale of a new car.

It is almost impossible to get a chance at a new car and the old cars are more of a problem to get the noise out of than the sale is worth. Few automobile dealers can or do service auto-radios and either send them to their distributor or some local dealer or a serviceman when they go sour. And many radio servicemen are turning this class of work down flat for various reasons.

I should like to get the reaction of other radio men, especially those 100 to 200 miles from broadcast stations.

SIASCONSET, MASS.

H. H. HOLDEN

## Complaints Are Dwindling

With reference to the numerous letters of complaint and especially the letter of Mr. Corey in your May issue regarding indiscriminate distribution of wholesale price catalogs by certain mail order houses . . .

Why patronize these catalog houses if they are detrimental to your business? I do not know what portion of their business is derived from legitimate radio men but it must be considerable and I feel that if all who opposed their methods would buy through regular jobbing houses the situation would quickly clear up.

MIDDLEBURY, VT.

H. E. MONROE

## Glad You Liked It

I have just finished reading Oswald F. Schuette's splendid article in the May issue.

Primarily, I am interested in selling modern type radios and I would like to see everybody plugging "American Short-waves for Americans." From a selling standpoint I think it better than foreign reception. Naturally, my attitude is due to the fact that I do business in a location remote from dependable broadcasts.

HOUSTON, TEXAS

J. G. BRADBURN

## Combinations

To an old timer who has been in constant touch with the retailing of phonographs and records since 1908, the varied opinions of dealers regarding "What's Wrong With the Combination" in your recent issue was interesting . . .

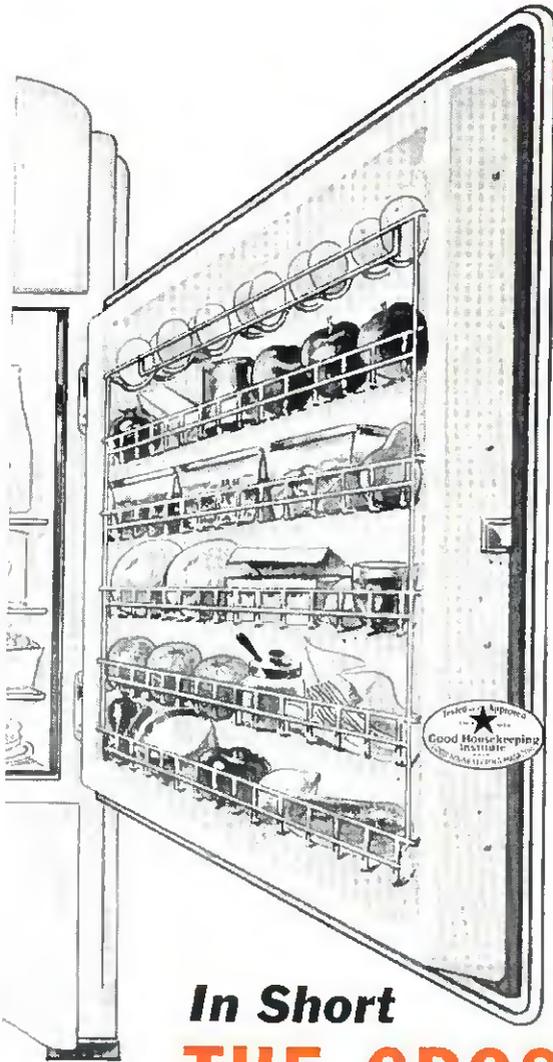
Manufacturers would do well . . . to create a department for the sole purpose of promoting the combination, especially those with the immense advantage of a record library . . . Such a department could devote its entire time to the promotion of the instrument and could resume much of the effective work of the past with the public schools. We have been surprised that the larger companies . . . have utterly neglected this field until recently and forced dealers to procure equipment from smaller but more enterprising makers.

Records need intelligent study by such a department, that new policies may be adopted to better meet present-day conditions. Their present plan of distribution could be greatly improved in some sections . . . In smaller cities where comprehensive record stocks are not justified new cooperative plans should be developed immediately.

Above all, the combination will only progress if promoted along its own peculiar lines and sound merchandising policy adopted and adhered to, with due consideration to the selection and protection of the retailers in whose hands its fate largely rests.

UTICA, N. Y.

EARL B. WORDEN



**In Short**

# THE CROSLEY SHELVADOR

# Yes Sir-

## SHELVADOR IS TOUGH COMPETITION!

No one knows that better than dealers trying to sell other makes

**TOUGH** to sell against . . .

*this much more in a Shelvador*

**TOUGH** to sell against . . .

*the world's most beautiful refrigerator*

But mighty sweet to fall in line . . . To push the refrigerator that, for four consecutive years, has shown the fastest sales growth; the refrigerator that is now making merchandising history; the refrigerator that fits the millionaire's kitchen and the working man's purse . . .

Priced from \$99.50 to \$211.95 including delivery and installation. Five-year Protection Plan. (All prices slightly higher in Florida, Texas, Rocky Mountain States and West.)

## SHELVADOR DEALERS' ENTHUSIASM REACHES NEW HIGH AS SALES AND PROFITS SOAR!

- from **Massachusetts**  
**300% SALES INCREASE**
- from **Tennessee**  
**SELLS 1000% OF QUOTA**
- from **Ohio**  
**SELLS SEVEN TIMES MORE THAN ALL COMPETITORS**

The American Housewife vote for Shelvador is at flood tide. Dealers are profiting as never before. Surely—Now is the time to tie up with the leader!

**THE CROSLEY RADIO CORPORATION**  
POWEL CROSLEY, Jr., President CINCINNATI

ELECTRIC WASHES REFRIGERATORS RADIO	<b>ERLE HYDE, Inc.</b> <i>Electrical Appliances</i>	ELECTRIC RANGES WATER HEATERS RANGES
193 Eighth Ave., North Cincinnati, Ohio	PHONE 6-1119	Nashville, Tennessee
<p>Gentlemen:</p> <p>Immediately on organizing this business, we took on the complete Crosley line.</p> <p>Starting with a very limited capital, we have been successful in selling 200 Crosley Shelvadors in our first season, realizing quite a satisfactory net profit on our sales therefrom. Our inventory turn-over has been very rapid and our service expense has been low. Furthermore, our customers are uniformly happy and satisfied.</p> <p>When Crosley first announced the Shelvador it appealed strongly to me and my experience in 1934 as Sales Manager for a company handling a competitive line made me appreciate still more the sales and profit possibilities with Crosley. It was <b>hard</b> competition.</p> <p>The Crosley dealership is a real opportunity. An active organization can operate on a small investment, secure fast turn-over and make a real profit. Crosley gives you more than just a line — it gives you a 12 months' business.</p> <p>We do not feel it is necessary to handle competing lines — for Crosley covers the field and Crosley acceptance — created by WLF and Crosley advertising — brings sales volume easily and quickly.</p> <p>With the splendid cooperation of the Crosley factory and the Gambill Distributing Company, the Crosley wholesalers in this, the TVA territory, we look forward to a substantial increase in our business this next season.</p> <p>With the new models and the "word of mouth" advertising of many satisfied Crosley users — there surely will be a "sales slide" to Crosley in 1935.</p> <p>Sincerely, <i>E. H. Hyde</i> ERLE HYDE, INCORPORATED</p> <p>ERH:LC</p> <p style="text-align: center;">ALL MAKES ON RADIO SERVICE</p>		

RESEARCH KEEPS GENERAL ELECTRIC YEARS AHEAD



Off-Focus  
Tone

G-E Focused  
Tone

Off-Focus  
Tone

### WHAT IS FOCUSED TONE?

It is G.E.'s new radio circuit that **AUTOMATICALLY** and **VISIBLY** shifts itself into hair-line tuning—perfect tone.

It is the new G-E Colorama Dial that changes from red to green to tell you that your program is perfectly tuned.

It is the Personalized Radio with the custom-tailored dial—your own local station letters flash on when you tune in.

It is Silent Tuning—you can switch from one program to another without a single squeal, squawk, or screech.

It is the combination of all the new and revolutionary G-E Radio inventions and developments — G-E Metal Tubes; G-E Sentry Box; G-E Stabilized Dynamic Speaker; G-E Sliding-rule Tuning Scale; G-E "V-doublet" All-wave Antenna — which give you the finest, truest tone of any radio ever built—that's Focused Tone! Only the new G-E gives it to you — **AUTOMATICALLY!** — **VISIBLY!** — **INSTANTLY!** — every time you tune in.

## Radio's Newest Marvel

# Focused Tone

**SO PACKED WITH SENSATIONAL IMPROVEMENTS THAT YOU'LL ALWAYS BE GLAD YOU SOLD G-E . . . and your customers will always be glad they bought it.**

### HERE'S NEWS THAT WILL MAKE RADIO HISTORY!

There's a 6-metal-tube, 2-band model—utilizing an 8-inch Stabilized Dynamic Speaker, with 5 watts output—a sensational price leader to sell at \$29.95\*.

You can sell a beautiful all-wave console using 7 metal tubes, having a 12-inch Stabilized Dynamic Speaker, with 5 watts output for \$59.95\*. A sensational 10-metal-tube, all-wave console employing Focused Tone features, a 12-inch Stabilized Dynamic Speaker, with 10 watts output, sells for \$99.95\*.

Then there's a deluxe, 15-metal-tube, console model, using every Focused Tone feature, 5 reception bands, 15-inch Stabilized Dynamic Speaker, with 35 watts output, to sell at \$195.00\*. Models with Focused Tone features sell for as low as \$74.95\*.

**Before making any further plans, be sure to attend the dealer showing of General Electric Focused Tone Radio. WATCH FOR YOUR G-E RADIO DISTRIBUTOR'S ANNOUNCEMENT OF HIS LOCAL DEALER SHOWING. Or better still, phone or write him for the date of this important event. You can't afford to pass up this great opportunity.**

\*Eastern List Prices — slightly higher in west and south.

# GENERAL ELECTRIC

## Focused Tone Radio

APPLIANCE AND MERCHANDISE DEPARTMENT, GENERAL ELECTRIC CO., BRIDGEPORT, CONN.