

APRIL, 1938



New BUSINESS BAROMETER

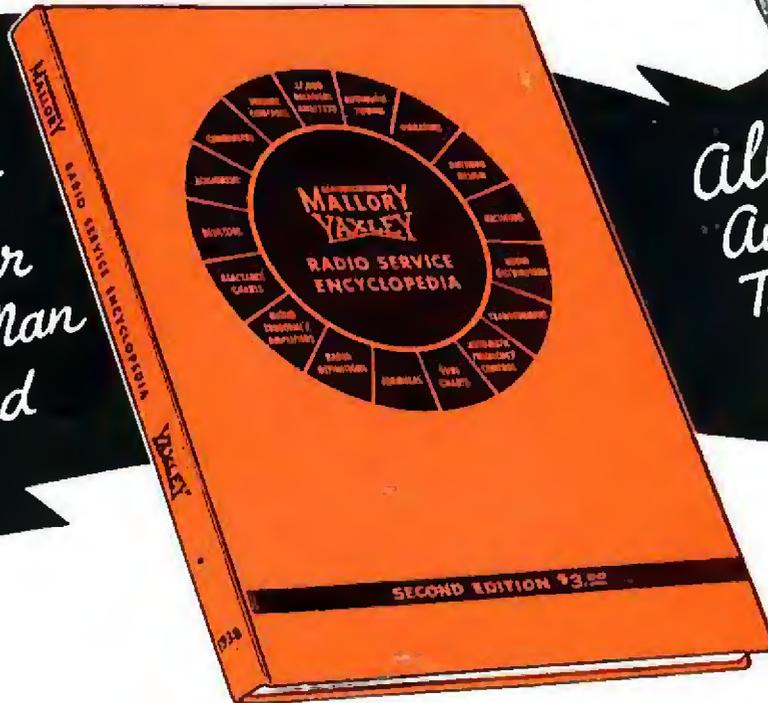
(See page 7)

MAN, OH MAN! WHAT A BOOK!

The **Second**(1938) Edition of the
MALLORY-YAXLEY
Radio Service Encyclopedia



*The
 Greatest
 Time-Saver
 a Service Man
 ever had*



*All
 Automatic
 Tuning Systems
 Completely
 Analyzed*

Mister, it's a B O O K . . . beyond your fondest dreams. If you thought the First "MYE" was "hot", you'll say this Second Edition "tops" everything! 17,000 receivers analyzed (5000 more than in the First Edition), 336 pages of handy, concise information. (There were 216 in the First Edition.) Chock full of substantiated radio service data never available before.

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P. R. MALLORY & CO., Inc., INDIANAPOLIS, INDIANA
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**17,000
 RECEIVERS
 ANALYZED**

**TUBE
 CHARTS**

**AUDIO
 AMPLIFIER
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RESISTORS

**ANTENNA
 DESIGN**

**VOLUME
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CONDENSERS

Use
P. R. MALLORY & CO. Inc.
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 CONDENSERS . . . VIBRATORS

Use
YAXLEY
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RADIO RETAILING

APRIL, 1938

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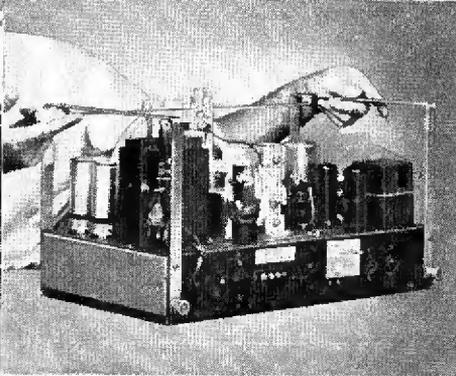
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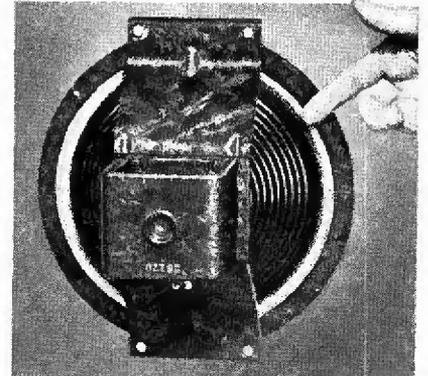
SALES STATIC I could fix it if I had this hydrometer.



...TELL ME WHY—"THERE IS NOTHING FINER THAN A STROMBERG-CARLSON"



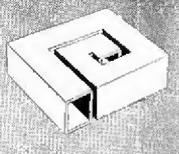
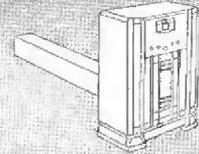
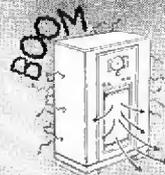
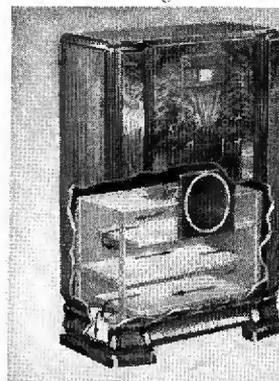
1. The **FORTIFIED CHASSIS**. All parts are protected by a heavy steel framework. The one-piece base provides both an electrical and mechanical shield. Rubber cushioning insures trouble-free operation.



2. A speaker cone suspended by soft, pliant **CARPINCHOE LEATHER**. This allows the cone to move freely and protects the tone by absorbing the vibrations at the edge of the cone.



3. Notice the fidelity with which every instrument is reproduced. As you listen, note that you are hearing fundamental bass tones usually missing in radio. This extended range is made possible by the exclusive Stromberg-Carlson **LABYRINTH**.



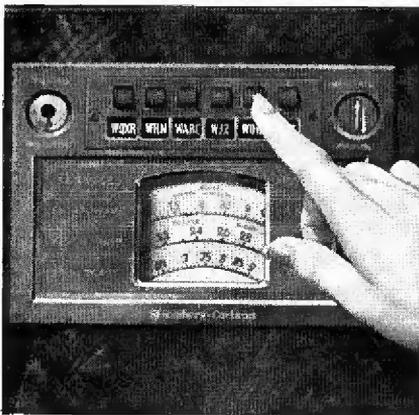
(a) In the ordinary radio, empty space back of speaker causes "boom" and distorts the pure tone from front of speaker.

(b) Theoretically—a long tube of sound-absorbent material would absorb unwanted sounds and reinforce bass tones.

(c) To get this result, within the space of the cabinet, Stromberg-Carlson engineers folded such a tube into a Labyrinth.

(d) Only Stromberg-Carlson has the **LABYRINTH**. It is the necessary long tube (baffle) wrapped up, folded over and placed within the cabinet. It gives you deeper bass notes, with a new fidelity and also increases the volume

capacity and accuracy of the loud speaker. The Labyrinth is considered by all to be the greatest tonal advance in radio history. Its benefits cannot be duplicated without infringing many patents, both in U. S. and Canada.



4. **ELECTRIC FLASH TUNING**. Just touch a button and the station you want comes in perfectly tuned, *instantly*. The pre-selected stations are clearly marked. Easy to set up and trouble-free.

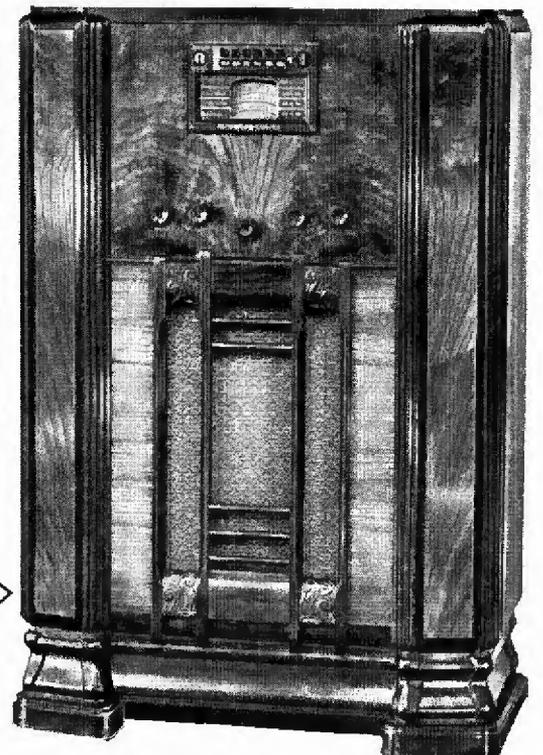


5. **OUTSTANDING CABINETS**. Distinctive—in design, in the selected grainings of the woods and in the hand-rubbed finish. They blend harmoniously with fine furnishings.

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

5 GREAT SELLING FEATURES -- ALL IN ONE RADIO -- THE No. 245-M

Stromberg-Carlson



When Scientific Research and

Life Itself

Depend on Radio Tubes—

the Bowdoin-Kent-Harvard
Arctic Expedition

used **RAYTHEONS!**

Up in the cold, bleak Arctic—radio communication is all-important—the life-line to any scientific expedition.

Radio tubes *must* work efficiently—*must* be of sturdy construction to withstand the rigors of cold climate, the vibrations of the ship, the jarring of dog sleds.

The custom-built radio receivers used in the recent Bowdoin-Kent-Harvard University Expedition to the Arctic were completely equipped with Raytheon tubes—another reassuring tribute to Raytheon engineering, quality and dependability.

Radio servicemen and dealers save on unprofitable call backs and build good-will by using these same Raytheons.

Use Raytheons for *your* replacements and enjoy greater permanent tube profits.

RAYTHEON

CHICAGO • ATLANTA • NEW YORK • NEWTON, MASS • SAN FRANCISCO
"WORLD'S LARGEST EXCLUSIVE RADIO TUBE MANUFACTURERS"



HARRY BOYD BROWN
National Merchandising
Manager of Philco

TAKE THE STORE TO THE CUSTOMER

At least 18 million radios in use in the United States today are obsolete—a conservative estimate. Yes, more than 18 million radios in American homes are incapable of delivering the full benefit of the splendid broadcasting service—the marvelous radio programs on the air today.

Millions of radios with inferior speakers—with obsolete circuits—with limited range and output—with unmatched aerials and inaccurate tuning. Yes, radios—by the million—that possess *none* of the outstanding and indispensable improvements of the modern day instrument.

Radios with defective tubes—with worn out drives and condensers. Radios afflicted with a general breakdown of parts and wires. Radios that fade and rattle—that lack sensitivity and selectivity. And all this means poor reception—poor quality of tone.

In other words, a large majority of radio listeners in America are losing out on the radio entertainment of today. *And they don't know it.* If they did know it, then hundreds of thousands of them—depression or no depression—would buy new 1938 Philco Radios right now—today. A real, actual and tremendous market—but how are the radio dealers of America to get this business?

The answer is—**HOME DEMONSTRATION!** Free Trial in the prospect's living room! One week's trial convinces the prospect far more than the printed word or selling talk. Seeing and hearing is believing.

Therefore, the aggressive, alert radio dealer of today will place 1938 Philco Radios—just as many as possible—on Free Trial in the homes of responsible people. He will telephone, or better still, will call on all his old customers and deliver a brand new Philco on one week's Free Trial.

He also will deliver new Philco Radios to replace old radios sent in to him for repair. He also will place 4 or 5 Philcos on a truck and send out two of his dependable salesmen to place them on trial in the right homes.

The most successful radio dealer today does not wait for customers to come to his store. He takes the store to the customer.

Harry Boyd Brown

PHILCO

The RADIO MONTH

APRIL

1938

Turning Point Perhaps we flatter ourselves in thinking that this issue will mark a turning point in the history of the radio industry, but—we honestly believe such to be the case.

Over-production has been the treacherous reef on which in the past every boom in radio sales was wrecked, on which price schedules and constructive sales effort have come to grief time after time. To turn that tide of disastrous cycles, *Radio Retailing* begins in this issue to publish a monthly "Business Barometer" of retail set sales, which if properly used will chart a course that may lead the industry safely around that reef of over production.

The barometer, as published in this issue, marks only the beginning of a monthly reporting service that will be expanded eventually so as to show actual retail sales for specific territories, not only in units but also their dollar value, and other pertinent data.

For the first comprehensive report on current retail radio set sales, see pages 7 and 18. Meanwhile, we extend our sincere thanks and appreciation to those hundreds of radio dealers, large and small, located in all parts of the United States, who through their cooperation are making it possible for us to contribute an index that may lead radio out of the wilderness.

Rising Tide A small wavelet of sentiment for a national organization of radio and appliance dealers that raised its wavering head in the Atlantic states territory but a few months ago, bids fair to develop into a tidal wave that may sweep clean across the continent, over the Rockies and to the Pacific

Ocean before it is content to subside.

Without fanfare or trumpets, the National Association of Radio and Appliance Dealers was born in New York March 21st. There were representatives of local groups from the East, South, and Middle West, and written assurance of support came from far western dealers. The set-up is based upon sound principles of cooperation for the common good of all independent dealers.

What is needed now is active constructively-thinking earnest workers to create local groups that can work for the good of local dealers under the guidance of and with the aid of the new national organization. To that purpose, *Radio Retailing* lends its support.

Trade-ins The widely heralded used-car exchange week passed into history, made an enviable record. Ford dealers sold nearly 58,000 trade-ins, General Motors' dealers totaled 65,000, Chrysler agents 30,000, according to the *Automotive Daily News*.

During the week between 160,000 and 175,000 used cars were sold and the cost of the whole national advertising program that put over this campaign averaged less than eight dollars per car sold, according to *Printers Ink*.

Radio sets cost materially less than new cars. Radio trade-ins probably would not average \$8.00 per unit.

One way of breaking the trade-in jam in the radio business would be for every manufacturer to set aside a Trade-In Fund to take the place of extra discounts, spiffs, cruises, premiums and what not. Then send out stout

men with big axes to destroy obsolete trade-ins—giving dealers numbered credit slips at so much per set, redeemable on new sets, one scrapping credit to every new set.

This process would be much more effective and far less costly than the one used by car makers.

Show-Up The annual report of one very active and well managed local association of radio and appliance dealers shows among the receipts one significant item, namely, "Profit from Radio Show \$1,962.10."

We have attended one of the shows managed by that group. They are well handled, popular for miles around, and operated independent of manufacturers support strictly by local distributors and dealers.

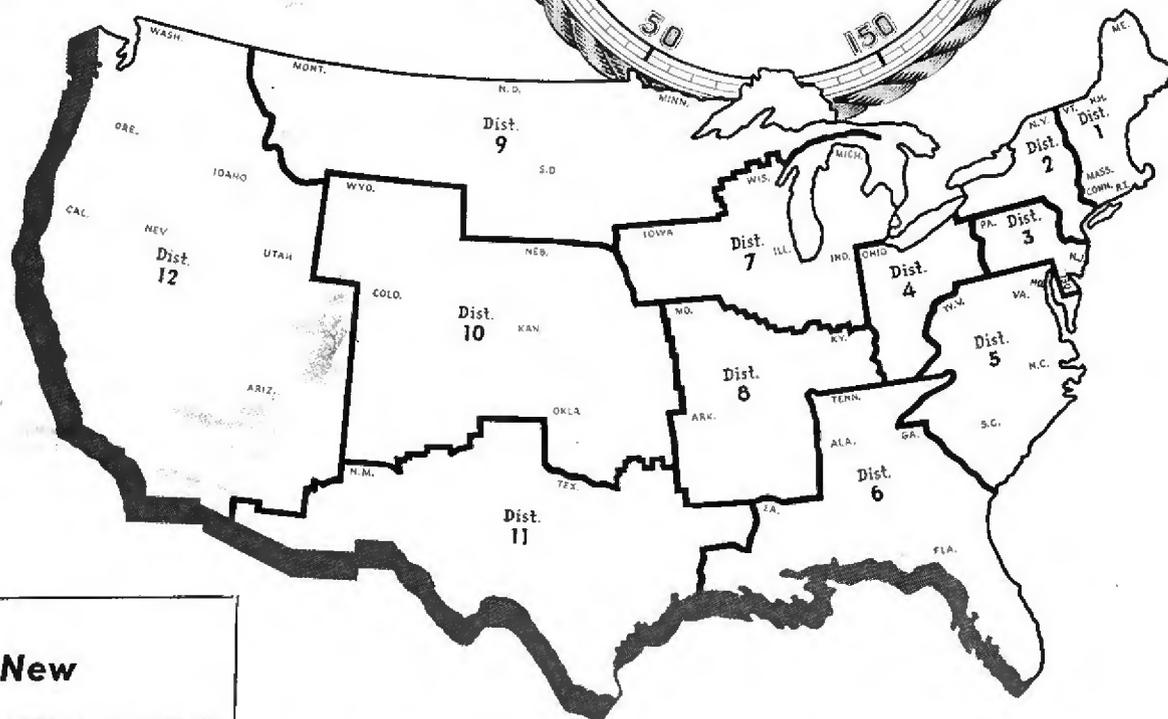
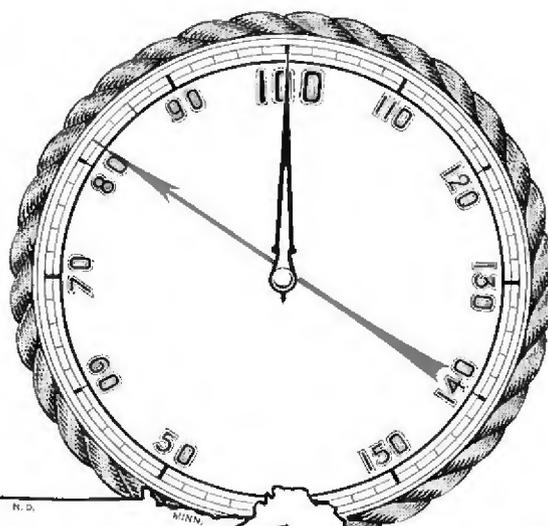
Among items of disbursement on the same report is one: "Purchase of three U. S. Saving Bonds \$2,250." Who can doubt but what most of the trouble of radio and appliance merchandising would disappear if there were such a soundly managed group operating in every trading area.



EDITOR

BUSINESS BAROMETER

(March Retail Radio Sales)



A New RADIO RETAILING Service

The Retail Radio Sales Barometer inaugurated herewith was designed to provide a yardstick by which dealers might plan their purchases, manufacturers schedule their production.

The red arrow shows in percentages how March retail sales this year compare with the same month of last year, the latter—taken as 100—being indicated by the black arrow.

At present this barometer reflects only unit sales for the country at large. It will be expanded to show dollar values and specific territorial sales as soon as practicable.

This service is made possible through the cooperation of nearly 1,000 dealers who send confidential reports of their sales regularly each month to Radio Retailing's editor.

WITH Dealer reports on retail radio set sales during March not complete from several districts, preliminary compilation shows that during March of this year there were 18 per cent fewer units sold in the country at large than during the same month of 1937. This is considered a very creditable performance in that sales of other comparable items, notably automobiles, have shown greater declines.

Analysis of individual dealers' reports indicate that in many, and particularly smaller cities, dealers were able to produce increases in both unit and dollar sales by staging special sales or taking advantage of special offerings from manufacturers. Evidently the public could be coaxed into buying when real bargains were offered.

Incomplete returns from far west-

ern and southern states indicate that sales there were well above the national average and in some districts above the March, 1937 unit sales. Similarly, reports from Pennsylvania, Iowa, the New England states, compared in many cases favorably with last year.

Compared with the national figure, declines were largest in industry towns and cities or in districts where government spending has been stopped or drastically reduced. In suburban areas affected by big city bargain sales, dealers appear divided into two classes, namely the ones who joined the parade and cleared their stocks through bargain sales and the ones who sat tight.

Dealer reports on inventories showed that for the country at large there are right now fewer sets in dealer stocks than a year ago.

HEAT RELIEF

AT A PRICE TO
ATTRACT THOUSANDS!



\$159⁵⁰
LIST
F.O.B. FACTORY

- NO INSTALLATION PROBLEM
- NO WATER PIPES TO CONNECT
- NO WIRING TO INSTALL
- NO FLOOR SPACE REQUIRED
- FITS ON WINDOW SILL
(Window Sealing-Panels Furnished)
- PLUGS INTO LIGHT SOCKET

A self-contained electric refrigeration plant which circulates air over cold coils where it is cooled, cleaned, de-humidified—then distributed throughout the room.

DISTRIBUTORS—DEALERS!

WRITE at once for details, discounts, merchandising plans on this sensational new space cooler!

A practical unit capable of sufficient volume to cool and de-humidify *effectively*—built for **DEPENDABLE** performance—priced to convert widespread desire into *widespread sales!*

Nothing you can sell has such a deep rooted appeal as **RELIEF** from heat and humidity. Thousands of women in thousands of kitchens; doctors, lawyers, dentists, hotels, hospitals, clubs—all are your market. Be prepared to cash in on the urgent demand that sweeps every community every year with the arrival of hot and humid weather! Time is getting short. Act **NOW!**

NOTE! The Johnson Space Cooler is not a makeshift air conditioner. It is just what its name implies—a *space cooler*, which definitely cools entire small rooms or prescribed areas in large rooms. It is the product of a company noted for *quality* manufacture, makers of such specialized products as household refrigerators and the famous Sea-Horse Outboard Motors.

JOHNSON MOTORS, 1930 MONMOUTH BLVD., GALESBURG, ILL.

JOHNSON Space Cooler



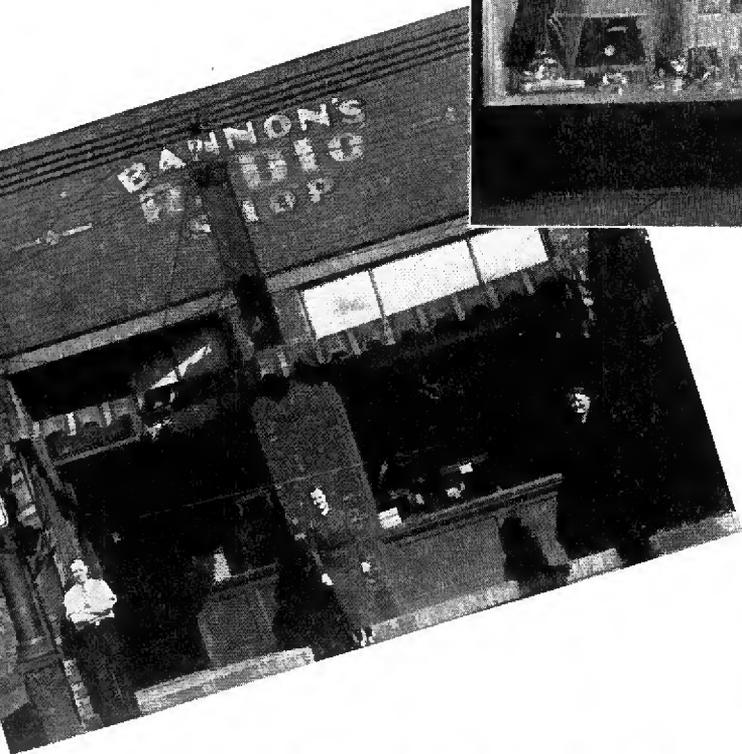
CURTAIN .. *One Minute!*

SACRIFICED to the machine-age was the theatre's traditional call-boy when George Abbott's "Brother Rat" company hit Philadelphia. Backstage at the Locust Playhouse appeared a Philcophone inter-communicator, controlling remote speaker units in distant dressing rooms (top photo shows typical installation on makeup table).

Made to click with greater precision, certainty, was the entire production by this elimination of fast but fallible footwork. Pleased was the management with bettered timing following elimination of old-fashioned, knock-on-the-door curtain-cues.

Obligingly willing to graphically portray the artist's approval of the innovation for *Radio Retailing's* cameraman (lower picture) was pretty Florence Sundstrom. Male lead Edwin Phillips loaned moral support. But last laugh had the playfully kicked call-boy, who later solved his personal unemployment problem by securing a small "walk-on" bit in the show!

X-L RADIO SHOP



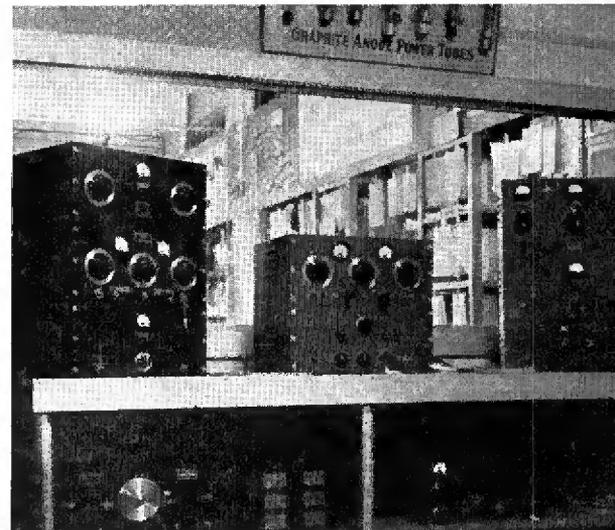
OLD STORE GETS FACE LIFTED

Believe it or not, the store pictured at the left and the one above are identical, before and after alterations. Proprietor Roy J. Bannon of Morris, Illinois (he operates a shop at Sandwich, Illinois, too) decided he needed more store traffic to help out volume obtained by outside selling, put in a modern new front, stepped up window lighting 250 per cent. The change produced a 45 per cent increase in radio and electrical home appliance business.



REPLACEMENT PROOF

To people who ask for a free second repair, inferring that Greenville, Mississippi's Radio City Service might not have replaced the faulty original part, S. Garren, Jr. shows such components. He tags 'em all, then saves for 6 months.



COMMUNICATION RECEIVERS

"Hams", shortwave bugs who buy communication receivers and other amateur gear are best sold in a demonstration where they may actually play with it, according to M. Beitman of Chicago. They sell themselves quicker than

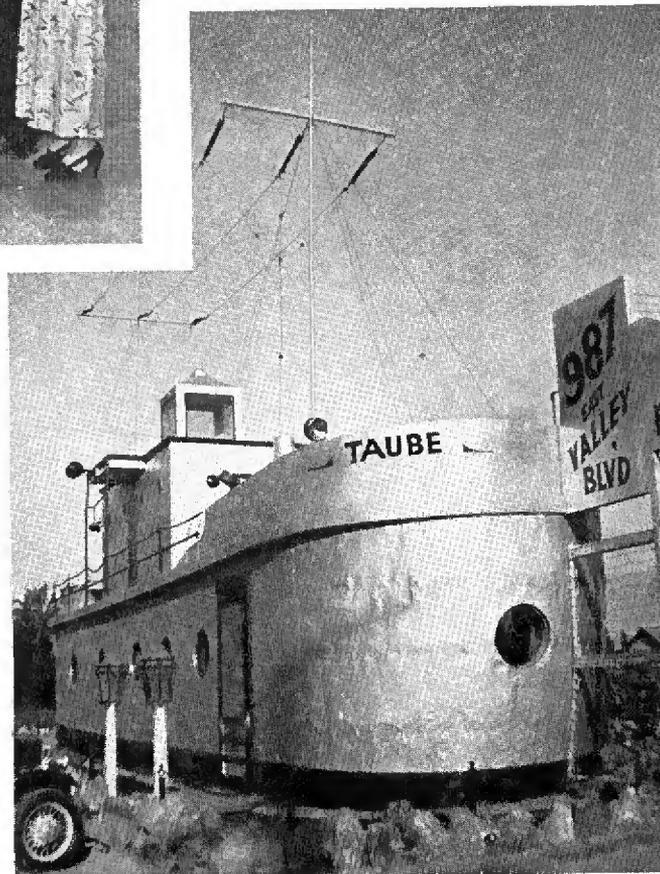


SOUND FOR SHENSI

To war-torn central China goes this trailer-mission equipped with Webster-Chicago sound for the Rev. Father Christopher Sullivan, headquarters at Hingan Fu, Shensi. Turret projectors contain speakers

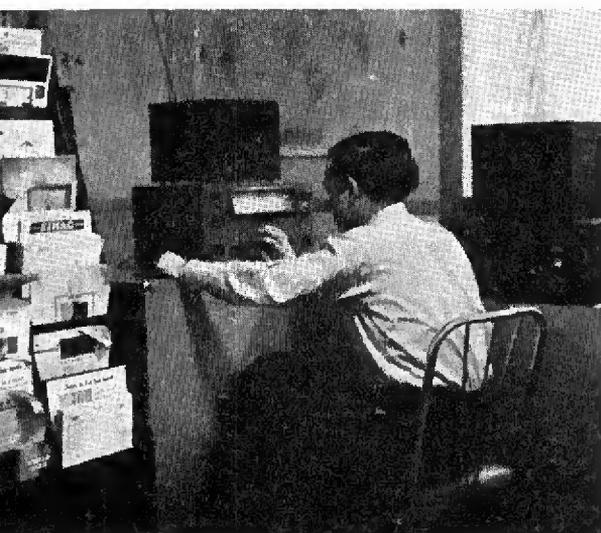
EL MONTE ODDITY

Sixty-feet long by sixteen wide is this imitation boat (complete with miniature ocean) housing the Taube radio department on a main road at El Monte, California. Contains store, office, repair shop



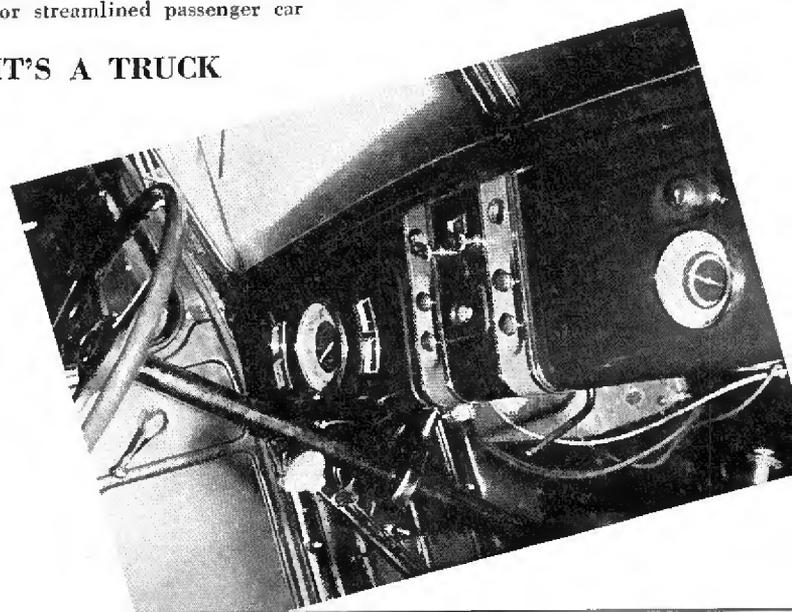
In Federal 1½-ton trucks Philco radio is now standard optional equipment. Instrument panel centers on the dash, classy enough for streamlined passenger car

IT'S A TRUCK



BEST BE DEMONSTRATED

For class of customer if given the opportunity, he contends. This is a typical setup, with magazines and handbooks close at hand. Both transmitters and receivers (left) fit well in properly designed tables



A SUBSTANTIAL, growing demand for sound equipment is assured. Wholesalers and retailers anxious to sell it are numerous! Manufacturers capable of producing sufficient quantities and variety are already in the field. Sound, certainly, is destined to be a major American industry. Only the rapidity with which it is to fully achieve this distinction is open to speculation.

To men who have masticated the figures contained in last month's Sound Survey (RR14Mar) the stumbling-block must be obvious. Distribution invariably lags behind when a relatively new product simultaneously fires the imagination of both consumer and producer. Existing channels do not take up the load quickly enough to satisfy either, so spartan methods are temporarily adopted to move merchandise. Retailers suddenly find themselves eligible for wholesale discounts. Wholesalers, for self-preservation, begin to sell at retail. Neither works at full efficiency, so the business does not develop as rapidly as it might. But imminent "jamming" is averted.

Soon, each individual manufacturer must decide for himself what his eventual distribution system is to be. Is it to be factory-to wholesaler-to retailer-to consumer? Or factory-to retailer-to consumer? Or factory-direct to consumer in the case of certain large installations? The eventual setup might conceivably include two of these plans, could not easily involve all three.

First choice need not necessarily be last but the trend at the moment appears to be in the direction of factory-to retailer-to consumer sales, with the manufacturer himself cultivating certain heavy item markets. And we use the term "retailer" here advisedly, despite the fact that extension of wholesale discounts might cause factories to favor other classification.

Waiving discussion of heavy goods frequently sold direct from factory to consumer, and thinking rather in terms of sound equipment to be sold through the trade, the following excerpt from a sound maker's letter aptly illustrates the present position of many. Writes this sales manager:

"The established jobber and dealer is doing too little for us. In some cities we have found individuals connected with power companies, telephone companies, etc. to be better representatives even though they can only devote a portion of their time to this business. Strange as it may

Straight from

seem, a man of this type often produces more business for us than a large jobber of electrical supplies. While it is difficult to locate this type of representative we shall attempt this year to rebuild our list of representatives on this basis, knowing that we can profitably give them more cooperation than *normal* (Italics are ours: Ed.) outlets which would ordinarily be considered better business risks."

Clearly, here is a manufacturer who would prefer to distribute through existing trade channels. His very use of the word "normal" more or less labels the particular phase of the sound business through which this industry is now passing an expedient one.



The bulk of comments received by *Radio Retailing* in connection with sound equipment distribution policies is from men whose statements indicate that they are essentially wholesalers. Out of more than a hundred letters we have selected several which appear to be most typical of those from operators who find the business profitable and yet see much room for improvement.

Here they are:

"The real trouble with the sound business today for a distributor is due to mail-order selling direct to the consumer.

"I conduct a 100 per cent wholesale parts business to the radio serviceman, sound engineers and radio dealers *only*. If I cannot sell a sound job through any of the above sources I lose the business and it goes through the so-called mail-order house."

Another distributor hammers this same point home:

"The foremost obstacle to the increased sale of nationally advertised sound equipment is the consumer catalog. While the trade knows that the parts and sound dis-

tributors have cut in to a great extent on such business much of it continues.

"In estimates we have furnished our trade, we show that virtually 100 per cent of the sales that didn't mature went directly to some mail-order house. Because of the wide distribution of catalogs most prospective sound equipment purchasers have one quoting wholesale prices. Therefore, a large percentage of the individual jobber's sales must be private-brand in order to avoid odious price comparison."

Still another says:

"The main trouble with the sound distribution picture at the present time, from our angle of the picture, is the resale policy and discount setup. By that we mean that there is no set policy among either manufacturers or distributors as to who is entitled to the trade discount and who is not.

"This condition has been mainly brought about by the widespread mailing of catalogs direct to the consumer."

Veering off at a slightly different angle, are letters which take this tack:

"For three years we have tried to merchandise sound through dealers but found it difficult due to their lack of knowledge of the equipment and financial backing. In our territory the sound industry got off to a bad start due to the fact that many dealers invested sums ranging from fifty dollars to three or four thousand, only to have the market undercut by chiselled prices as low as three dollars per day for the rental of systems, together with the operator and in some cases an automobile covering a local territory and 100 miles of running."

And, again:

"Too much ignorance on the part of radio dealers, furniture stores, etc. regarding different types of sound equipment, price range, etc. has been detrimental to selling quality sound alongside the 'gyp.'

"Sound must be demonstrated. It must be sold the hard way, by educating the buyer."

Still more:

"The average dealer will find a prospect but he does not go any further. He turns the deal over to us as a jobber and prefers a small commission. The dealers in this part of the country do very little service

By
W. MAC DONALD

the Shoulder

About SOUND

of their own. They know nothing about sound, cannot figure a job, nor can they install it. For this reason the distributor must do most of the work. More sound could be sold if independent dealers would go after it. This would bring about an increased sale of small, portable systems."

Another wholesaler writes:

"I believe that sound equipment will have to be sold direct from wholesalers to user. Few dealers are willing to stock enough, or willing to put forth the effort needed to sell equipment. They expect the jobber to loan the equipment, make the demonstration, then sell the customer and wait for the money.

"We are now selling direct in most cases."

And yet another:

"We believe the only way to satisfactorily handle the distribution of sound equipment would be to set up a consumer or trade net price on the units and eliminate the high list prices. From this trade net price a jobbing discount of 25 per cent to 35 per cent should be extended to certain, exclusive jobbing outlets in restricted territories.

"This would be much the same as is already being practiced in the handling of radio test equipment to the servicemen and amateurs. There would be but one net price and the representative or jobber handling the equipment would be in position to retain his profit margin."

Again the comment angle changes and we strike letters like this:

"Direct selling to sound specialists by the manufacturer is the biggest drawback to getting the entire industry on a legitimate plane and a profitable basis for everyone.

"As a result of such direct selling, distributors are reluctant to handle sound equipment and the industry suffers from increased distribution costs. This reflects itself in abnormally high consumer prices, which in turn reduces sales volume and encourages sales to consumers at wholesale prices either by the few distributors handling sound equipment or by the sound specialists who buy at a price enabling them to do so.

"One solution would be to reduce prices and margins all along the line to a point where it would be unprofitable for manufacturers to sell at jobber's discounts to anyone except bona fide distributors who, in turn, operate on a margin making it unprofitable for them to sell to anyone but active radio dealers and sound specialists.

"As a final result the sound specialist

would find that he had a satisfactory retail sales margin to operate on by selling at established list prices, which would be considerably lower than at present. He would be in a position to devote his time entirely to sales promotion and be relieved of all responsibility of acting as a distributor. At the same time it would also be unnecessary for him to assemble his own equipment in order to reduce costs, and this assembly would be entirely in the hands of the manufacturer, where it belongs.

"Incidentally, it should be called to the attention of manufacturers of sound equipment that credit reporting companies will classify and so designate on their report any sound specialist as a distributor or manufacturer. Steps should be taken to correct this misleading information.

Or correspondence like this:

"Too many sound equipment manufacturers go direct to schools, churches, when a big job is in sight. Also, too many parts jobbers like ourselves have too many items to sell to specialize in sound equipment.

"If a jobber really wants this business I believe if he can afford to create a department to cover this equipment alone and let that department forget about other merchandise he can get somewhere."

Many additional letters from sound wholesalers are on hand but these are sufficiently close to those selected as typical and published in the preceding paragraphs to be virtually carbon-copies in tone, if not in wording.

The Retailer's Position



Because a number of sound equipment manufacturers over whose lists we mailed questionnaires are already selling direct to outlets reselling most merchandise to the ultimate consumer—many letters received are from men who properly classify as retailers. This, conveniently, provides us with material from which the retailer's attitude with respect to sound may be determined, despite the fact

that our initial survey was originally intended to cover just the wholesaler's phase of this problem.

Throughout the correspondence from retailers runs a strong note of protest in connection with widespread distribution of mail-order catalogs on sound equipment direct to the consumer. So similar to the thinking of the wholesaler, already reflected in preceding paragraphs, is the comment on this point that we feel it unnecessary to further elaborate. Rather, we plunge directly into retail comment on the subject of discounts. Here, after wading through a wad of correspondence from both wholesalers and retailers of sound equipment, we are immediately reminded of an old, familiar conundrum, i.e.: "Which came first, the egg or the chicken?" For the present situation, in which retailers get wholesale discounts and wholesalers sell direct to consumer, is undoubtedly responsible for much of the confusion in the sound field today.

It is difficult to decide whether by-

(Continued on page 40)

OUTSIDE —
 This is where you'll stay
 if yours is a direct bid
 for business. Sets can't
 be sold from pictures for
 people don't know they
 need them until they
 hear them

You Can't S E L L Radios



at the DOOR

SEE that man across the street, canvassing? He's trying to sell radios. In his hand is a large folder, with pictures inside. He's got a tough job. I know. I've had his job.

He canvasses a block and he puts on the pressure: he won't take "no" for an answer. But "no" is the answer he gets. He starts to coast: he's not going to waste his time with any woman unless she is definitely interested in a radio. But after a block of this, he decides that he'd better go to work again!

He should stop right there and ask himself a question: "What is my greatest resistance?"

For the answer would be clear: *He can't sell radios at the door.* Furthermore, if he is fortunate enough to get into the house, *he can't sell many radios from pictures.*

Take that woman midway the block, for instance. She was a good prospect. Radio eight years old; not working well. She even asked about the price of a new one and the terms. And yet, he couldn't sell her. *Not at the door, anyway.*

He tried to get in the house, of course, but she wouldn't let him. And he knew *why*. She felt that letting him in the house would obligate her; she was afraid he might high-pressure

her—and she had a right to be, too, because he gave her to understand that he was *selling* radios. And he was, of course, but he worked it wrong; he put the cart before the horse; he was trying to *sell* before he aroused her *desire* for the radio sufficiently. And the best way to arouse her desire for it would have been to let her *use* it.

She finally said she was "not quite ready for it yet." What a laugh. If he could only be *in that house* tonight, and have a *radio in there with him*, and tell her about the big trade-in allowance, and the easy terms, she'd be ready all right. But neither he

nor anybody else can sell her *at the door*.

Yes, the answer is very clear to him. And I hope the answer is clear to you, as a dealer. The answer is **GET THE RADIO IN THE HOUSE.**

And when I say get the radio in the house, I mean get the radio in the house by any lawful means at your disposal. By trickery, by cunning, by anything under the sun but a hint that you want the lady to buy it. By misrepresentation, if you will, provided you stick to your original story, even when you go back to sell.

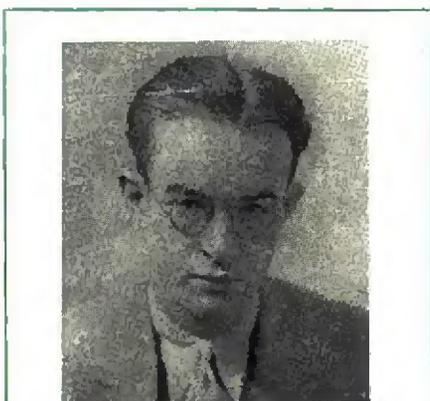
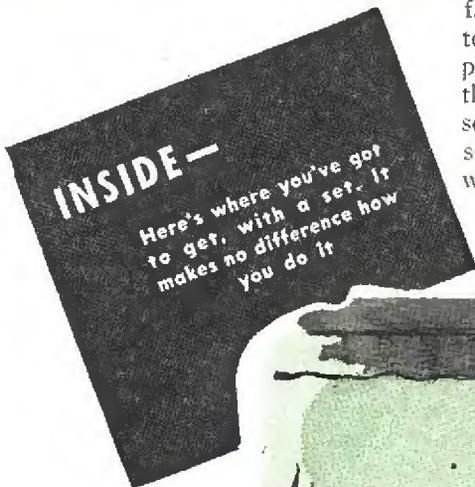
And what do I mean by misrepresentation? When your men go out to canvass, they should canvass for demonstrations, for free trials. They should think of nothing else *but* free trial.

And once you have decided that the best place to sell a radio is inside the house with the radio, the most important thing to do is *stick*

to that decision. Even when one of your men runs across a lady who is actually ready to buy (and admits it), he shouldn't try to sell on the spot. He should arrange for a demonstration. He shouldn't lose sight of the fact that, no matter how good the prospect seems, the best place to sell her is *still* inside the house with the radio.

stration if you go about it in the right way.

Let me tell you about Bill Brown. Bill is a specialist. He realizes that in order to do one thing well, you must specialize in that one thing. He specializes in placing radios on demonstration. He has a supervisor to close his sales for him—despite the fact that he is as good a salesman as his supervisor: he has a sales story, for selling a woman the idea of taking a radio in on free trial, that is very convincing. He tells a



**By
CASWELL ODEN**

To sales managers who want volume without excessive cost the author directs this first of a series on outside selling. In early issues he will tell how to attract good men, how to weed out the weak ones, train the best and then direct them. In the business himself, Caswell Oden deals with his subject in the direct, practical language of a man who actually works at it.

Boiled down to a few words, it amounts to this: (1) **GET THE RADIO IN THE HOUSE.** (2) **DON'T EVEN TRY TO SELL IT UNTIL YOU GET IT IN THE HOUSE.** And, thank heaven, when you once get it in the house, the chances are that you won't even *have* to sell it. It'll probably sell itself.

A Story That Clicks

That is all very true, you may be saying, but it is not as easy as it sounds. People are smart. They know that you have only one reason for putting a radio in the house and that reason is to sell it.

You're right. People are smart. But a canvasser can be smart too. And it is not hard to place radios on demon-

stration *why* he wants to place a new radio in her home on demonstration—yet not one of his reasons suggests that he expects—or even hopes—that the lady will buy it! He has enough of these reasons to last an hour—if he needs them.

Here are a few of them:

First of all, there's an advertising campaign on (there always is), and he is practically an advertising man, to hear him tell it. It is very true, he admits, that if one of his demonstrations is accidentally sold he receives a commission on it (from the dealer) but that is only *secondary* to him; his job is to advertise a certain make radio by placing it on demonstration, and he receives a dollar (from the distributor) for

every demonstration he makes. (Bill has told this story so often that he believes it himself—that's why he is so convincing. I wish I had a dollar for every lady who has taken a set into her home simply so Bill could earn his dollar! But many of these sets are *sold*.)

Then there is the lady who would really like to help Bill earn his dollar, but she has a hunch that she and Bill would be pulling something over on the distributor, inasmuch as she is *sure* she won't buy. "It's just a waste of time."

Here, of course, Bill must consider the circumstances. If the lady has a set that's only a year old, or if there is some definite reason like that which leads Bill to believe, *himself*, that no sale can be made, he will pass it up. But if the circumstances lead him to believe that there is even a *slight* chance of a sale, he goes on something like this:

"Naturally, Mrs. Jones, we want to put radios in on demonstration where we think we'll sell them. But that's not the *only* reason we want to demonstrate them. Why, Mrs. Jones, we're even anxious to demonstrate a radio where we're *sure* we won't sell it. That's what you can't understand, isn't it? All right, I'll explain why. Take yourself, for instance. Your set's only four years old, and from what you tell me I believe, myself, that you're not ready to trade it in for a new one just yet (Bill is lying now; he has sized this up as a good prospect, but only *if* he can get a new set in her house, and he is giving her the works), and I promise you I won't even *ask* you to buy it—but I *still* want you to *try* this set. Why? Because you're going to buy a new set *eventually*. Right? And we figure that if once you have the opportunity to listen to this new——right in your own home, then it will be your selection when you *are* ready to buy. The distributors have so much confidence in this set that they believe, once you use it, it will sell itself—if not immediately, then at some future time. And as for the dealer, we believe there is a good chance that you will remember us and give us the business.

"Not only that," Bill continues; "look at all the *leads* we get. Why, Mrs. Jones, your living room is a better place to display a radio than the front window of our store. Time after time I take out a set, which I have demonstrated, but get sent right

across the street where a sale is waiting. Take Mrs. Slocum last week, for instance, over on Darien Street—maybe you know her. (Bill gets right down to specific cases. True cases, fictitious cases. What's the difference?) I didn't sell Mrs. Slocum a set. But she got me a sale. She only took it in so I could make my dollar, and I didn't even try to sell her. As I was unhooking it, and thanking her for using it, she said, 'Before you put it in your car, Mr. Brown, go over and see Mrs. Vogt across the street, at 3924. She was over here last night, listening to it. From the way she talked, I think maybe you can sell it to her.' I took it right over, Mrs. Jones, and I sold it that night. Mrs. Vogt didn't even want a demonstration; she'd already had one—in Mrs. Slocum's house.

"So you see, Mrs. Jones, why we want to make demonstrations. It's not a waste of time at all. It's business and very good business. And even though you're not ready to buy yet, I certainly would appreciate it if you'll allow me to put one of these new——in on demonstration for you. There's absolutely no obligation; you don't have to sign a thing; and, well, as I explained, it means something to me, whether you buy it or not. I'll bring over one of these \$92.95 sets. The foreign reception comes in exceptionally good on this one. Practically no static at all. Just wait until you hear it! Maybe you can get me a sale. Just explain to your husband that it's a free demonstration. That's right. Some time this afternoon."

And if Bill has been convincing enough, the lady will, in many cases, decide to take the set in. She wanted to do it in the first place, so he could make his dollar; but she had an idea that the distributor only wanted Bill to make demonstrations where there was a probable sale. Now, after Bill's story, she sees where not only Bill, but the distributor and the dealer as well, want to make demonstrations wherever they can, regardless of the chances of a sale—and, so help me, she sees *WHY*.

The Fine Art of Closing

It is, of course, difficult to be specific about every phase of this method of selling radios, but the fundamental ideas involved can be applied by practically all dealers. Each dealer will have to work out his own method of application, depending

upon his own particular set-up. There is the question of stock; of manpower, and how the man-power operates.

As for the stock, most dealers, even small dealers, can get it, and will get it—if they see where it is going to move.

As for the man-power, any dealer with canvassers to make the demonstrations, and supervisors or closers to go back to sell, is in the best position—because the man who makes the demonstration, when he becomes *good*, has such a terrific cock-and-bull story to tell, in order to get the radio in, that he is actually ashamed to ask anybody to *buy* a radio.

This doesn't mean, however that the closer, going back for the demonstrator, need be a high-pressure man who has to be thrown out on his ear. His job is easier than the canvasser's. The way has been paved for him. He is invited in. He has a chance to talk; to show what he is talking about, and not just a picture. It is after dinner, in most cases, and the whole family is there, and it is warm and comfortable inside, and he is shown more respect because he is "the boss" and has lost no dignity pushing door bells, and he becomes friendly, and is in an ideal position to sell.

And what does it matter if Mrs. Jones says, "But where is the man who put it in?" He can have rheumatism, or neuritis, or a pain in the back.

And what does it matter if Mrs. Jones says, "But I told him I wasn't going to buy it"? "Oh, that's all right, Mrs. Jones; you don't have to buy it. We demonstrate a lot of them that we don't sell. But it is a nice set, isn't it? Did you notice this gadget here?" . . . and the first thing you know he's got London for them.

The canvasser who must close his own sales should still force demonstrations, but he won't be able to place as many radios on trial as a man like Bill. The difference is that he looks for *sales* while Bill looks for *demonstrations*. His *percentage* of sales for 100 demonstrations will be higher than Bill's: while he is placing 100 radios and selling 80 of them, Bill will be placing 500 and having 250 of them sold for him. Which would you rather have?

As for credit, some dealers insist upon having a Home Demonstration blank filled out, which consists of

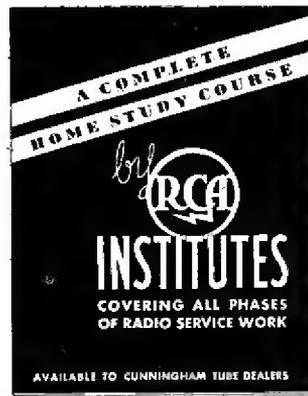
(Continued on page 43)

Special offer TO RADIO SERVICE DEALERS

The Complete Home Study Radio Service Course by RCA INSTITUTES, INC.

REALIZING that there are many radio service dealers who could materially increase their personal income if it were possible to obtain complete and reliable instruction in the highly technical field of radio service, authorized Cunningham Radio Tube Distributors are now offering the RCA INSTITUTES HOME STUDY RADIO SERVICE COURSE to radio service dealers ABSOLUTELY FREE in return for the purchase of Cunningham Radio Tubes.

The regular cost of the 9 groups of lessons going to make up the complete Home Study Radio Service Course is \$81.00. But ... now it is yours at NO COST. Ask your Cunningham distributor today for the pamphlet containing full information so that you can take advantage of this opportunity.



MODERNIZE YOUR SERVICE SHOP

with RCA Test Equipment. Ask your local Cunningham distributor how you can obtain the many pieces of RCA Test Equipment, as well as Public Address Systems, FREE with the purchase of Cunningham Radio Tubes.

OVER 90,000,000 CUNNINGHAM RADIO TUBES
HAVE BEEN SOLD FOR REPLACEMENT SERVICE WORK

A quality product by RCA



Cunningham Radio Tubes

STANDARD SINCE 1915

SALES... STOCKS... and SHIFTING LINES

PROFIT—real tangible NET profit is the chief objective of every radio dealer.

There are certain things that the dealer himself can or must do—and must continue doing—if he is to operate at a profit, if he wants to *have* a net profit at the end of the year.

Then there are other factors, wholly and completely beyond the control of the dealer, which nevertheless have a direct influence and often serious effect on his opportunity for making a net profit.

Sometimes those outside factors are easily and quickly recognized while at other times they are obscured or entirely concealed and their import does not become apparent until their effect has been felt—and then it is often too late to do anything about it.

If then, a dealer is subject to vari-

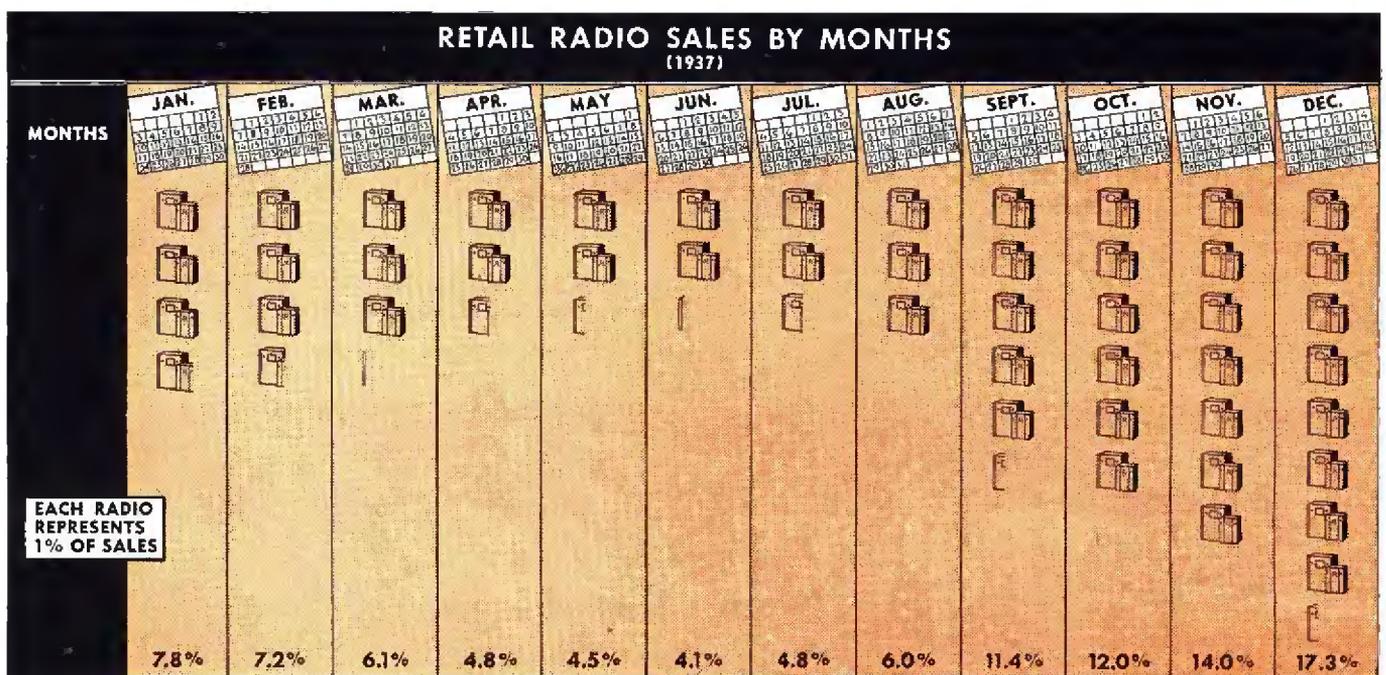
ous external influences, over which he has no control and of which he cannot be warned in advance, it follows that the only protection against them lies in effecting a position of greatest possible flexibility in all branches of his operation.

Many large dealers accomplish a

A pre-season picture of the radio retailer's present position, based on a survey among 2,000 stores

By O. FRED. ROST

considerable degree of such flexibility with the aid of very complete accounts of their buying, selling and internal operations, in that they use their records of past performance as a guide to new commitments and future planning. For the small dealer, that is not always possible.





5 Full Pages in "LIFE"

(April 4th Issue)

Plus the Magic Key, the Victor Record Programs and other outstanding mediums . . . will sell your customers the

VICTOR RECORD SOCIETY

RCA Victor's "Magazine within a Magazine" in "Life" April 4, 1938, tells 14,000,000 readers about new Victor Record vogue

Everywhere Americans are eager to join the Victor Record Society! They proved it in the sensationally successful Wilmington trial. And—right now—they're proving it in every section of the country!

That's the reason why RCA Victor is devoting the entire next issue of "Listen" to the Victor Record Society. On April 4th, 1938, five exciting, colorful pages in "Life" will blast this important news to millions

of music lovers all over America.

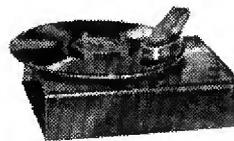
And that's just one part of a \$500,000 Campaign which includes the Magic Key, the Victor Record Programs, National Magazines and Newspapers.

Your biggest business-building chance in years!

Even before the Victor Record Society started, Victor Record sales had soared 575% above '33. Now—with this sensational new sales-making plan—you're offered the greatest single profit-making opportunity in years! So don't wait! Start cashing in now! See your distributor at once for full information and sales helps!

RCA VICTOR RECORD PLAYER—R-93-B

Plays Records Through Any Modern AC Radio!



This is the RECORD PLAYER Victor Record Society members receive at no cost. Plays records with full tone of the radio. Can be played from arm-chair. No getting up to change records. List price \$14.95. See your distributor.

Over 325 million RCA radio tubes have been purchased by radio users . . . In tubes, as in radio sets, it pays to go RCA All The Way.

Listen to the "Magic Key of RCA" every Sunday afternoon at 2:00, E. S. T., over the NBC Blue Network.



RCA Victor

RADIO'S
GREATEST
VALUE

A SERVICE OF THE RADIO CORPORATION OF AMERICA

More Profit *per* Prospect



By **RICHARD GILBERT**

SIXTH of a SERIES on Selling RECORDS

PRACTICALLY everything you need to know and do to boost sales has been indicated, however roughly, in the five articles which preceded this, the last of a series of six on phonograph record retailing.

The first article considered the problems of initial inventory, physical layout, personnel, demonstration facilities; also the need of managerial control. These are difficult to generalize. Their complete solution requires specific knowledge of location, type and volume of merchandise carried in the past, clientele preferred, and proposed investment. The ideal set-up, however, calls for a representative stock, adequate means for demonstration and, above all, intelligent, alert salesmanship. Given these advantages the progressive dealer is in a position to make the most of the

LEAD "JAZZ FANS" TO BETTER MUSIC WITH THESE SELECTED DISCS—

RHAPSODY IN BLUE (Gershwin) Boston "Pops" Orchestra. Victor Nos. 11822/3.....	\$3.00
CONCERTO IN F (Gershwin) Roy Bary & Whiteman Orchestra. Columbia set No. 280.....	3.75
AN AMERICAN IN PARIS (Gershwin) Shilkret & Victor Orchestra. Victor Nos. 35963/4.....	2.50
PORGY & BESS—EXCERPTS—(Gershwin) Lawrence Tibbett & Helen Jepson; orch. & chorus. Victor set No. C25.....	6.50
LA CREATION DU MONDE (Milhaud). Ballet on Jazz Themes Symphony Orchestra con. Darius Milhaud. Columbia set No. X18.....	3.25
CONCERTINO FOR PIANO & ORCHESTRA (Honegger) Play part two. Eunice Norton & Minneapolis Orchestra. Victor No. 8765... ..	2.00
RIO GRANDE (Lambert). By the British "Gershwin" St. Michael's Singers, Harty & Halle Orch. Columbia set No. X52.....	3.25
FACADE (Walton). Play "Popular Song" London Philharmonic Orchestra. Victor 12034/5.....	3.00
DIVERTISSEMENT (Ibert). With "MacDowell" concerto Boston "Pops" Orchestra. Victor set No. M324.....	7.50
BOLERO (Ravel) Amsterdam Concertgebouw Orch. Columbia set No. X22.....	3.25
CONCERTO FOR PIANO & ORCHESTRA (Ravel) Marguerite Long & Orchestra. Columbia set No. 176.....	5.00
JONNY SPIELT AUF (Krenek). The first "jazz" opera Orchestra. Decca No. 25785.....	.75
FUGATO ON A WELL-KNOWN THEME (McBride) Variations on the Laurel & Hardy theme song. Boston "Pops" Orchestra. Victor No. 4378.....	1.00

singular opportunities offered by the disc business.

This business is a repeat business. More than any other type of merchandise available to the radio or music dealer, records make customers pay frequent visits to your store

and stimulate their curiosity regarding diverse forms of musical entertainment. As the disc buyer's interest increases and his—or her, don't forget—tastes broaden, there is practically no end to the classifications and

(Continued on page 48)

RADIOS for Foreign Countries

Exporters and dealers who get occasional orders for sets to be used out of the United States, will find this tabulation useful. It lists essential wavebands, states most common supply voltage and tells what type of line cord connector is most frequently required.

Country	Wave Bands	Supply Voltage			Connectors		Country	Wave Bands	Supply Voltage			Connectors	
		A.C. Volts	Frequency	D.C.	Sockets	Wall Plugs			A.C. Volts	Frequency	D.C.	Sockets	Wall Plugs
Aden	S M L	230	50		BT	RP	Haiti	S M	110 220	60		ED	
Afghanistan	S M L						Honduras	S M	110	60		ED	
Albania	S M L	220	50		ED		Hongkong	S(SM)M	200	50		BT	FB RP
Algeria	S M L	115	50		BT	RP	Hungary	(ML)					
Angola	S M	110	50		ED	RP	Iceland	S M L	110 220	42 50		ED	RP
Arabia	S M	230	50				Iran	S M	220	50	DC	ED	
Argentina	S M	220	50		ED	RP	Iraq	S M L	220	50	DC	BT	RP
Australia	S M	220 240	50		BT	FB RP	Irish F. S.	S M L	220	50	DC	BT	RP
Austria	S M L	220	50		ED	RP	Italy	S M L	150	42 50		ED	RP
Azores	S M L	220	50		ED		Jamaica	S M	110	40		ED	
Bahamas	S M	115	60		ED		Japan	S M	100	50		ED	FB RP
Barbados	S M	110	50		BT ED	FB	Kwantung	M	110	60		ED	
Belgian Congo	S M L	220	60		ED	RP	Latvia	S M L	220	50		ED	RP
Belgium	S M L	220	50		ED	RP	Liberia	S				ED	
Bermuda	S M	110	60				Libya	S M L	125	50		ED	RP
Bolivia	S M	110	50		BT		Lithuania	S M L	220	50		ED	RP
Brazil	S M	127	50		ED	FB RP	Luxemburg	S M L	220	50 60		ED	RP
Brit. E. Africa	S M L	220 240	50	DC	BT	RP	Madagascar	S L	120	50		BT	RP
Brit. Guiana	S M	110	60		ED		Madeira	S M L	230	50	DC	BT ED	RP
Brit. Honduras	S M	110		DC			Malta	S M L	105	100		BT	RP
British India	S M L	230	50		BT	RP	Mexico	S M	110	60		ED	
British Malaya	S M	230	50	DC			Mozambique	S M L	240	50		BT	RP
Brit. Oceania	S M	240		DC	BT	RP	Netherlands	S M L	220	50		ED	RP
Brit. W. Africa	S	230	50		BT	RP	Neth. India	S	127	50		ED	RP
Bulgaria	S M L	150 220	50		ED	RP	Neth. W. Ind.	S M	127	50		ED	
Canada	S M	110	60		ED	FB	Newfoundland	S M	110	50 60			
Canary Islands	S M L	127	50		ED		New Zealand	S M	230	50		BT	FB RP
Ceylon	S M	230	50		BT	RP	Nicaragua	S M	110	60		ED	FB
Chile	S M	220	50		ED	RP	Nigeria						
China	S M	110 200	50		BT	FB RP	Norway	S M L	220	50		ED	RP
Chosen	M				ED	FB	Palestine	S M L	220	50		ED	
Colombia	S M	110	60		ED		Panama	S M	110	60		ED	FB
Costa Rica	S M	110	60		ED		—Canal Zone	S M	110	25		ED	FB
Cuba	S M	110	60		ED	FB	Paraguay	S M	220		DC	ED	
Cyprus	S M L	220		DC			Peru	S M				ED	FB RP
Czechoslovakia	(ML)						Philippine Is.	S M	220	60		ED	
	S M L	220	50		ED	RP	Poland	S M L	220	50		ED	RP
Danzig	S M L	220	50		ED		Portugal	S M L	220	50		ED	RP
Denmark	S M L	220	50	DC	ED		Rumania	S M L	220		DC	ED	RP
Dominican Rep.	S M	110	60		ED		St. P. and Miq.	S M	110	40 60			
Ecuador	S M	110	60		ED	FB RP	Salvador	S M	110	60		ED	
Egypt	S M L	200	50		BT ED	RP	Siam	S M	110	50		BT	
Estonia	(ML)	220	50	DC	ED	RP	Span. Morocco	S M L	127	50			
	S M L						Surinam	S M					
Ethiopia	S M L	220	50		BT ED	RP	Sweden	S M L	220	50		ED	RP
Falkland Is.	S M						Switzerland	S M L	120 220	50		ED	RP
Finland	S M L	120		DC	ED		Syria	S	110	50		BT	RP
France	S M L	110	50		BT	RP	Trinidad and Tob.	S M	110 220	60		ED	
Fr. Eq. Africa	S M L	120	50		BT	RP	Tunisia	S M L	110	50		ED	RP
Fr. Guiana	S M				ED		Turkey	S M L	220	50		ED	RP
French India	S M				BT	RP	Un. of S. Africa	S M	220	50		BT	RP
Fr. Indo China	S	120	50		BT	RP	U. S. S. R.	(ML)					
Fr. Morocco	S M L	115	50		BT	RP		S M L	120	50		ED	
Fr. Oceania	S				BT	RP	United Kingdom	L S M L	230	50		BT	RP
Fr. Somali C.	S M L				BT	RP	Uruguay	S M				ED	FB RP
Fr. W. Indies	S	110	50		BT		Venezuela	S M	110	60		ED	
Germany	S M L	220	50		ED	RP	Yugoslavia	S M L	120	50		ED	RP
Gibraltar	S M L	110	76		ED		Zanzibar	S M					
Gold Coast	S												
Greece	S M L	127 220	50	DC	BT ED	RP							
Greenland	S M L				ED								
Grenada	S M	105	50										
Guatemala	S M	110	60		ED								

S—Short Waves (up to 50 meters—above 6000 kc.) (SM)—Short Medium (50 to 200 meters—1500 to 6000 kc.) BT—Bayonet Socket
M—Medium Waves (180 to 545 meters—550 to 1770 kc.) (ML)—Medium Long (545 to 1200 meters—250 to 550 kc.) FB—Flat Blade Wall Plug
L—Long Waves (1200 to 1875 meters—160 to 250 kc.) ED—Edison Screw Sockets RP—Round Pin Wall Plug



"I couldn't get
along without my
771
CHECKMASTER"

**771 is a compact,
inexpensively priced
WESTON tube-checker
plus continuity tester**

Like servicemen everywhere, you'll find this compact tube-checker, volt-ohmmeter combination the handiest tool in the shop. Its striking appearance makes it ideal for tube-selling in the store. Its voltage and resistance ranges, coupled with its portability, make it ideal for rapid bench testing. And its compactness and light weight make it unequalled for trouble-shooting in the home. Listed below are a few of its outstanding features. But be sure you get *all* the details. Return the coupon today.

- Wired for testing latest tubes, and tubes with wandering filaments . . .
- Neon short check while tubes are hot . . . Cathode leakage test of correct design . . . Individual tests on elements of diodes . . . Voltage ranges for point-to-point testing . . . High and low resistance ranges for continuity testing with built-in filtered power supply . . .
- Actual condenser leakage measurements—all types of high and low voltage condensers—read in ohms on meter scales . . . Positive line voltage control.



**Model 776
WESTON
Oscillator**

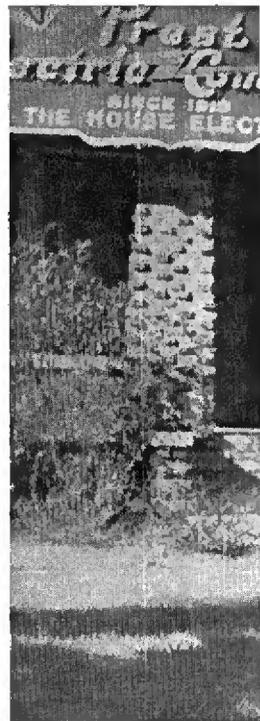
Hand calibrated dial (no trimmers or padders used). Uniform output level regardless of frequency. Constant signal free from drift or shift in frequency. Complete attenuation of signal on all bands. The coupon will bring you full data on Model 776 as well.



WESTON
Radio Instruments

Weston Electrical Instrument Corporation
581 Frelinghuysen Avenue, Newark, N. J.
Send complete information on Model 771 and other Weston Instruments.

NAME _____
ADDRESS _____
CITY _____ STATE _____



VISITORS WELCOME—Easy of access to people who may not be quite ready to buy but are interested enough to go through a model home, Prest Electric's new quarters provide plenty of parking space

For the Home . . . From a Home

By

A. V. DuCHANE

FROM a conventional store in the downtown district of San Bernardino, California, after 18 years to a "House Electric", four blocks away, went dealer R. C. Prest. Up went radio and appliance sales (400 per cent, first season) and down went overhead.

Unique enough to pique the curiosity of the public, usually thought of as a model home open without obligation to visitors rather than a store displaying merchandise cold-bloodedly for sale, it attracts more than its share of floor traffic. Easy of access without bucking business area congestion, it also boasts ample parking space beneath backyard trees.

Clever stunt not practical in ordinary shops yet highly successful here is placing of a registry book at the

front door. Sign reads: "Please register. We like to know who our visitors are." The result is a lucrative mailing list. And no asking for names after sales are in progress.

In the only structural addition made, a glass-enclosed extension out front, radios and appliances are displayed much as they would be in any window. Main set stock is concentrated in the living room, grouped around a fireplace which eliminates the necessity for expensive backdrops, provides home-like atmosphere conducive to pressureless closing. Scattered throughout the remaining rooms, wherever they fit in naturally, are other connected sets.

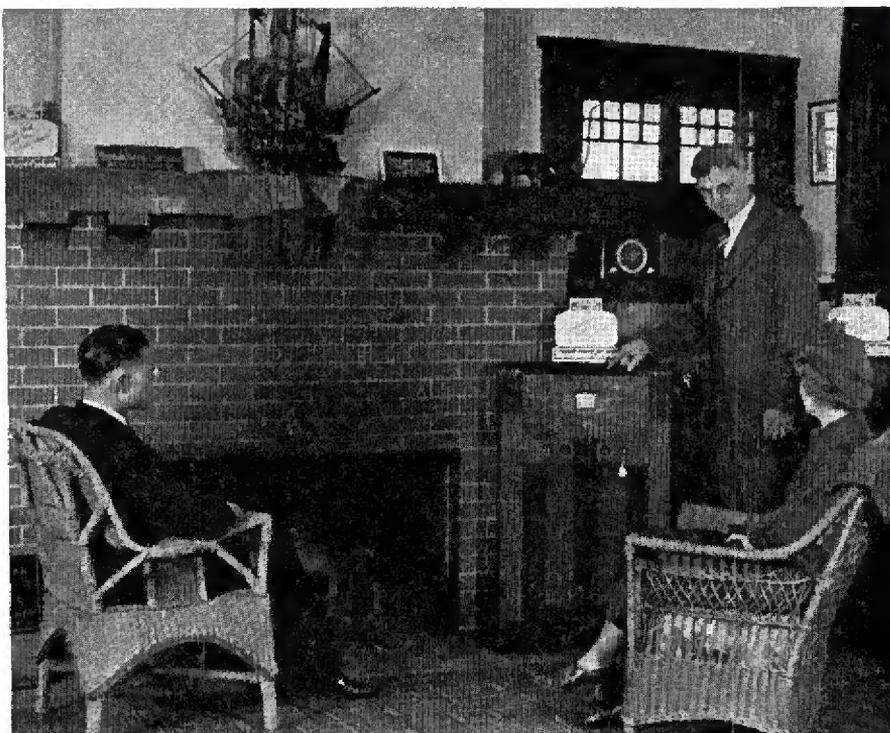
Dining room and kitchen feature refrigerators and ranges. Walls of the maid's room are lined with show-cases containing small appliances. Service laboratory is in a glass-enclosed porch (not illustrated). And the business office is, appropriately, in the building's library.

Sales technique is to meet people at the door, escort them with the air of a guide on a tour of the building. Direct attempts to sell are avoided unless visitors indicate that they are there to buy. With merchandise scattered throughout the house, opportunities to call attention to it without forcing obviously occur.

"Not all these visitors are customers," says Prest. "But every one is a prospect. We sell them, if not today then next week, next month or next year."



THEY'LL EVENTUALLY BUY—Only addition to the original building is an extension out front serving as a display window. Big enough to do a job without looking too commercial, it is visible both ways for blocks



SALE BY THE FIRESIDE—R. C. Prest moves a console out into the living room, stages a demonstration aided by the homelike atmosphere. Feeling like guests rather than customers, his visitors are more susceptible

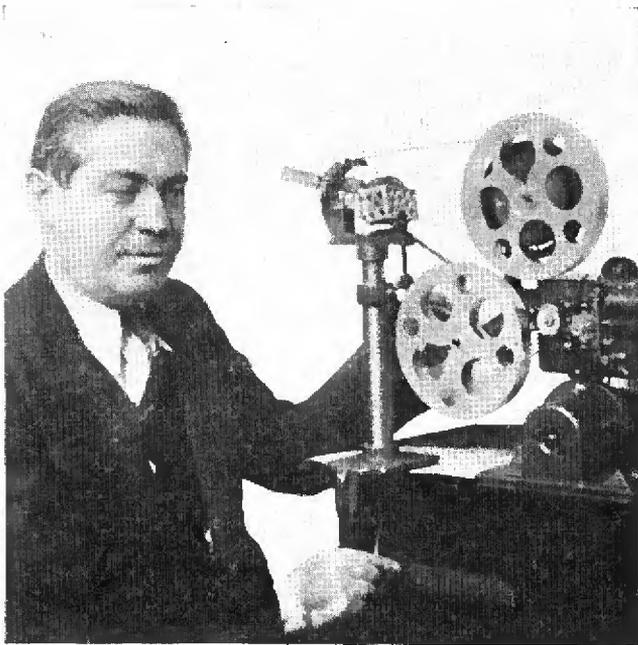
SECOND-SET DEMONSTRATION—Placed where they fit in naturally, table model radios almost sell themselves by calling similar niches in the customer's own home forcefully to her attention



SERVICE ON THE SUNPORCH—No corner of the "House Electric" is closed to visitors on a tour. Many a sale has been completed here, the customer convincing himself that his purchase will be kept in good working order



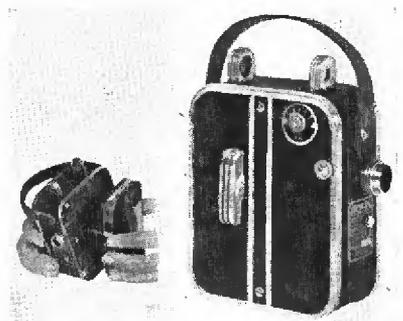
Preview of New



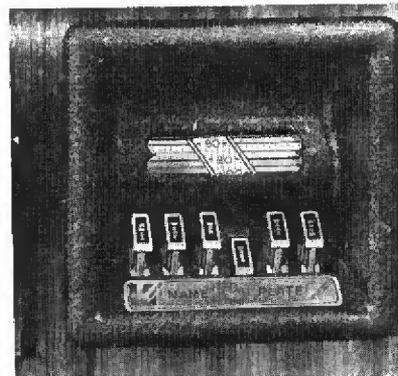
MILES

"Filmograph" connects to a 8, 16, or 35 mm. projector in conjunction with amplifier-speaker combination or radio receiver; records sound (voice or music) on standard film or positive stock and plays back instantly; may also be operated without pictures; for making home talkies, recording speeches, music, etc., \$98.50; made by Miles Reproducer Co., Inc., 812 Broadway, New York City

Magazine loading is the high point of the 16 mm. movie camera marketed by Irwin Corp., 27 W. 20th St., New York City; optical spy glass view-finder; footage indicator; fixed focus; 30 and 40 ft. magazines; pictures can be shown on any standard size amateur 16 mm. projector; \$12.50



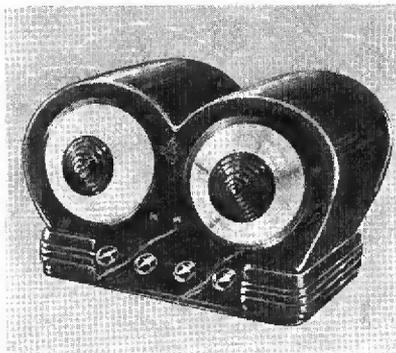
IRWIN



FRANKLIN

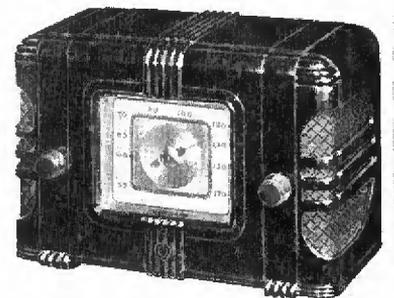
The tuning unit offered by A. W. Franklin Mfg. Co., 175 Varick St., New York City, is available in a variety of shapes and finishes to harmonize with all cabinet designs; consists of sturdy frame mounting 6 or more station selector buttons; a cable drive transmits cam shaft action to the variable condenser

Count Alexis De-Sakhnoffsky, whose styling is frequently illustrated in "Esquire", is now designing sets for Emerson Radio and Phonograph Co., 111 Eighth Ave., New York City; illustrated is the first model, BD-197, a 6 tube ac-dc table set for American and foreign reception; Miracle Dial; \$39.95



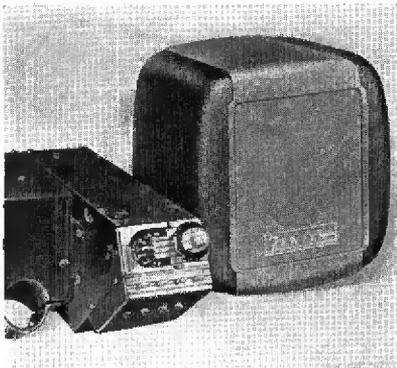
EMERSON

Challenger 5 of the Grebe Mfg. Co. Inc., 119 Fourth Ave., New York City, is a 5 tube ac-dc, high gain trf receiver; high "Q" coils; beam power output tube; 175-550 meters; lustrous plastic cabinet comes in ebony, walnut, ivory, jade or red; also available with long wave band from 835-2050 meters



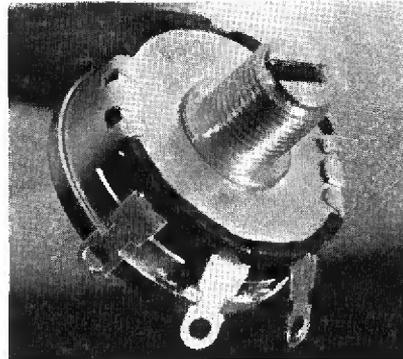
GREBE

Radio Merchandise



ZENITH

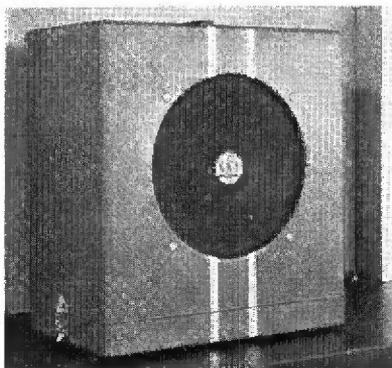
Other models in the 1938 Zenith line include the illustrated (left) 5M294, push button tuning, 5 tubes, \$39.95; 5M291, 5 tubes, \$29.95; 6M292, 6 tubes, push button tuning, built-in speaker, \$44.95; 6M293, 6 tubes, push button tuning, \$49.95; Models 6M292 and 6M293 may be obtained with "Acousticmatic", \$5 extra



CLAROSTAT

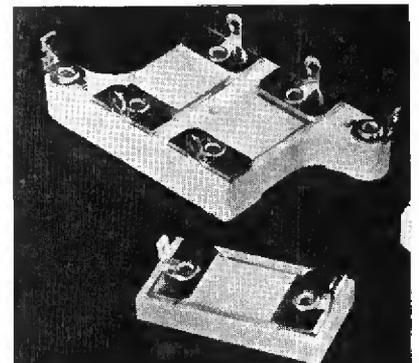
The line of midget composition - element controls made by Clarostat Mfg. Co. Inc., 285 N. 6th St., Brooklyn, N. Y., has been extended to include tapped and auto-radio types; have the Ad-A-Switch feature which means the back plate can be slipped off and a power switch slipped on if desired

A new type infinite baffle speaker mounting, with high frequency deflector unit has been introduced by Sound Systems, Inc., 6545 Carnegie Ave., Cleveland, Ohio; excellent for funeral parlor installations where pipe organ selections are used in which reproduction must be faithful over a very wide frequency range

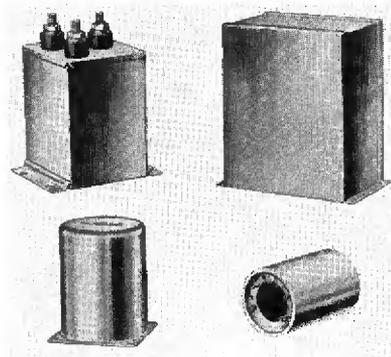


SOUND SYSTEMS

For radio production purposes, F. W. Sickles Co., Springfield, Mass., is offering its Silver Cap condenser; attains and maintains a high value of Q, together with a capacity value within tolerances not usually found in regular production components; single and double types

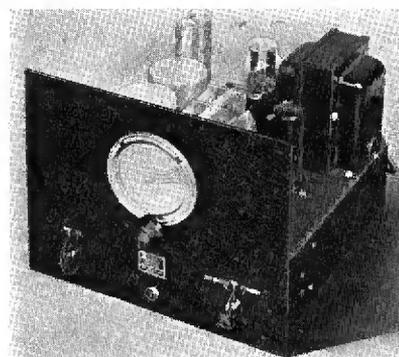


SICKLES



RCA

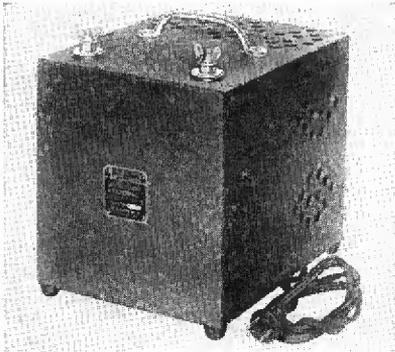
With the new television parts just announced by RCA Mfg. Co., Camden, N. J., and other standard parts already available, the amateur experimenter who is equipped with sufficient technical knowledge can assemble his own Kinescope deflecting circuits for use in experimental television receivers.



MEISSNER

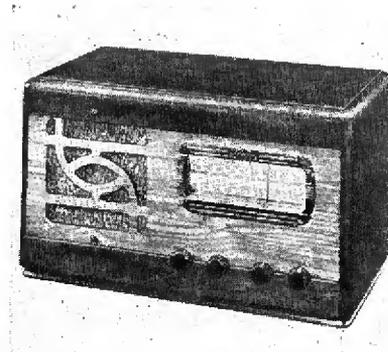
To enable the amateur to conveniently change the transmission frequency from his operating desk, Meissner Mfg. Co., Mt. Carmel, Ill., has introduced the "Signal Shifter" a variable-frequency, electron coupled exciter unit with ganged buffer stages; 5 sets of 3 plug-in coils each provide for operation on the 10, 20, 40, 80 and 160 meter bands

PREVUE OF NEW RADIO MERCHANDISE



B. L. ELECTRIC

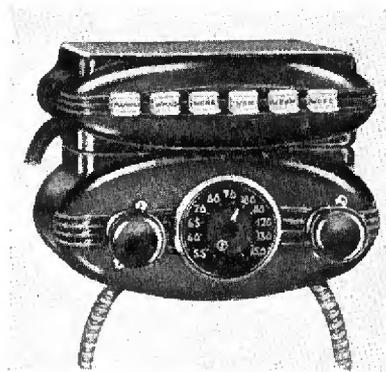
A new power unit for demonstrating auto radios, including those having motor driven automatic tuning, has been placed on the market by B-L Elec. Mfg. Co., 19th and Washington Ave., St. Louis, Mo.; heavy duty transformer and rectifier insure proper output voltage and current during tuning; thermal overload circuit breaker



ADMIRAL

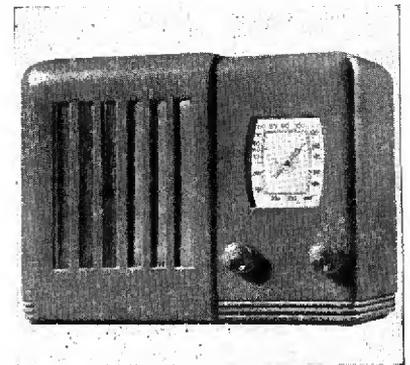
Model 512-6D, a 6 tube superhet for 6 volt d.c. operation. Tunes from 16 to 550 meters in 2 bands, slide-rule dial, 2 position tone control, 6 in. p.m. speaker, lay down cabinet; Continental Radio and Tel. Corp., 3800 Courtland St., Chicago, Ill.

For use on all types of auto radios, F. W. Stewart Mfg. Co., 340 W. Huron St., Chicago, has developed an electric push button tuning unit; can be attached to instrument panel or steering post, with manual control mounted in the instrument panel or under dash control; contained in a compact metal case

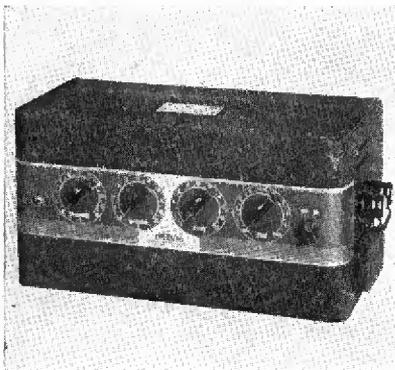


STEWART

Model 516-5C, a trf ac-dc table model by Continental Radio and Television Corp., 3800 Courtland St., Chicago, Ill. Five tubes including ballast, 2 bands tune from 175 to 550 and 800 to 2000 meters, 5 in. dynamic speaker, 2 watts maximum output

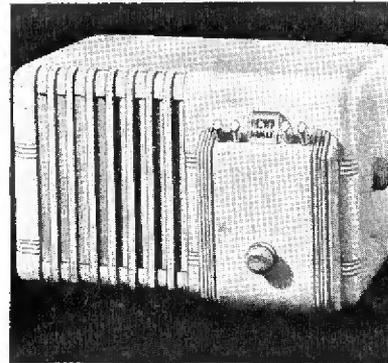


ADMIRAL



OPERADIO

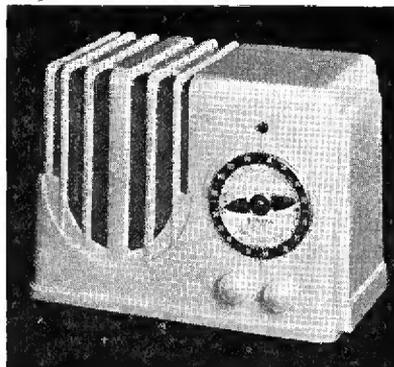
Modern beam power amplifier by Operadio Mfg. Co., St. Charles, Ill. Three channel high impedance input, 35-52 watts output, non-resonant equalizers used as tone balancers for both high and low frequencies, full range of output impedances



ADMIRAL

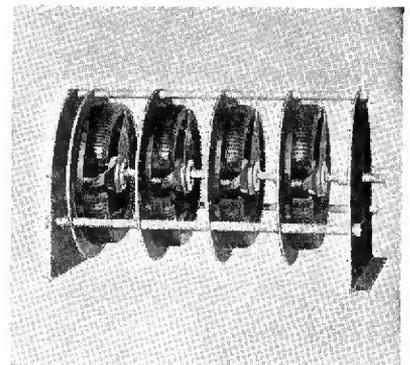
Model 115-5A, a 5 tube superhet table tuning range from 175 to 550 meters. Manual push-button tuning with novel magnifying lens for indicating position of drum-type dial. Available in ivory, black or brown bakelite from Continental Tel. and Radio Corp., 3800 Courtland St., Chicago, Ill.

A new series of inexpensive table models is ready at the plant of Fada Radio & Elec. Co., Long Island City, N. Y.; there are "Coloradios" in ivory plastic (plain or gold trimmed), and walnut bakelite as well as cabinets of hand rubbed walnut; 5 and 6 tube superhets for ac or ac-dc and a trf series for ac-dc



FADA

A special type of tandem construction and assembly has been designed by engineers of Ohmite Mfg. Co., 4835 Flournoy St., Chicago, for use with the larger-size Ohmite rheostats; this assembly is used for control of electrical apparatus where several circuits are to be simultaneously varied



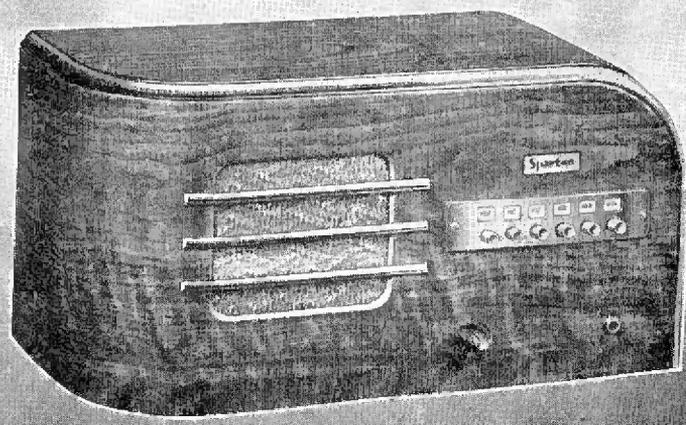
OHMITE

**ITS NEW-ITS UNIQUE-ITS 100% MODERN
INSTANTANEOUS-AUTOMATIC
PUSH BUTTON
TUNING**

Beautiful, full-sized, personal radio . . . Walnut finish --
chrome trim An entirely new idea in cabinet material and
finish Designed to meet radio's demand for surpassing tone
quality -- simplicity of control -- beauty and quality -- at a price.

**WITH
SPARTON
QUALITY**

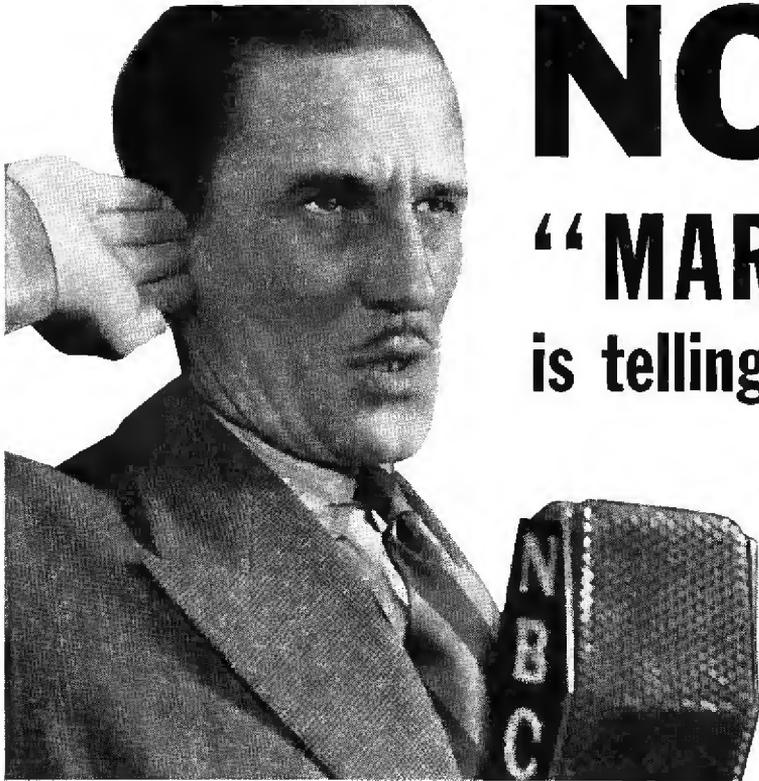
**SUPREME
TONE
QUALITY**
"Radio's
Richest
Voice"



SPARTON MODEL 5018

ITS STARTLING AT
SLIGHTLY HIGHER IN THE WEST **\$19⁹⁵**

THE SPARKS-WITHINGTON CO.
JACKSON, MICHIGAN, U. S. A.



NOW RADIO'S FAMOUS "MARCH OF TIME" is telling your prospects about

SERVEL ELECTROLUX

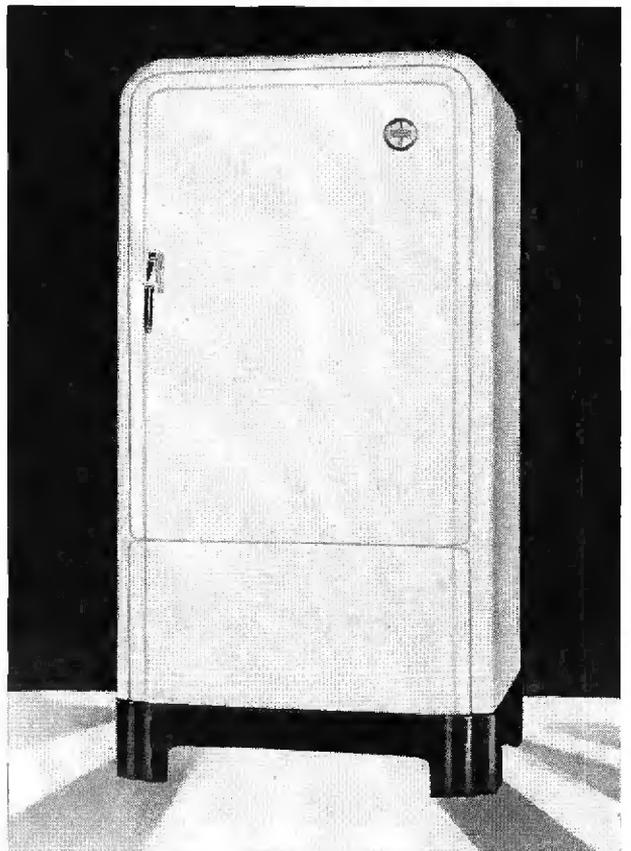
**Any family is a prospect for this
different refrigerator—runs on either
gas, kerosene, or bottled gas**

EVERY YEAR, Servel Electrolux sales grow larger. Every year, Servel Electrolux dealers make more money. The reason is simple. You don't have to be a super high-pressure salesman to profit with this refrigerator. For you can find business on every hand.

Servel Electrolux has models that run on manufactured gas . . . or on bottled gas . . . or on kerosene. That means that *any family anywhere* can now enjoy this world-famous refrigerator, can enjoy its permanent silence, continued low running cost, and other advantages of its exclusive "no-moving-parts" freezing system.

Today—in addition to magazine advertising—Servel Electrolux is supporting dealers with radio's outstanding dramatic show, *The March of Time*. There are money-making days ahead. So write today for information about available franchises. Servel, Inc., Servel Electrolux Sales Division, Evansville, Indiana.

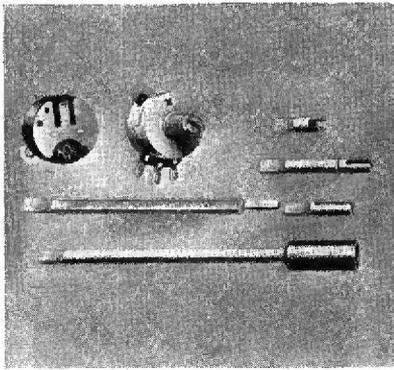
Tune in "THE MARCH OF TIME," sponsored
by Servel, every Thursday night, N.B.C. Network



PERMANENT SILENCE • NO MOVING PARTS • CONTINUED LOW RUNNING COST • NEW, MODERN CONVENIENCES

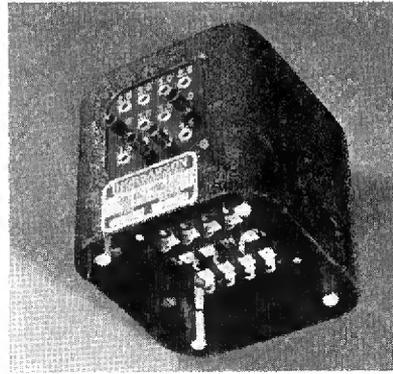
Sell the Refrigerator **THEY HEAR ABOUT
BUT NEVER HEAR**

PREVIEW OF NEW RADIO MERCHANDISE



MALLORY

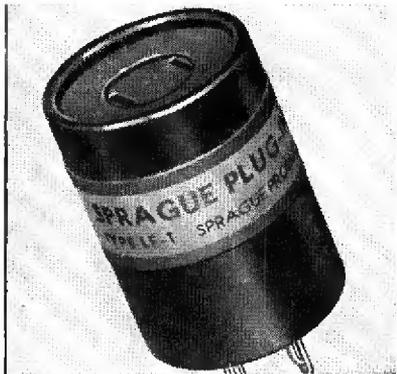
Midget volume controls—plain, single tap, double tap and duals—in resistance values from 5,000 ohms to 3 megohms and in all necessary tapers may be obtained from P. R. Mallory & Co., Inc., Indianapolis, Ind.; a line of 17 plug-in shafts give the 56 controls a range of over 1,000 exact replacements



THORDARSON

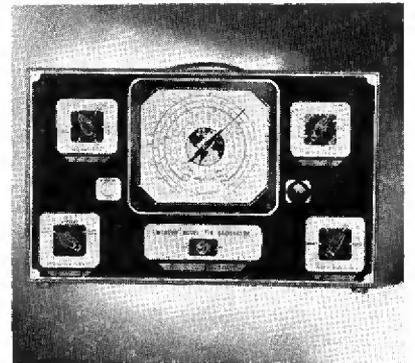
Three additions to the C.H.T. Multi-Match series of transformers are now ready at the plant Thordarson Elec. Mfg. Co., 500 W. Huron St., Chicago; two are drivers for coupling a 500 ohm line to any class B grids; the third is a driver for coupling 6L6's as drivers to any class B grids

A plug-in type filter to reduce radio interference caused by electric razors, heating pads and practically all fractional horsepower electrical motor or vibrator devices may be obtained from Sprague Products Co., North Adams, Mass.; convenient round size, 2x1 7/16 in.

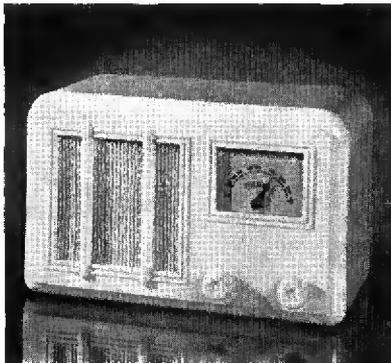


SPRAGUE

Precision control, both as to frequency and output level, is the high light of the test oscillator, model 776, just introduced by Weston Electrical Instrument Corp., Newark, N. J.; equipped with a unique circuit providing automatic amplification control at any required level from 1 to 100,000 microvolts

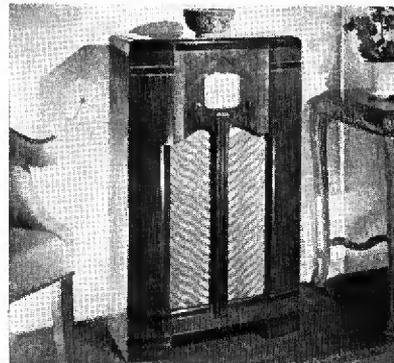


WESTON



GILFILLAN

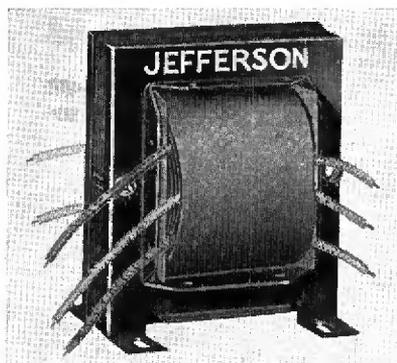
Following the popular trend towards plastics, Gilfillan Bros., 1816 Venice Blvd., Los Angeles, Calif., has brought out the illustrated Table set in ivory Plaskon



RCA

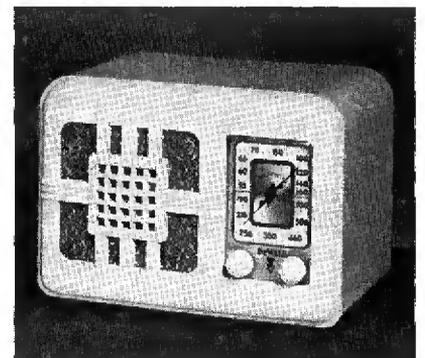
Three new farm radios, two with Current Cuts switch which reduces battery drain by one-third, are announced by RCA Mfg. Co., Camden, N. J.; 94BT is a 2 volt table model priced at under \$20; 94BK console is \$36.95; 94BT-6, 4 tube table set for 6 volt storage battery operation is \$29.95

Two additional vibrator transformer units have been added to the line manufactured by Jefferson Elec. Co., Bellwood, Ill.; designed for replacement in auto sets and for use with mobile or portable transmitters and receivers used in amateur work



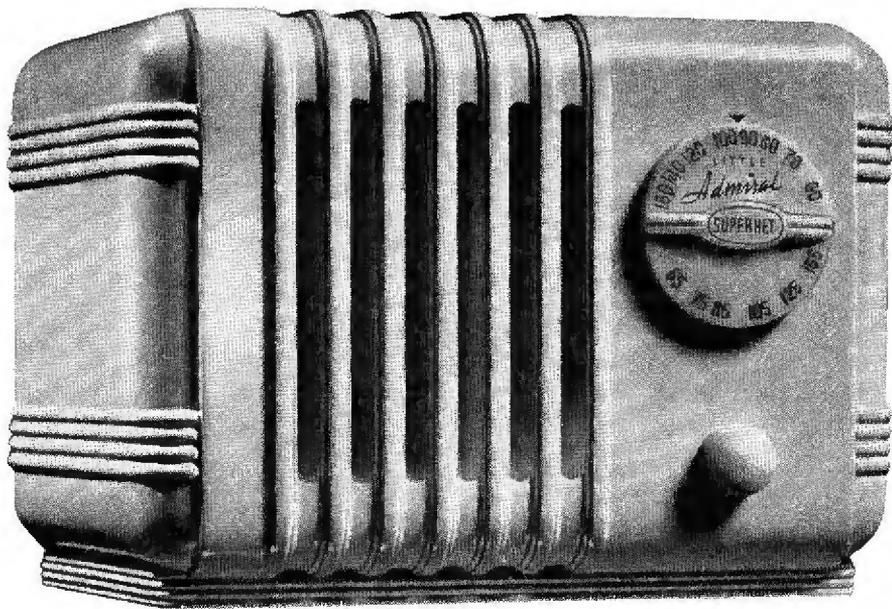
JEFFERSON

"Wonder Tone" grille, designed to blend high and low audio frequencies, is featured in the new ac-dc midget placed on the market by Pierce-Airo, Inc., 440 Lafayette St., New York City; this DeWald Model 530 is housed in a modern plastic cabinet of molded plastic; 5 tubes



PIERCE-AIRO

TAKE YOUR CHOICE



"LITTLE" ADMIRAL 5 TUBE SUPERHET

MODEL 123 - 5E BLACK BAKELITE
 MODEL 124 - 5E BROWN BAKELITE
 MODEL 125 - 5E IVORY BAKELITE
 MODEL 126 - 5E RED BAKELITE

The midget of them all! Modern bakelite cabinet measures only 6 $\frac{3}{8}$ " wide by 4 $\frac{3}{8}$ " high by 4 $\frac{1}{4}$ " deep. Shipping weight only 5 $\frac{1}{2}$ lbs. 5 RCA tubes (including ballast) in improved superheterodyne circuit. Range 535 to 1735 KC. Has 3 $\frac{1}{2}$ " dynamic speaker, iron core antenna coil, 1 $\frac{1}{2}$ watts output.

\$15.00
LIST



NEW RADIO - PHONOGRAPH With PUSH BUTTON TUNING

Model 110-6B—6 tube AC superheterodyne with 8-tube performance. 6-button motor driven "Touch-O-Matic" Tuning. Sliding pointer travels direct to station on full vision illuminated "slide rule" dial. 2 Bands; 16 to 52 and 175 to 565 meters. Has continuously variable tone control, new automatic volume control, 8" super dynamic speaker. Equipped with crystal pick-up and self-starting synchronous motor. Plays all records including 12". Beautiful two-tone walnut cabinet measures 19 $\frac{1}{2}$ " wide by 13 $\frac{3}{4}$ " high by 13 $\frac{1}{2}$ " deep. List price \$74.95.



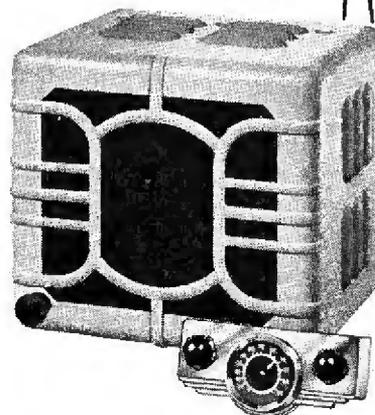
MODEL 55

\$24.95

ORIGINAL
"TOUCH-O-
MATIC"
PUSH
BUTTON
TUNING

UNDER DASH AUTO RADIO

5 multi-purpose tubes employed in ultra sensitive and selective superheterodyne circuit so as to give 7 tube performance . . . five stations easily and quickly assigned for automatic tuning . . . special electro dynamic speaker . . . plug type antenna connector . . . no suppressors required . . . automatic volume control . . . full vision slide rule dial (calibrated 535 to 1530 KC) with large easy-to-read numerals . . . compact metal cabinet 5 $\frac{7}{8}$ " wide x 10-5/16" deep x 3 $\frac{7}{8}$ " high . . . fits all cars . . . readily mounted flush below instrument panel.



SUPER-SIX AUTO RAD

Model 69 Super Six Auto Radio 6 tube superheterodyne with 6 vacuum filter circuits to provide reception absolutely free from ignition noises . . . variable tone control . . . no suppressors required . . . rubber mounted 3-gang condenser . . . low battery drain . . . 3 $\frac{1}{2}$ watt output . . . size 7 $\frac{3}{4}$ " wide x 7" deep x 8 $\frac{3}{8}$ " high. List price \$39.95.

BE AN ADMIRAL DEALER AND MAKE MONEY!

The secret of successful merchandising is found in one simple word: **TURN-OVER**. The only way to get **TURN-OVER** is to offer the best possible values for the least money. That's our policy and we intend to stick to it! When we put a price on an Admiral Radio we don't include the cost of a ticket to Timbucto . . . nor the expense of a large national advertising program. Our job is to give value . . . your job is to do the selling

Does such a policy pay? We think it does. At any rate it sells Admiral Radios . . . and lots of them! As proof we point with satisfaction to the fact that Admiral alone carried over no surplus inventory from last year . . . and much the same can be said of most Admiral dealers.

We don't believe in loading up our dealers with a burdensome stock of radios by such "high pressure" methods as a small additional discount at ninety days to pay. Those ninety days roll around mighty fast and then who are you? A "healthy" inventory . . . rapid **TURN-OVER** with merchandise *rightly* priced . . . that's the way to make money and keep it.

Priced to Sell . . . "Stepped-Up" for Profits

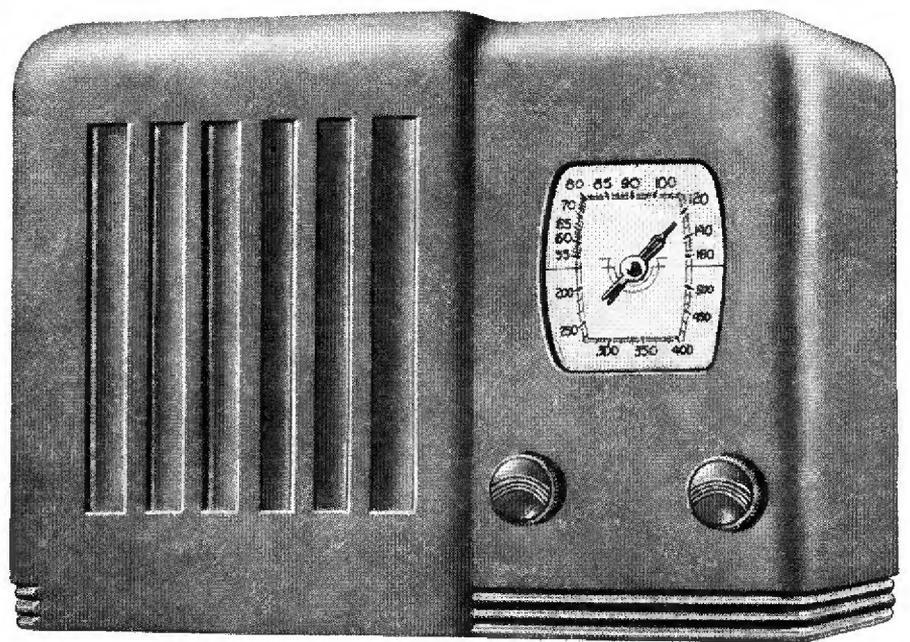
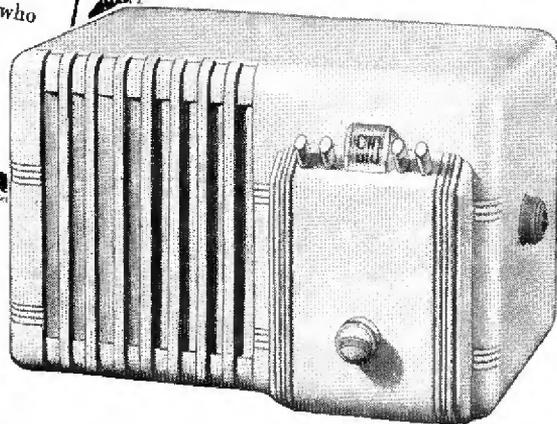
Here are some of the new Admiral Radios for 1938. Starting at \$9.95 the line is gradually "stepped-up" \$169.50 for the 16-tube Admiral tuning console. Never before such values for the money! Look 'em over . . . see for yourself why we say Admiral is the "hottest" line on the market today!

BE A RADIO DEALER AND SEE THE WORLD

Cuba . . . Miami . . . South America . . . Mexico . . . a swell slogan for the Navy . . . but NOT for the radio dealer who is still interested in making money! After all, it's the customer who foots the bill. Can you expect him to pay for your vacation and give you a legitimate profit to boot? And don't overlook this . . . even if you are one of the majority of hard working dealers who stay at home to mind your business, you may still be penalized helping to pay for the other fellow's joy-ride.

Model 113-5A Ivory Bakelite
Model 114-5A Black Bakelite
Model 115-5A Brown Bakelite

\$16.95



5 TUBE TRF AC-DC RADIO in Brown or Ivory Bakelite Cabinets

5 Tube (with ballast) TRF AC-DC Table Model. 2 Bands: 175 to 550 and 800 to 2000 meters. Tunes American broadcast, foreign stations, police, amateur, aviation, ships at sea. Has round airplane dial, manual tuning, 5" dynamic speaker, one stage R.F., 1 1/2 watts undistorted output, 2 watts maximum. Cabinet measures 8 3/4" wide by 6 3/4" high by 4 3/4" deep.

516-5C BROWN BAKELITE

\$9.95
LIST

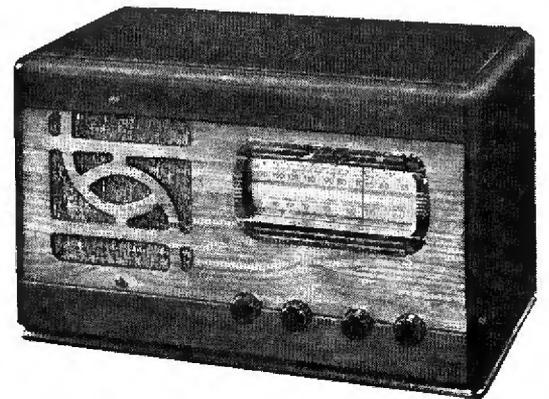
517-5C IVORY BAKELITE **\$12.95**
LIST

5 TUBE AC SUPERHET Ivory, Black or Brown Bakelite Cabinets

5 tube AC superheterodyne table model with tuning range from 175 to 550 meters. Tunes American broadcast, foreign stations, police, amateur, aviation, ships at sea. Manual push-button tuning. Has small drum type dial with magnifying glass, full AVC and 5" dynamic speaker. Cabinet measures 11" wide by 6 3/4" high by 7" deep.

6 TUBE 6 V. SUPERHET Operates from 6 Volt Storage Battery

Model 512-6D—6 tube superheterodyne operating from a 6 volt storage battery. 2 bands from 16 to 550 meters. Tunes American broadcast and foreign stations, police, amateur, aviation, ships-at-sea. Slide rule dial with manual type tuning. Has 2 position tone control and full AVC. 6" permanent magnet type speaker. Beautiful laydown cabinet, 16" long, 9 3/4" high, 9" deep.



NEW 1938-39 MODELS

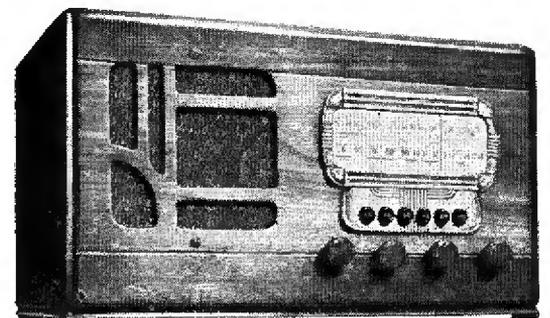
Admiral
AMERICA'S
Smartest **RADIOS**

All prices slightly higher in West and South

See your jobber or Write us for Price List

CONTINENTAL RADIO & TELEVISION CORP.

3800 W. CORTLAND ST., CHICAGO, ILL.



6 TUBE AC SUPERHET With Electric Motor Tuning

Model 102-6E—2 bands. Tunes American broadcast and 19, 25, 31 and 49 meter foreign bands, police, amateur, aviation, ships-at-sea. Full vision 6 1/4" slide-rule gold dial; 6" electro-dynamic speaker; automatic volume control; variable tone control; special wave trap. Handsome laydown cabinet 16" long, 9 3/4" deep, 9" high. List price **\$29.95**

NEWS

Dealers Form NARAR

Atkinson, Davis, Wegner, Frederick, Poucher officer new national association. "Wholesale-retailing", spiffs, other abuses condemned. Meet again in Chicago this July. Fort Wayne to get first national convention early next year.

NEW YORK—Closely following the organization committee program announced in March issues of the trade press (*RR21March*) more than 50 retailers, many of them delegates from important groups, met March 21 at the Commodore Hotel, formed the long-predicted National Association of Radio and Appliance Retailers. Elected president was Russell A. Atkinson, head of the Metropolitan League of Appliance Dealer Associations and executive of the Brooklyn Appliance Dealers Association. Homer C. Davis, president of the Home Appliance Dealers Association of Philadelphia, received the post of vice-president. Ralph Wegner, president of the Fort Wayne Dealer Association, was elected treasurer; W. H. Frederick of Wilmington, Delaware, recording secretary and B. H. Poucher of Philadelphia, executive secretary.

Adopted at this initial meeting were resolutions striking at price-cutting, discount house selling, high pressure devices such as spiffs, misleading advertising. Recommended was manufacturer control of production by closer checkup of actual retail sales, placing of labels and other identification marks so that these cannot readily be removed or obliterated from sets. Promised manufacturers was NARAR assistance in combating trade evils, in keeping with the sentiment prevailing throughout open discussions which favored conciliation rather than antagonism in dealing with these factors. Heard during the meeting were H. M. Capron, managing director of the Radio and Electrical League of New Jersey, Martin Tarzian and William H. Ingersoll of the Brooklyn group, William H. Cheney, managing director of the National Retail Furniture Association and O. Fred. Rost, editor of *Radio Retailing*, who pointed out the importance of closer cooperation between retailers and manufacturers in planning production schedules. Reporting were S. L. Stein, H. M. Capron and Homer C. Davis of the resolutions committee; Wil-

liam Frederick, B. H. Poucher and S. T. Clutterbuck of the by-laws committee; Max Schutze, Ward I. Nicholas and Joe Dorsey of the finance committee; Ralph Wegner, Percy Peters and J. C. Harding of the nominating committee.

NARAR, according to its newly elected president, is to have 12 regional sections, conforming with the U. S. Federal Reserve Districts. Each region will have a vice-president and will be represented in voting according to its population. The regional vice-presidents will comprise the national board of directors, of which Homer C. Davis has been named chairman. According to president Atkinson, there are approximately 110 local radio-appliance organizations in the country. NARAR plans affiliation with forty State and local groups, expects an optimum membership of about 5,000. A tentative budget lists probable annual expenses of running the association at \$16,100, possible revenue at \$21,000. A schedule of initiation fees adopted budgets associations with 25 or more members at \$50, those with 25 or fewer members at \$25. Annual dues planned for individual memberships are given as \$1. An additional \$10,000 is expected from 1,000 unaffiliated members who would pay \$10 a year.

Planned for Chicago in July is a sec-



TEAMS WITH MECK AGAIN—Robert Barr, new sales manager of Electronic Design Corporation's Vocograph Sound Systems Division. Stepped up from the position of promotion manager into the sales manager's seat at Clough-Brengle when John Meck left it vacant to form his own outfit



BURGESS KINGPIN—Just elected president of the Burgess Battery Company is Dan W. Hirtle, former vice-president. Dr. C. F. Burgess is chairman of the board

ond NARAR meeting, to be held during the furniture market to enable closer contact with groups and individuals in the middle west. Fort Wayne, Indiana, is to get the association's first annual convention, tentatively planned for the first week of March, 1939.

RSA Membership Triples

Fourteen directors elected. Whaling City and New Hampshire chapters pick local officers

CHICAGO—From Joe Marty, Jr., executive secretary of The Radio Servicemen of America, Inc., comes word that membership has tripled in the last ninety days. Four new chapters have come in, raising the total number of those affiliated to 27.

The following directors have just been elected: Second district, L. G. Dearing of Oklahoma City; Fourth district, T. P. Robinson of Dallas; Fifth district, E. H. Bertelsen of Rock Island; Seventh district, Howard S. Watts of Duluth; Eighth district, Lee Taylor of Chicago; Ninth district, Joseph A. Cole of Detroit; Tenth district, Donald H. Stover of Freeport,



BIG AMPLIFIER BROADCAST—Highlighting the new Thordarson amplifier line to distributors and dealers listening in all over the country via telephone is sales manager C. P. Cushawey. J. H. Kleker, sales engineer, waits for the ok of his distant audience.

Illinois; Twelfth district, Albert J. Theriault of Cleveland; Thirteenth district, Gerard G. Larkin of Washington; Fifteenth district, Carl A. Rauber of Somerville, N. J.; Sixteenth district, Kenneth A. Vaughan of Johnstown, Penna.; Seventeenth district, Henry M. Lutters of the Bronx, N. Y.; Nineteenth district, John T. Rose of Endicott, N. Y.

Whaling City chapter of New Bedford, Mass., has elected Fred Fiske president, J. A. Sumner vice-president, James L. Shepley secretary and Walter England treasurer. New Hampshire chapter has elected George J. Craig chairman, Ray Gallagher vice chairman, Ray Rogers secretary and George P. Lefebvre treasurer.

Victor Starts Record Society

Novel plan works like book clubs, swells sales in actual tests, is applied nationally

CAMDEN—Inauguration of the Victor Record Society, to increase the number of record-players in use and further accelerate the rapidly growing phonograph record business, was announced late last month by Thomas F. Joyce, RCA Victor advertising manager. This new merchandising plan was evolved after months of experimentation and test in ten different cities in various sections of the country.

To join the Victor Record Society, the customer pays \$6 for membership, and buys \$9 worth of Victor Records of his selection. He at once receives a new record-player instrument, which ordinarily sells for \$14.95, to reproduce records through his radio set. In addition, his membership entitles him to a free subscription to the monthly Society Review, which will give the latest information about records and artists. He also gets the booklet:

"The Music America Loves Best." All of these become his property at once.

Somewhat in the manner of the book clubs, if the Record Society member purchases \$60 worth of records, at the rate of not less than one dollar of purchases per week, he becomes eligible to receive a dividend of \$1.50 in records of his choice for each \$15 worth of accumulated purchases, up to \$60. This optional privilege entitles him to receive record dividends up to \$6, the entire cost of his membership.

To the dealer, the Victor Record Society plan means a normal profit out of the original \$15 enrollment transaction, and what is most important, virtual insurance of a \$60 additional volume of business from the majority of the members. The only extra expense to the dealer for this \$60 of business is his small cost of the record dividends.

The Victor Record Society idea and other related merchandising plans received a thorough test in many representative cities, including Wilmington, Del., Chicago, Boston, Charlotte, N. C., Los Angeles, Milwaukee, Seattle, St. Louis, Mo., Portland, Ore., San Francisco, and surrounding territory. Of all the plans, however, that evolved in the Wilmington test brought the best and most positive results.

Taking Wilmington with a population of 106,500, as an average American city, the plan was presented to the radio and record dealers. At the end of an eight week test period, dealers reported signing up one member for every 250 homes in the entire city. Eighty per cent of the Society members were new record customers. Fifty-five per cent of the new members purchased liberal quantities of records, and as was expected, general record sales increased measurably all over the city. In a house-to-house canvas of Record Society members at the end of the test period, over 60% said they were planning to purchase phonograph-radio instruments.

The average price of the instrument they expected to buy was around \$176.

Philly Show April 18-23

Electrical Association exposition at Convention Hall open entire week from noon to 11 p.m.

PHILADELPHIA—The Electrical Association of Philadelphia stages the biggest exposition in the city's history at Convention Hall the week of April 18-23, doors opening at noon and closing at 11 p.m. each day. Included are exhibits sponsored by manufacturers and local distributors of radios, refrigerators, ranges, washing machines, air-conditioners, ironers, dish-washers, vacuum cleaners, other household equipment.

Says George R. Conover, managing director: "In the long series of successful shows we have conducted I do not recall one that has aroused so great a measure of public interest at an advanced date. The long and successful background of this exposition has established for it a degree of public acceptance seldom equalled in the exposition field. We are confident that a new high attendance record will be established. It is a merchandising opportunity providing consumer contact to an unequalled degree."

New Address For Espey

NEW YORK—The Espey Manufacturing Company, Inc., is now located in new quarters at 67 Irving Place, retains its old telephone number.



VOLUNTEER SALES MANAGER—To aid sales during Stromberg-Carlson's "General Manager's Week," George A. Scoville, vice president and general manager, tries his hand again at the old sales manager's job just for the month of April, reading reports, editing the concern's weekly publication, supervising selling activities, awarding a mystery prize for performance



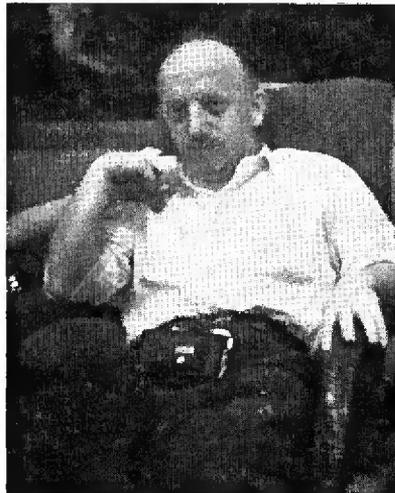
SALES—Aboard the "MS Pilsudski" enroute to Curacao, Colon, Panama and Havana last month: sartorially perfect *Earl Poorman*, General Electric's district appliance sales manager, basks in the sun on the boat-deck-aft



SUPERVISORS—Two of GE Supply's sales supervisors breath in nice, fresh ocean air: *Ben Rice* (wearing sweater) and *Arthur Hirsch* who, by the way, makes a pretty good amateur master of ceremonies



TERMS—In a sidewalk café at Havana, G. E. Contract Corp's manager Conrad ("Connie") S. Keyes waters the rubber jack-in-the-box snake in an artificial flower with which he playfully panicked women and small children on the boat. Claims it speaks Russian



CREDIT—At ease in a deck-chair, the man who watches GE Supply's dollars: Credit manager *Johnny Abraham*, holding an un-identified feminine hand

Hadley Joins Fairbanks, Morse

INDIANAPOLIS—Earl L. Hadley has been appointed manager of advertising and sales promotion of the Fairbanks, Morse & Company appliance division. Widely known among distributors and dealers, Mr. Hadley was at one time advertising executive for Grigsby-Grunow, more recently was associated with Henri, Hurst & McDonald, Inc., advertising agency handling the Fairbanks, Morse appliance account.

RMA Directors to Meet

WASHINGTON—President Leslie F. Muter is arranging to hold a meeting of the RMA board of directors late this month, probably April 21 or 22. Acute merchandising and production problems developing from present business conditions will make this spring meeting unusually important. Also, as it may be the last board meeting before the fourteenth annual convention of the association and the national radio parts trade show final convention programs are likely to be approved.

Brooklyn Whacks Discounts, Deals

New York dealers lose million weekly, states Tarzian. Ceriello, Forker question efficacy of certain cooperative merchandising campaigns

NEW YORK—At the third 1938 meeting of the Electrical Appliance Dealers of Brooklyn, Inc., held late in March, M. A. Tarzian condemned sale of merchandise through various discount houses, pointed out that well over \$1,000,000 worth of business was lost to retailers in the local area because of such short-circuiting each week.

Ralph G. Ceriello, chairman of the board of directors, criticised certain cooperative campaigns staged by manufacturers who, in his opinion, had not secured the approval of a sufficient number of their local dealers to warrant methods used. T. A. Forker suggested that manufacturers secure the approval of the Association to such cooperative deals in future, secured passage of a resolution approving this stand and called for mailing of copies of this resolution to all members for signature.

President "Jimmy" Schmeer introduced ex-president R. A. Atkinson, now head of the new local League of Retailers, who informed his audience that the League will shortly expand to New Jersey and Long Island, already has 16 members, each representing an important local district. Guest speaker Ed McCaffery delivered a talk relative to washing machine sales methods.

Factory Branch For Stewart-Warner

INDIANAPOLIS—First step of what is to be a major operation at the recently acquired Indianapolis factories has been announced by Stewart-Warner Corporation. This will be opening of a new factory branch for the distribution of refrigerators and radios at 1001 York Street, serving the entire state of Indiana.

Operating under the name of Stewart-Warner Distributors Company and occupying part of the new factories, this new organization will display the complete company line of refrigerators and radios to the trade. In addition, a complete service department has been installed to handle the territorial requirements on both products.

Fred Ahrbecker, for the past two years sales manager of the Central Distributing Company, has been appointed sales manager of the new distributing organization.

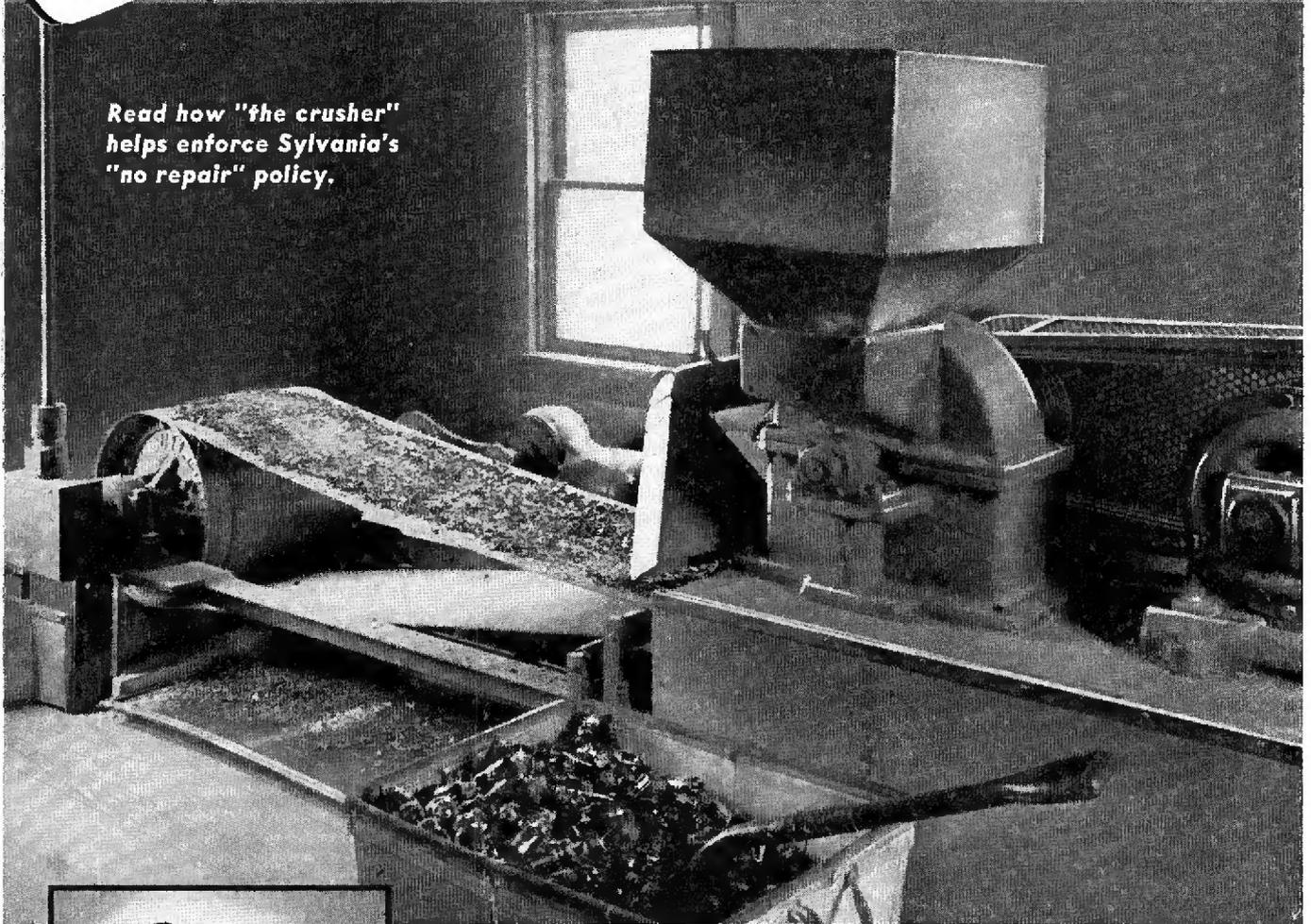
Stromberg's For Blushing Brides

NEW YORK—Stromberg-Carlson radios are included in the "Bride's House of 1938," exhibit staged during the month of April at the Savoy Plaza Hotel by *House Beautiful* magazine.

Executioner

(OF IMPERFECT TUBES)

Read how "the crusher" helps enforce Sylvania's "no repair" policy.



A switch is thrown... a motor hums... giant metal "teeth" start to grind—and it's *goodbye to imperfect tubes!*

That's how "the crusher" works. Now we'll tell you why:

To insure uniform, high quality... Sylvania tests each tube scores of times—for materials... for construction... for performance. And

thanks to a strict "no repair" policy—any tube that fails *even one* of these tests is sent to "the crusher"... *completely destroyed!*

Never a "dud"... never a second-quality Sylvania tube. For Sylvania—in accordance with this rigid policy—*destroys* defectives instead of repairing them. Remember this when you buy.

SYLVANIA

SET-TESTED RADIO TUBES

HYGRADE SYLVANIA CORPORATION
Emporium, Pa. • Also makers of the
famous Hygrade Lamp Bulbs

Parts Show Growing Fast

More booths already contracted for than last year, with two months to go

CHICAGO—From the management of the Radio Parts Manufacturers National Trade Show, Inc., comes word that with two months yet to go more booths have already been contracted for than were occupied at the exhibit held in Chicago last June. Not only is the show going to be larger but exhibits will be more diversified.

Those who plan to attend the show are urged to register in advance by mail, writing to the Personal Service Bureau at 53 W. Jackson Blvd. Badges for those who so register will be available at the registration desk when the show opens June 8 at the Hotel Stevens, without delay.

Representatives of the trade from Canada and foreign countries are to have their own headquarters, we understand. These will be on the exhibition floor.

Trade Show Exhibitors Listed

Most parts makers sign up months before opening, with additional applications pending

CHICAGO—From Ken Hathaway, managing director of the Radio Parts Manufacturers National Trade Show to be held at the Stevens Hotel June 8-11, comes the following list of exhibits contracted for a full four months in advance:

Aerovox	Ken-Rad
Alpha Wire	Kenyon
American Microphone	Mallory
American Phenolic	Meissner
American Radio Hardware	Million
American Tele. & Radio	Nuter
Amperex Electronic	National Company
Amperite	National Union
Arcurus	
Astatic	Ohmite
Atlas Sound	Operadio
Audak	Oxford-Tartak

Belden
Bell Sound
David Bogen
Wm. Brand
Bruno Laboratories
Brush Development
Bud
Bliley

Carron
Centralab
Cinaudagraph Corp.
Clarostat
Clough-Brengle
Continental Carbon
Cornell-Dubilier
Crowe Name Plate
Cornish Wire

Drake Electric

Hugh H. Eby
Electro Motive
Electronic Laboratories

General Industries
General Transformer
Edwin I. Guthman

Hallicrafters
Hammarlund
Hickok
Hygrade-Sylvania

Indiana Steel
Insuline
International Resistance

Jackson
J. F. D.
Jefferson
Jensen
E. F. Johnson

Kato

Parris-Dunn
Philmore
Pioneer Gen-E-Motor
Precision Apparatus
Presto Recording

Quam-Nichols

RCA
Radiart
Radiotechnic Laboratory
Raytheon Production
Readrite
John F. Rider
Rola

Shure
McMurdo Silver
Simpson
Solar
Sprague Products
Standard Transformer
Supreme Instruments

Technical Appliance
Thordarson
Triplett
Tung-Sol
Turner

United Catalog
United Sound
United Transformer
Utah Radio

Webster Company
Ward-Leonard
Ward Products
Earl Webber
Webster Electric
Weston
Wirt

Zenith

Univex Helps Find Stars

NEW YORK—To find new faces and personalities for the movies a national "home movie test" is being sponsored by Warner Brothers and by the Universal Camera Corporation, maker of "Univex" movie cameras, in collaboration with *Picture Play* magazine. Rules, obtainable in neighborhood stores, require that contestants submit a roll of 8 mm. film showing the candidate in a variety of poses.

Actual Hollywood screen tests are to be given to contestants who place high in the test, all expenses paid. Seventy-five "consolation" awards are to be made, in addition. Bette Davis and Errol Flynn will judge entrants.



CROSLY ADMAN NOW—John S. Garceau, widely-known for his imaginative and effective radio "copy." He's just been made manager of advertising and sales promotion out at Crosley's

Minnesota Servicemen Gather

Will try to standardize Northwest service rates

MINNEAPOLIS—The Radio Service Dealers Association of Minneapolis stages a statewide convention at the West Hotel Sunday and Monday, May 15 and 16, will campaign for standardized service rates throughout the Northwest. H. H. Cory, executive secretary, advises that 1,250 radio servicemen and service dealers have already received invitations, says the two days program will feature nationally-known speakers, entertainment, prizes, a banquet.

Officers of the group are: A. C. Enke, president; Forest Nelson, vice-president; W. H. Warmington, secretary-treasurer.

Radiart Ups Burcaw

CLEVELAND—Kenneth C. Burcaw has been appointed supervisor of the Radiart Corporation's western sales division. Ken has long worked in behalf of the concern's line of vibrators, auto-aerials, is well known among both jobbers and dealers.

Halsion Reorganizes, Moves

MERIDEN, CONN.—To this city comes the Halsion Radio and Television Corp., formerly Halsion Radio Manufacturing Co. of Norwalk. Occupying the plant formerly used by the Aeolian Company, this concern is officered by Hal P. Shearer, president and treasurer; Charles S. Halpern, vice-president and Philip J. Halpern, secretary. It will turn out a complete line of trademarked radios and will also engage in the private brand business.



HOW DEALERS CELEBRATED HALLICRAFTER WEEK—Here's a typical window display used by a dealer during Hallicrafters' drive timed to coincide with the introduction of the Sky Challenger II model. President Bill Halligan had display banners, window streamers and counter display cards prepared, furnished these to the trade

DETROIT
DIAMOND

MOTOR PRODUCTS CORP.

Congratulates

SPARTON

on



A Sensational New Cabinet

Sparton
Model
5018



Introducing the Most Modern Radio Cabinet Development
in Material • in Finish • in Trim
with a

5 Year Cabinet Guarantee

A fitting companion to Sparton's last word radio features

We are proud to say

CABINET BY

MOTOR PRODUCTS CORPORATION, Detroit, Michigan

. . . inquiries solicited

Train Tour For RCA Sound

Trip started March 20, covers 7,000 miles in 6 weeks

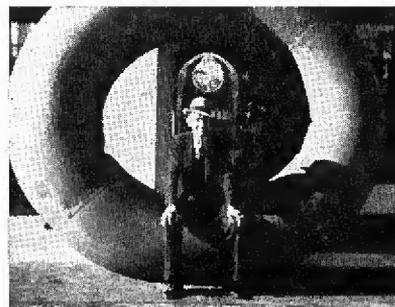
CAMDEN—A special Pullman car, crammed with an extensive array of commercial sound amplification and reproducing products, has been sent out by the RCA Manufacturing Company on a 7,000-mile tour with stop-overs in twenty-four principal cities.

This novel exhibition tour, which is being conducted in collaboration with RCA Victor commercial sound wholesalers, has two main purposes. One is to call the attention of dealers to the unusual marketing possibilities of sound products in a constantly growing field of applications. The other, is to provide a spectacular means of demonstrating the variety, scope and technical excellence of the new RCA Victor commercial sound products to architects, engineers, building owners, school administrators, entertainment operators, and industrial managers.

At each stop, invited groups of dealers, architects, electrical contractors, and school authorities are conducted through the car. W. L. Rothenberger, Manager of RCA Commercial Sound Sales, is in direct charge of the tour. Together with two engineers, he accompanies the exhibits and occupies living quarters in the car. This same Pullman car made recent musical history under RCA Victor sponsorship when it was occupied by Leopold Stokowski, Eugene Ormandy, and Jose Iturbi on two successive nation-wide concert tours with the entire personnel of the Philadelphia Orchestra.



ALL ABOARD—Travelling with RCA Victor's Pullman exhibit of sound equipment: *W. L. Rothenberger*, commercial sound executive, *Toby Wing*, noted screen star, *W. E. O'Connor* and *H. P. Brightman* of Washington, D. C.



BIG TUBE MAN—*J. T. "Snake" Fulwiler*, parks the tired body on a resilient inner-tube from a swamp-wagon wheel following an Atlanta Hygrade-Sylvania sales conference staged by Fulwiler-Chapman



HERE, THEN HOME AGAIN—*Carleton L. Dyer*, managing director of Philco Radio and Television Corporation of Great Britain, stopped at New York's Hotel Chatham for a few days late in March, sailed on the "Columbus." Human interest note: Owns horse named "Philco"

GUIDE FOR SERVICEMEN—Stancon's new service guide number 125 has just been issued, is a 32-page manual containing accurate listings of over 2,800 sets together with their transformer and choke requirements. Containing material gleaned from factory service notes and all 8 Rider Manuals, the guide also contains the tube setup of all receivers listed plus other similar information. Free on request to company jobbers or the factory at 1500 N. Halsted Street, Chicago.

STRAIGHT FROM THE SHOULDER

passing of the retailer by the wholesaler is due to the retailer's inability to take hold of the business quickly . . . or, conversely, whether the purchase of sound equipment at wholesale discounts by the retailer has forced the old-line distributor to sell his merchandise direct to the consumer. Perhaps the answer is . . . both.

At any rate, here is a typical retailer's letter:

"Your questionnaire probably should not have been sent to me as my standing is that of a retail outlet. However, the fact that wholesalers in this State are in direct competition with me in regard to most of my sound sales is making it necessary for me to purchase my sound supplies on a distributor's basis in order to make a profit and meet distributor competition where they quote wholesale prices to schools, large private concerns and others who should not be buying at wholesale.

"I don't consider that I should be buying at jobber's prices but find that I can and must to compete with others who also do, but are not entitled to it either. I think the manufacturers are selling to every town over 10,000 in this State on a jobber basis when the State will not support adequately over about two actual jobbers."

And here is another:

"The reason why sound equipment does not sell more rapidly is that, at least in our district, all sound equipment is sold at wholesale prices to anyone that comes along."

And another:

"This city with its abutting suburbs has a population of 100,000, yet no dealer or serviceman has a chance to sell sound equipment, because our only local wholesaler reserves this business for himself.

"If a serviceman tries to sell a customer and the wholesaler gets to know about it they will sell at about their own cost in order to beat the serviceman out, yet we must buy from this wholesaler or wait days to get parts or tubes shipped in from some other town.

"The sound manufacturer suffers from this bad situation as there is little sold in this territory. Were it left for dealers and servicemen they would go out and sell this equipment."

Still another:

"We have approximately \$2,000 invested in sound equipment. We use this for rental purposes only, mostly for fairs and homecomings.

"Being close to the city of ———, we are unable to sell and meet the competition of that city as some of the distributors there sell to our local consumers for the same price as we buy for."

One reader takes a whack at *Radio Retailing*, as follows:

"Your magazine is continually telling the

(Continued on page 42)

Philco Sponsors Service Course

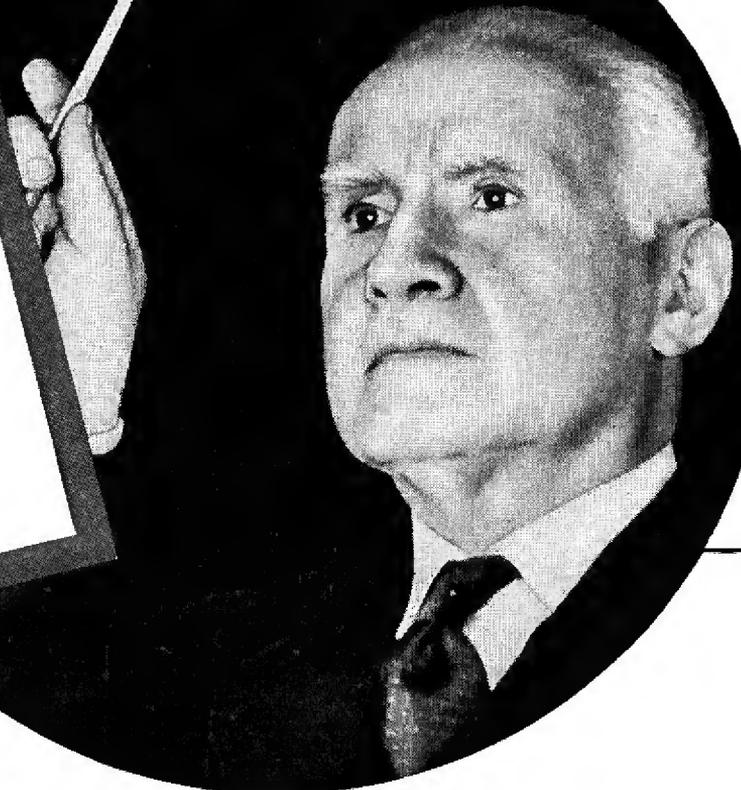
Collaborates with NRI to produce new low-cost plan for RMS members

PHILADELPHIA—From Bob Herr of Philco Radio & Television Corporation comes a last-minute news flash to the effect that beginning at once a complete course of study in radio theory and practice, with emphasis on fundamentals, is to be offered at low cost by the National Radio Institute of Washington, D. C., to members of Radio Manufacturers Service. Included without extra charge is a Philco audio signal generator ordinarily sold for \$37.75.

To Philco distributors and RMS members, from the Philadelphia factory just as we make ready for the press, go mailed announcements of the plan designed to help servicemen increase earnings by bettering their technical knowledge. With announcements go booklets completely describing the course, giving details relative to cost, method of study.

RMS members taking the special course offered have the privilege of consulting NRI experts in connection with pressing repair problems encountered during their course of study.

To Millions
RADIO
 brings the
PRICELESS
GIFT OF
MUSIC



DR. WALTER DAMROSCH, conductor, NBC's exclusive "Music Appreciation Hour," America's most widely-listened-to musical educational program for school children. Very popular among adults, also.

RCA further promotes music culture and the music industry by cooperating with NATIONAL MUSIC WEEK—May 1 to 7—You, too, can profit by helping "Foster Local Music Talent"

AUTHORITIES have declared radio to be the greatest single factor in the promotion of music. RCA again assumes leadership in this enterprise through NBC's whole-hearted participation in this Fifteenth Annual Celebration of National Music Week, which will be officially inaugurated by the Magic Key program on Sunday, May 1st.

Such worthwhile musical services are not new with RCA . . . For, through Dr. Walter Damrosch, on NBC's "Music Appreciation Hour," RCA has for many years contributed to the growing musical enjoyment of countless men, women and children throughout the country. Into their homes, from the Metropolitan Opera stage and through the NBC Symphony Concerts directed by Arturo

Toscanini and other famous conductors, RCA has brought the world's most magnificent music. Every Sunday, RCA's popular Magic Key program brings them superb musical entertainment from all parts of the world.

Radio Dealers...Support National Music Week

It will pay every radio merchant to stand behind National Music Week. This worthwhile promotion will greatly stimulate public desire for fine music. And to enjoy it, people will buy fine radios, phonograph-radios and phonograph records. This will help radio merchants...So be sure to cooperate wholeheartedly with your local musical organizations and broadcasting stations in *fostering local musical talent!*

RCA presents the "Magic Key" every Sunday, 2 to 3 P. M., E.D.T., on the NBC Blue Network.



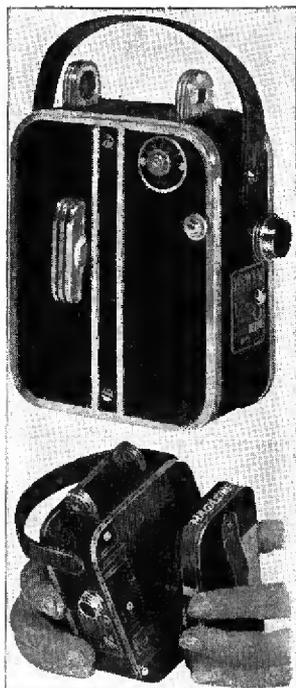
RADIO CORPORATION OF AMERICA
 RADIO CITY • NEW YORK

RCA MANUFACTURING COMPANY, INC.
 NATIONAL BROADCASTING COMPANY

RADIOMARINE CORPORATION OF AMERICA
 RCA INSTITUTES, INC.

RCA COMMUNICATIONS, INC.

HERE'S YOUR BIG PROFIT LINE FOR SUMMER *Mr. Radio Dealer!*



Every radio dealer can share in the profits from the demand for cameras. There is no recession to the sale of cameras . . . every sales report proves that the demand is increasing . . . and the radio dealer has the logical "set-up" to cash in on this consumer demand.

Feature the Sensational
IRWIN
MAGAZINE LOADING
16 mm MOVIE CAMERA
4 Times as Large as 8 mm Pictures

THAT LISTS FOR ONLY **\$12.95**
Plus Lowest 16 mm Film Cost!

No other 16 mm movie camera selling for less than \$60.00 combines such important selling features: **LOW LIST PRICE! LOW MAINTENANCE COST! QUALITY PERFORMANCE! SIMPLEST TO OPERATE! TAKE LIFE-LIKE COLORED MOVIES! MAGAZINE LOADING! BEAUTIFUL APPEARANCE!** . . . it's the greatest buy on the market and comparisons will prove that fact. Literature and dealer prices on request . . . don't fail to write today.

IRWIN 8 and 16mm ZEPHYR AIR CONDITIONED PROJECTORS

FOR A. C. OPERATION **\$18.95**
THAT LISTS FOR ONLY

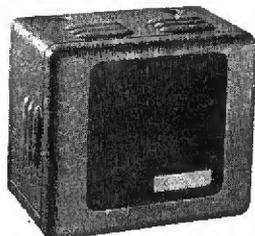
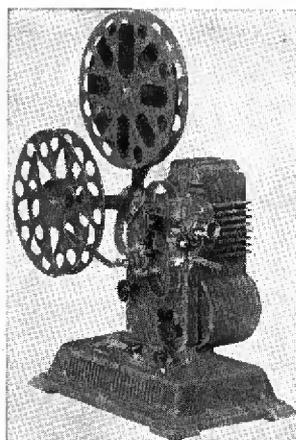
The finest low-priced 8 and 16 mm Projectors on the market. Possesses all the features found on projectors selling for twice their price. Rugged in construction, excellent in performance and professional in appearance. Just the item to turn summer losses into profits.

JOBBER! DISTRIBUTOR!

Irwin has an interesting proposition for you . . . your letter will bring full details promptly.

IRWIN CORPORATION

33 West 20th St. New York, N. Y.



AUTO RADIOS For 1938 BY TRAV-LER

These new 7-Tube Trav-Ler models have full 8 watts power output. Sensitivity is 1.5 microvolts at one watt output. Has full A.V.C. and three-gang variable condenser. Has the very latest features including iron core coils.

TRAV-LER
RADIO

The Trav-Ler Electric Automatic Tuning Unit, adaptable to either model, is simple and accurate. No drift or backlash—instantly setup from drivers seat without tools—any station on any button—6 buttons—motor driven. Mounting holes provided for easy installation. Price..... **\$17.95**

7-tube Auto Set with external 8" electro dynamic speaker . . . Model 711 . . . Price **\$59.95**
7-tube Auto Set, self-contained 6 1/2" electro dynamic speaker, Model 710. Price **\$49.95**

TRAV-LER RADIO & TELEVISION CORP. 1938

1921

1036 WEST VAN BUREN STREET, CHICAGO, ILL.

AC & AC-DC Home Sets — Auto Sets — Battery Sets

STRAIGHT FROM THE SHOULDER

retail man how he can make money selling sound. I admit that you are correct in giving us this advice but we cannot sell sound here because of competition with the wholesale houses. Therefore, I do not attempt to actively push sound sales although the market in this territory is great and has hardly been scratched.

"I sold about \$500 worth of sound last year and have an inventory on hand now of about the same amount, which I will sell before the year is out but I could sell five times this much if I did not have to compete with discounts. I'll bet you find all the other retail men in the same boat."

Following is a common retail attitude, and yet the outlet commenting continues to sell sound equipment because it is a logical, needed line:

"We do not expect any reform in these conditions. As long as the gyps will pay their advertising bill you will print anything they want. The only business that is really available to dealers is the kind where the gyp houses are not known or where technical advice is necessary.

"The above has been pent up so long that it has greater force. You suggested a frank discussion. Here it is."

From the pessimistic to the optimistic other letters swing. This one, for example, is cryptic and revealing:

"We need some distributors or better factory service in N. Carolina."

And this one:

"We have considerable faith in the future of the commercial sound business. We feel that this type of business has just about passed the same cycle that radio went through in the years 1920-1926, i.e.: the era when servicemen built sets from parts picked up from various factories. The day of package merchandising has just about reached the sound business. There is still some education work to be done with consumers to convince them that a 20-watt job built up in a store is not as desirable as a factory-made, precision-built amplifier, however."

And this:

"The more sound and inter-office equipment you sell and the more books and periodicals you read the greater becomes your theoretical and practical knowledge of this new and rapidly expanding field of sound. Theoretical knowledge alone is not enough on which to enter the field and make perfect installations for every condition of acoustics, fidelity, cost, labor and profit, versatility of equipment, etc. must be known from practical experience.

"In my estimation, the high cost of sound equipment and the uncertainty of how much time the installation will require is one chief cause of lack of proper sound equipment volume by retailers who would like to get it but don't know how to go about it."

And, finally, this letter:

"I am an independent radio serviceman. I have neglected pushing sound business as I have not been of the opinion that the

profits to be derived should be worth the educational effort which would be necessary for me to expend, viz: not personal education but, rather, education to the prospective customers.

"Within the past few months there has been a seeming interest displayed by many prospective purchasers so I have decided to actively engage in the promotion of inter-phone equipment. I do not feel that I should make any apologies for my lack of interest in the past. Only now that interest seems to be developing in my territory am I willing to promote this division of my business and confidentially expect to sell in such volume that an analysis of sales made by me in 1938 will show that approximately 25 per cent will have been sound equipment."

Here, *Radio Retailing* submits, is a mirror which reflects conditions within the sound equipment industry as they are today. Growth of the industry is dependent upon the solution of the problems herein outlined.

And it is our editorial opinion such a solution is not far distant.

YOU CAN'T SELL RADIOS

(Continued from page 16)

information necessary to check credit, before they will deliver a radio for free trial. Other dealers put them in immediately, and worry about credit after a sale is made. The latter method is much the best, for any dealer who is looking for volume. The Home Demonstration blank handicaps the canvasser too much; many women who would otherwise take in a set refuse to do so if they have to answer a lot of questions—"even before I buy it?"

To summarize:

(1) The only way to sell radios, in volume, is to get them in on trial first—and the more the merrier.

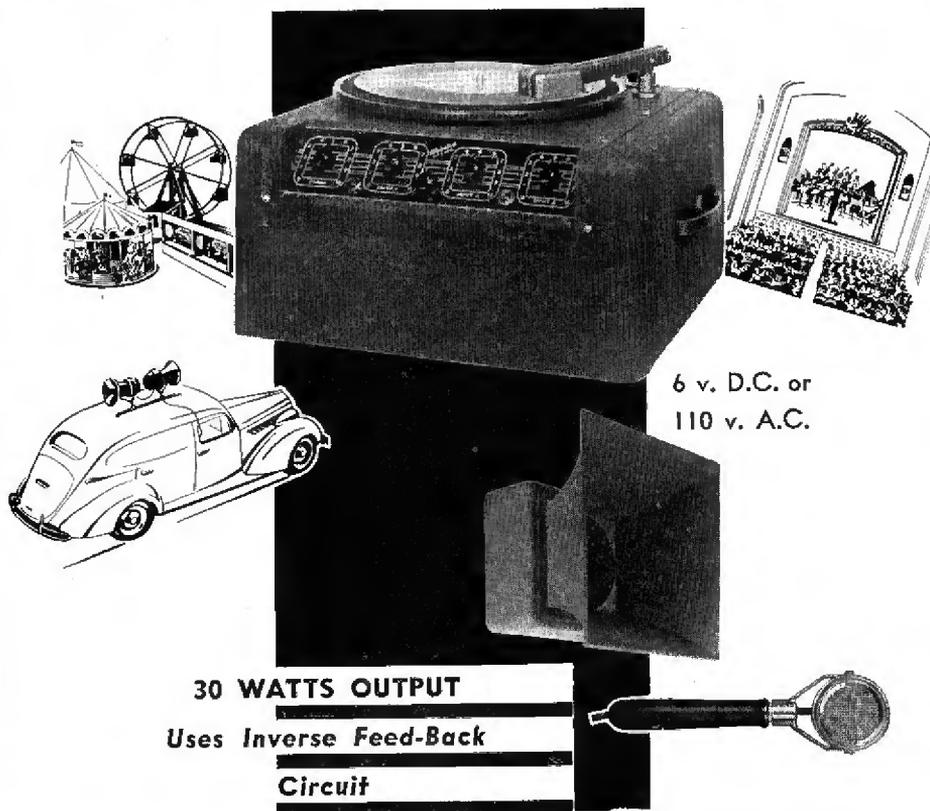
(2) The best way to get them in on trial is to give the lady some good logical reason for your wanting to put it on trial; but that reason, or reasons, must not carry the slightest suggestion that you want to *sell her* a radio.

(3) After they're in, you don't have to worry. Some you will pull and some you will sell. But the *percentage* of sales is very likely to amaze you, if you never sold them this way before.

Of one thing you can be assured: Your volume of radio business will be much greater than if you do not make demonstrations at all. And, more to the point, it will be *so much* greater that the added expense of deliveries will be negligible.

(Continued on page 45)

New ALL-PURPOSE Sound System



6 v. D.C. or
110 v. A.C.

30 WATTS OUTPUT

Uses Inverse Feed-Back
Circuit

HANDLES AUDIENCES TO 10,000 INSIDE
HALF THIS NUMBER OUTSIDE

New All Purpose System using inverse feedback circuit gives greatly improved tone qualities. Furthermore, microphone and speakers are matched to system. The result is clarity and naturalness of speech and music that is startling.

Changeover from 6 volt D.C. operation to 110 volt A.C. operation is simply accomplished by changing connections.

The original of this design was the outstanding mobile sound system of the last two years. This new model is an improvement on the basic design, principally to incorporate new tone qualities and to add some additional features like provision for two microphones. This model is ideal for rental.

Manufactured under license arrangements with Electrical Research Products, Inc., subsidiary of Western Electric Company, Inc., and American Telephone & Telegraph Company.

FEATURES

- Can Be Used Anywhere . . . Operates from Either 110 v. House Current or 6 v. Storage Battery.
- Dual Operation— Either 6 v. D.C. or 110 v. A.C.
- Provision for 2 Microphones.
- Phonograph and High Fidelity Pickup Built into Amplifier.
- Economically Priced.

WEBSTER-CHICAGO

WEBSTER-CHICAGO

Section A-8, 5622 Bloomingdale Ave., Chicago, Ill.

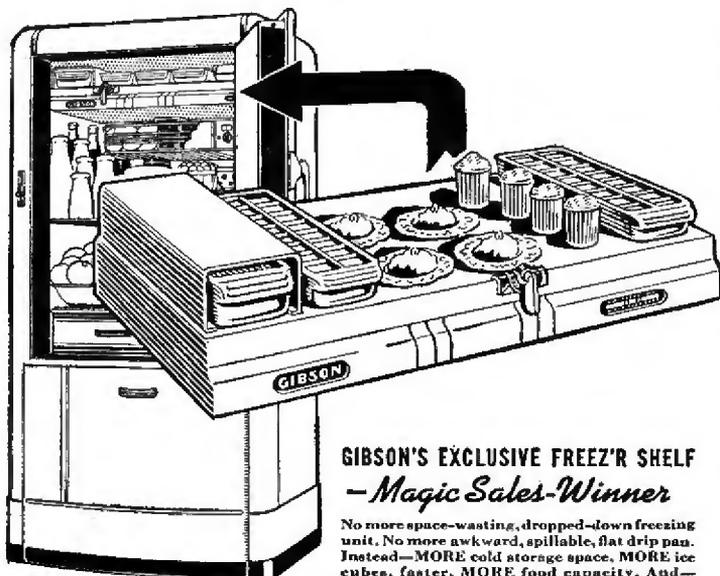
Please send more information on Model MP-532 All Purpose Sound System.

Name

Address

City State

Manufacturers of Public Address Systems. Sound Equipment and Accessories . . . Leaders in the Sound Field for Over 13 Years!



GIBSON'S EXCLUSIVE FREEZ'R SHELF
— *Magic Sales-Winner*

No more space-wasting, dropped-down freezing unit. No more awkward, spillable, flat drip pan. Instead—**MORE** cold storage space. **MORE** ice cubes, faster, **MORE** food capacity. And—everybody gets the idea instantly!

WHY ARGUE HAIRLINE SALES POINTS?

FREEZ'R SHELF SELLS ON SIGHT

Because Housewives See, Understand, Want!

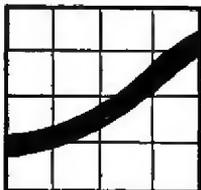
Dealers who always have struggled to make prospects see sense in technical sales points—dealers who have had to hang their profit expectation on the slender threads of small convenience features—**ARE ASTONISHED AT THE WAY PEOPLE SEE, UNDERSTAND AND WANT GIBSON'S FREEZ'R SHELF.**

To begin with, it's plainly *different*. Anybody sees that instantly. And then without even explaining this revolutionary advance, it becomes perfectly obvious that with the Freez'r Shelf Gibson means **MORE** ice cubes, **MORE** Food Capacity—**MORE** REFRIGERATOR in the SAME SPACE, at NO EXTRA COST.

You can't help but pile up sales with such a start!

On top of that, you get Gibson's strong localized, factory-placed advertising featuring the dealer. It's a combination that's unmatched in this industry. Investigate!

LOOK!



at Gibson's distribution increase in 4 months!

Proof that smart distributors and dealers know a profit-maker when they see one in here, in this terrific 1937-38 range of Gibson distribution... Come with us!

Gibson Electric Refrigerator Corporation
Greenville, Michigan
Chicago Office: American Furniture Mart
Export Office: 201 N. Wells St., Chicago, U.S.A.
Cable Address: Gibselco, Bentley Code

GIBSON

THE FREEZ'R SHELF REFRIGERATOR

Means

MORE

ICE CUBES—FOOD CAPACITY

The New "CLIPPER" DYNAMIC

Another American Moving-Coil Microphone, Featuring



HIGH OUTPUT—SMALL SIZE
RUGGEDNESS—FIDELITY
TRIM—EFFICIENT DESIGN
LONG LIFE—STABILITY

D7T High Imp. List \$22.50

D7 Low Imp. List \$20.00

D7 and D7T Microphones come complete with 12 1/2' R/J cable and Amphenol plug. Chrome finish. 5/8-27 Connector. Over-all height, 2 1/2". Diameter, 1 1/2". Net weight, 8 1/2 ounces.

Request Catalog No. 27 for Complete Details.

AMERICAN MICROPHONE CO., INC., Los Angeles, Calif.

A GOOD NAME GOES A LONG WAY



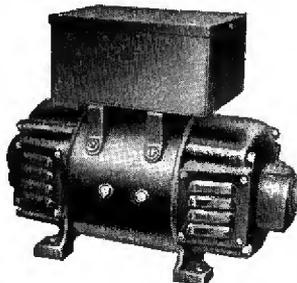
Customers buy easier when you recommend Ken-Rad Tubes. They know Ken-Rad Tubes give better radio reception.

Ken-Rad Tube & Lamp Corp.
Owensboro, Ky.

KEN-RAD

DEPENDABLE RADIO TUBES

Janette Rotary Converters



The original D.C. to A.C. converters with all wave filters developed exclusively for radio and sound apparatus.

CAPACITIES: 35 to 3250 watts.
6, 12, 32, 115 and 230 volts D.C. to 110 or 220 volts, 1 phase, 60 cycle A.C.

Insist on a Janette
Ask For Bulletin No. 13-25

Janette Manufacturing Company
556-558 West Monroe Street Chicago, Ill. U.S.A.
BOSTON - NEW YORK - PHILADELPHIA - CLEVELAND - MILWAUKEE - LOS ANGELES
DETROIT - SEATTLE



NEW MUELLER RADIO CLIP KIT!

A complete and handy outfit for the radio shop at a bargain price.—See it at your jobber's or write factory for details.

ASK US FOR NEW 1938 CATALOG 701

Mueller Electric Co.
1584 E. 31st St.
CLEVELAND, OHIO

YOU CAN'T SELL RADIOS

(Continued from page 43)

And if you are convinced of all this; if you realize that the only way to sell radios is to get them in on trial first, but are experiencing some difficulty in doing it—then let your men take a page out of Bill Brown's book and STOP TRYING TO SELL RADIOS . . . at least, until they're inside the house.

SALES . . . STOCKS

(Continued from page 19)

that could be used by the manufacturing branch of the industry as a guard against overproduction and by distributors and dealers as a guard against overbuying.

Thus, for instance, heretofore the radio industry has had no dependable information on the monthly ratio of consumer buying of radio sets. It was generally known that during the summer months business was "slack", and that the bulk of retail buying occurred during the last 3 or 4 months of the year, but beyond that, the manufacturers had to guess at production schedules and distributors and dealers had to do some more guessing when placing orders.

The accompanying chart entitled: "Retail Radio Sales By Months" provides the first general yardstick of actual consumer buying ever made available to the industry, in that it shows what percentage of the year's total retail sales of sets was accounted for in each month of 1937.

As a further aid in that direction, the information presented in the chart titled: "Consumer Purchases by Receiver Types" will prove of great value. This shows just how the actual radio set sales of a large group of dealers were divided as to style of cabinet and major price classes.

It will be noted that consoles accounted for over 52 per cent of all sales with those listing at under \$100.00 being the most popular of any type or price class in that they represented 32.75 per cent of all sets sold by these dealers. Table models as a class scored over 42 per cent of all sales, with those listed at over \$25.00 outselling the cheaper models by a ratio of 4 to 3. The fact that auto radios represented only 2.34 per cent of sales shows clearly that the average radio dealer has just barely begun to tap the vast market that exists in the several million

(Continued on page 47)

C. I. S. E. Plan

- 1- FACTORY PURCHASING POWER.
- 2- COMPETITION-DEFYING PRICES.
- 3- MOST COMPLETE LINE OF QUALITY P.A. EQUIPMENT.
- 4 EXCLUSIVE TERRITORY . . . SOLD ONLY THROUGH C.I.S.E. AGENTS.
- 5 FREE ENGINEERING AND CONSULTING SERVICE.

Have you heard the news?

The C.I.S.E. Plan has revolutionized sound distribution. Organized late in '37 to give the sound business back to the sound specialist, the Plan caught on instantly. It abolished cut-throat selling, meager profits, all the old confusion rampant in the P.A. field.



Sound men were wild with enthusiasm. Here was what they needed! Here was a plan enabling sound specialists to buy *direct from the factory*. Here was a way to sell sound equipment on an even basis with every distributor and manufacturer in the land.

The flood of requests for charter membership was so tremendous that only now are we in a position to consider further applications. Do you want to join the C.I.S.E.? Would you like to enjoy the untold benefits, the prestige and protected profits this Plan offers you?

Then mail the coupon today. It is your application for membership in the C.I.S.E. The new Spring listing of Clarion highest-quality sound equipment is ready—prices lower than ever before. But—only C.I.S.E. agents are authorized to handle Clarion sound equipment. You can be the official distributor in your territory . . . *if you hurry. Mail this coupon now!*

TRANSFORMER CORPORATION OF AMERICA

C.I.S.E.

CLARION INSTITUTE
OF SOUND ENGINEERS
69 WOOSTER ST., N.Y.C.

CLARION INSTITUTE OF SOUND ENGINEERS
69 WOOSTER STREET, NEW YORK CITY

Please send me an application form immediately. I want to belong. This, in no way obligates me, of course. RR-4

Name.....

Address.....

City.....

State.....

PASTE COUPON ON PENNY POST CARD

HORTON *first every time*

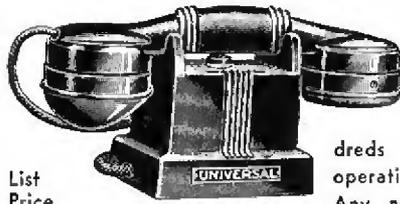
AMERICA'S top line of washing machines and ironers "tops" in eye appeal, exclusive features and reliability—that's Horton. Precision manufacture puts long and dependable service into every Horton product.

The complete line of new Horton Washers and Ironers meets every sales opportunity. Write now for detailed information without obligation.

finest every way. HORTON

HORTON MANUFACTURING CO., FORT WAYNE, INDIANA

TWO WAY COMMUNICATION



List Price
\$1500 per Station

Inter-phones, studio to studio, remote studios, house to garage, shipping dept., office to office. Hundreds of uses. Positive in operation. Simple to operate. Any number of 'phones on same line.

MICROPHONE DIVISION

UNIVERSAL MICROPHONE CO. LTD.

424 Warren Lane, Inglewood, Calif., U. S. A.

WHIP AUTO ANTENNAE

FOR HINGE AND BUMPER MOUNTING

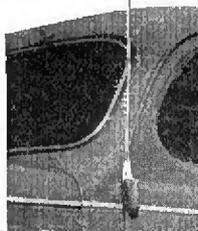
A profit line for jobber and dealer. Finest spring construction—in models to fit all cars. Complete style range—popular price range. Universal mounting brackets for two minute installation. Colorful, high-efficiency insulators—insures improved reception.

- * Chromium
- * Telescoping
- * Hinge Mount
- * Bumper Mount
- * Easy to install
- * For all Radios

—Your Jobber Stocks Them—

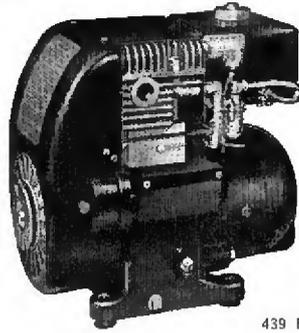
CONSOLIDATED
WIRE AND
CORPORATIONS

512 So. Peoria Street
Chicago :: :: Illinois



COMPLETE ELECTRIC PLANTS

NEW 1938 MODELS



OPERATE A.C. RADIO, PUBLIC ADDRESS, SOUND CAR, MOTION PICTURE EQUIPMENT AND RADIO TRANSMITTERS.

Also furnish power for Lights, Water Systems, all Household Appliances, for Camps, Farms, Lake Homes, or Standby Service. For use anywhere power is not available.

350 to 5000 Watts

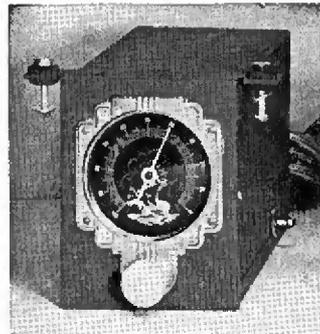
110 volt A.C., 6, 12, 32 and 110 volt D.C., and Combination AC-DC Units. Anyone can Operate. Complete, ready to run.

Write for Details and Territory

D. W. ONAN & SONS

439 Royalston Ave. Minneapolis, Minn.

SHORT WAVE CONVERTERS FOR CAR RADIOS



Can be attached to any car radio. Has on and off switch. Does not affect the reception on the standard broadcast bands. MODEL 600—covers 49, 31, 25, 20, 19 and 16 meter bands. Designed for reception of American and Foreign short wave broadcast. Especially adapted to use in tropical countries and the more remote parts of the world. Distance range 5000 to 10000 miles. A very attractive unit. List Price \$34.95

POLICE UNITS

MODEL 100—police converter with fixed condenser. Covers 1500 to 2000 kilocycles. List Price \$11.95

Model 800 Super Sensitive police converter. Covers 1500 to 2000 kv. Two metal tubes. Long range. List price \$15.95

MODEL 200—police converter with variable condenser and illuminated dial. Covers 1500 to 5500 kilocycles. List Price \$17.95

MODEL 500—police converter with two metal tubes, variable condenser and illuminated dial. Very sensitive. Exceptional distance range. List Price \$21.95

Jobs and dealers wanted **ABC RADIO LABORATORIES** 3334 N. New Jersey St., Indianapolis, Indiana, U.S.A.

SHOW TIME
JUNE 8TH TO 11TH
THE ANNUAL
HOMECOMING
OF THE ENTIRE RADIO INDUSTRY

Convention Time, Too!

Starting Tuesday morning, June 7, and continuing through Saturday evening, June 11, the Stevens Hotel, in Chicago, will fairly radiate with radio industry activity.

CONVENTIONS SCHEDULED

At The Time Of The

1938 NATIONAL RADIO PARTS TRADE SHOW

Are Listed Below:

RADIO MANUFACTURERS ASSOCIATION
SALES MANAGERS CLUB "REPRESENTATIVES"
RADIO SERVICEMEN OF AMERICA
NAT'L ASSN. OF RADIO PARTS DISTRIBUTORS

B C-N U

RADIO PARTS CITY
STEVENS HOTEL — CHICAGO
June 8, 9, 10 and 11, 1938

RADIO PARTS MANUFACTURERS NATIONAL TRADE SHOW
53 WEST JACKSON BOULEVARD CHICAGO, ILLINOIS

new cars that are sold each year and those 5 or 6 million used cars that change hands annually.

An important trend of dealer changes and shifting is portrayed in the chart headed: "Lines Per Dealer". This shows the actual number of lines handled by identical dealers during the years 1936 and 1937, while in the third section of the chart, the intent of those dealers for the 1938-39 season is indicated.

It will be noted that the number

"Sales Involving Trade-Ins" that 65.53 per cent of all 1937 sales, or approximately 2 out of every 3 sales involved trade-ins.

Then, as shown in the same chart, it appears that dealers had junked 40.43 per cent of all sets taken in, or putting it another way, they scrapped 4 out of every 10 trade-ins—which looks like a sizeable proportion until the chart entitled: "Store Set Inventories" is examined. That chart reflects the state of inventory of dealers as of January 1st, 1938, and shows that despite what appeared like a formidable proportion of scrapped trade-ins, they still had enough in stock to represent 41.11 per cent of their total inventory in units. In other words, for every 6 new sets they had also 4 old sets in stock. This might mean that many dealers are so heavily loaded up with old sets that they are not able to put proper selling effort behind new sets. Those figures indicate also that radio use has a point which clearly makes it desirable that a nationwide junking-of-trade-ins program be organized at an early date by which the

decks may be cleared for more successful selling of new sets. (*Radio Retailing* will have more to say on this subject in the next, the May, 1938 issue.)

* * *

A third group of questions put in this series of surveys dealt with current price and discount practices of manufacturers and the problem of Fair Trade laws and price contracts.

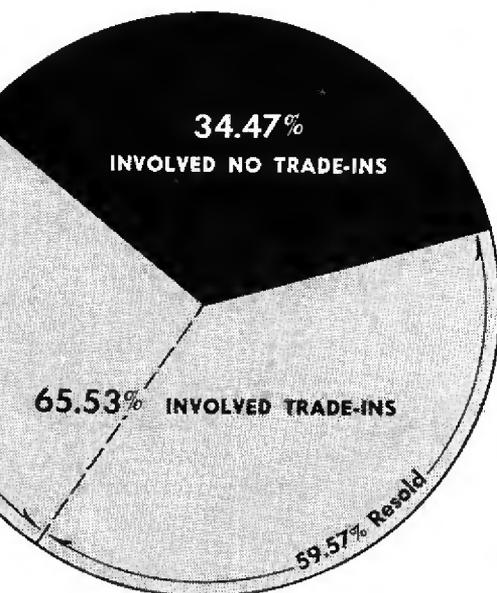
Those questions brought one of the highest percentage of replies in that nearly 300 of the 2,000 dealers asked about this, filed usable answers. They voted overwhelmingly—to the tune of 94.08 per cent—in favor of Fair Trade Contracts. However, there was less unanimity in replies to the question:

"Do you consider Price Contracts of much value as long as they do not impose a limit on trade-in allowances?"

To that question 98 dealers answered "Yes", but almost twice that number, 186, replied, "No", being evidently convinced that without defi-

(Continued on page 48)

Sales Involving Trade-Ins (1937)

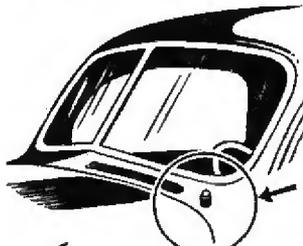


of dealers handling only one line remained constant for 1936 and 37, at 34 per cent of the total, but threatens to increase by approximately 20 per cent as in this survey 41 per cent of the dealers stated that henceforth they would handle only one line. However, it appears that at least numerically the number of 2-line dealers will remain about the same, indicating that those who boosted the 1-line group to a new high percentage have come chiefly from classifications handling 3 or more lines.

Significant in this connection, is the fact that 13 per cent of all dealers were undecided as to the lines they would handle next year, although the majority in this group was very emphatic in stating that they were going to change.

Another important phase of this series of surveys had as its objective the gaining of additional data on the present state of the trade-in problem:

It will be noted in the chart titled:



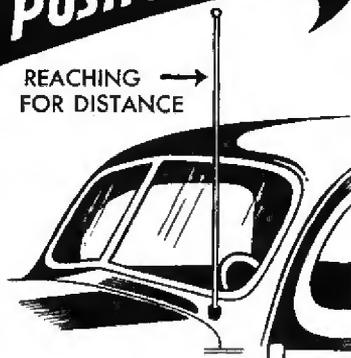
COL-MAR Outclasses All Auto Radio Aerials

DASH CONTROL-Push Button

Users are Thrilled by its Powerful Clear Reception

Car owners ask just one question when they see the Col-Mar Operative Aerial,—“How soon can you install one in my car?”

It sells on sight, and every buyer sends others. Handsome in appearance—rises and retracts by vacuum power from instrument panel button.





Reception is outstanding, in city or country. Highest quality materials, and thoroughly guaranteed. Advertising supplied.

Write for literature.

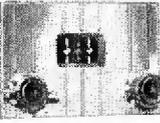
For Profits, Display and Sell

COL-MAR Operative Aerial

PIONEER SPECIALTY CO.
524 ST. JEAN AVE., DETROIT, MICHIGAN

SELL CROWE

Remote Controls for Auto Radios



INTERCHANGEABLE

MORE than five and one-half million auto radios were sold during the last six years. Nearly four million of these sets were new within the last three years!

A Ready Market for Replacements and Reinstallation Jobs

Sell Crowe On-the-Panel Controls to reinstall these radios—still serviceable—in new cars. Sell them to replace obsolete under-dash or steering column controls in owners' present cars.

Four Points in Favor of Crowe Controls

- 1. INTERCHANGEABLE** for all cars and most makes of radios.
- 2. PANEL-MATCHED ESCUTCHEONS.** Crowe escutcheons match exactly the manufacturer's styling. Result—neat, attractive, harmonious appearance.
- 3. DUPLICATE-STYLED DIALS.** Crowe Controls are adaptable to either airplane or porthole dials—to conform to car's individual styling.
- 4. LESS STOCK INVESTMENT.** Interchangeable for (1) All cars, (2) Most radios, and (3) Either airplane or porthole dials—Crowe Controls are economical to stock.

Order from
Your Nearest Jobber

Go after your share of this replacement business. Get a stock of Crowe Controls from your nearest jobber.

ASK FOR
BULLETIN

CROWE NAME PLATE & MFG. CO.
1745 Grace Street
CHICAGO, ILL.

SALES . . . STOCKS

nite and fixed provisions on trade-ins such contracts have little practical value as a means of obtaining adherence to list prices.

Aside from the specific facts here presented, the series of surveys produced a wealth of additional information of which much would not be of immediate interest to our readers, but will prove of inestimable value in shaping the future editorial policy of this publication.

Radio Retailing takes this opportunity to thank all those dealers who filed those thousands of answers that supplied the basis for this article.

For those who are interested in knowing the size of dealers from which the answers came, the following table is presented:

Annual Radio Sales Under \$5000	49.14%
\$5,000 to \$10,000	28.18%
\$10,000 to \$25,000	15.12%
Over \$25,000	7.56%

MORE PROFIT PER PROSPECT

quantity of records and accessories in which you can interest him.

I have already pointed out a number of fine sources from which you can obtain a fund of non-technical information that will assist you greatly in stimulating customers' interest in unfamiliar music, leading inevitably to larger unit sales. The hot jazz enthusiast can be introduced painlessly to the larger 12-inch discs and album sets of more serious but not less engaging music; the occasional purchaser of two or three fox-trot, tango or waltz dance discs can be sold Victor Herbert, Franz Lehar and Johann Strauss in the higher list-price category; purchasers of low-priced children's records can be impressed with the necessity of educating their off-spring along cultural lines other than Mother Goose. Everyone, sooner or later, will need extra empty albums, album cabinets, and other accessories to enhance their record libraries.

Listed in an accompanying box are a number of higher priced discs and album sets which I recommend that every dealer and salesperson investigate. Some of these are splendid examples of modern music which will fascinate collectors of Benny Goodman and Duke Ellington, others are symphony orchestra performances of tunes already popular, and all have been selected with an ear for unusually wide-range reproductive qualities. Discs such as these can

be used advantageously in demonstration. They are the sort that makes many a seventy-five-cent disc purchaser into an album set buyer. There are hundreds of others just like them in the catalogues. Familiarize yourself with records such as these.

In closing a sale you can always judge whether the time and purse of a customer are available for further suggestions along the line of his original purchase. You can get him to hear records such as the ones I have listed, or those of works already familiar—discs he may wish to buy in the future if he cannot afford them today. Never forget, in completing a sale, to suggest empty albums for single discs just purchased or at home, needles, or other accessories. These items add a quarter to a dollar to most sales; they should never be overlooked.

The best advertising for repeat business is that which the record buyer reads when he gets home and plays over his purchases. Always enclose record supplements and other descriptive matter in your delivery bag. Place this advertising in the record envelope or album leaf where there is less likelihood of its being thrown out with the wrapping.

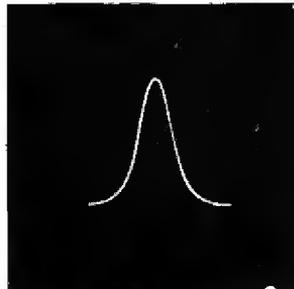
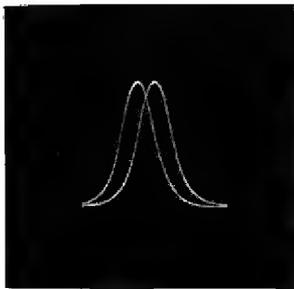
Once again—have the customer's name, address and telephone number, and a list of his musical preferences, on your mailing list. Keep this indexed file handy. When new records arrive, play them yourself, and wherever the music coincides with the nature of previous purchases, drop the customer a card or a letter announcing the release and suggesting that he hear it at your store or in his own home, depending on your policy concerning "on approval" demonstration. Follow ups of this sort boost sales tremendously.

In conclusion, two points should be stressed. First, acquire as much non-technical information about records and music, by reading and listening, as possible. It isn't difficult to sell when you know something about what you are selling. Music is in the air these days more than ever before, and the emphasis placed upon both popular and classical comes from sources—the radio and motion picture which make it practically unavoidable. There never has been a greater opportunity to cash in on recorded music.

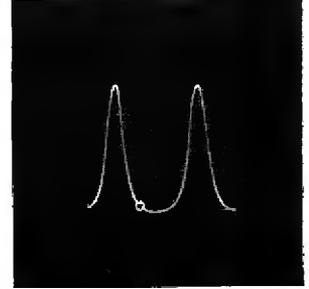
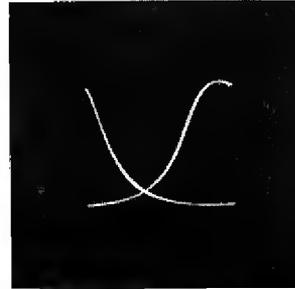
Second, keep a record on a record (inventory control), and concentrate on your list of prospects and customers. And advertise.

TECHNICAL TOPICS

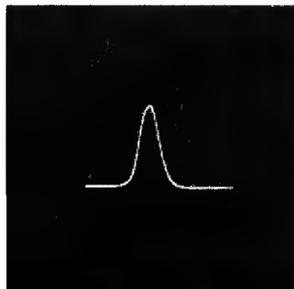
SERVICE • SOUND • CIRCUITS • INSTALLATION • PARTS



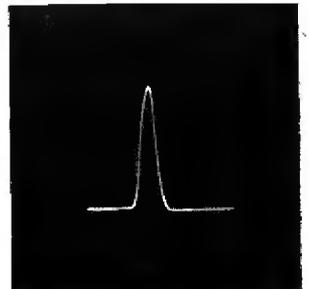
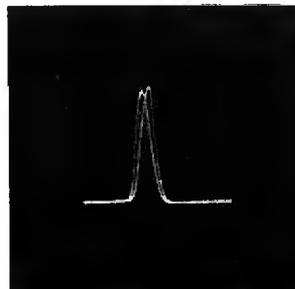
1 LAST STAGE FIRST—I. F. output transformer misaligned (1). Correct alignment is shown in (2).



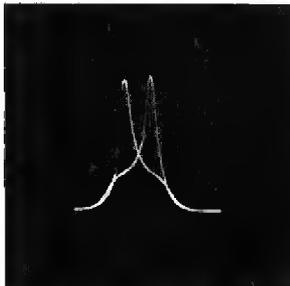
3 WRONG TIMING—Last stage correctly tuned but with time-axis-oscillator set at twice correct frequency (3); one-half correct frequency (4).



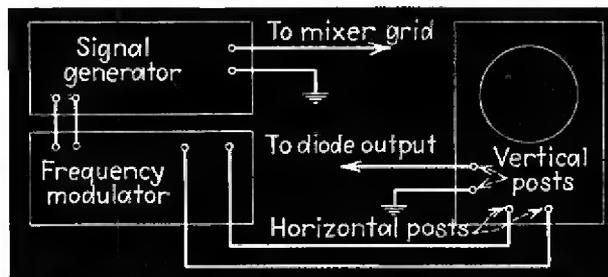
5 TWO STAGES—Last stage correctly aligned, first stage misaligned (5). Both stages aligned (6). Resonant peak sharper than single unit in (2).



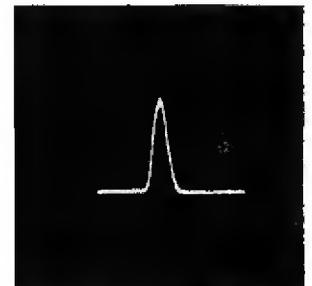
7 OVERALL—First and last i.f. stages aligned but first detector misaligned (7). All circuits correctly tuned (8). Peak is much sharper than (2) or (6).



9 REGENERATION — Over-all curve with feed-back between stages.



Oscillograms from Actual Photographs



10 INTERFERENCE — Super-imposed oscillation from receiver oscillator.

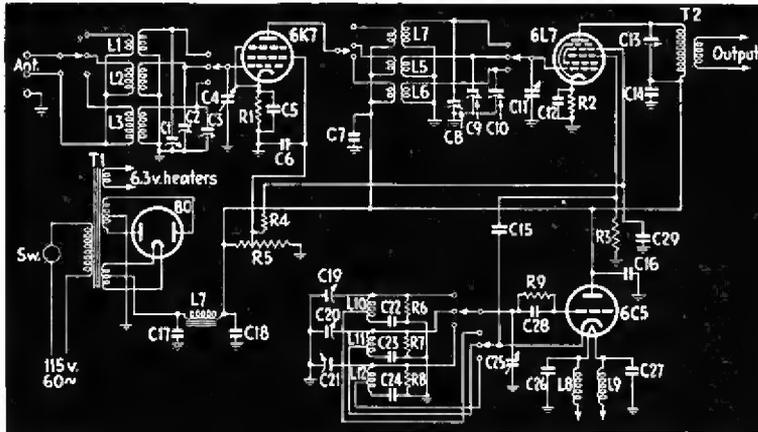
To align a superhet: first adjust the transformer nearest the second detector, gradually working up to the mixer stage. In cases where a receiver is badly misaligned, it may be necessary to adjust the earlier stages in order to get a signal through. The final adjustments are then carried out from last stage to first stage. The circuit of the oscillograph, signal

generator, and frequency modulator is shown above. Signal generator output feeds between mixer grid and ground. Second detector audio connects to the vertical posts of the oscillograph; while the horizontal posts receive synchronizing pulses from the frequency modulator, keeping the time-axis-oscillator in step with the frequency modulation of the signal generator.

Regeneration or oscillation may be prevented by separating grid and plate circuit leads. Defective bypasses should also be checked when a severe case is found.

Weak squeals throughout the dial, more commonly known as "birdies," can usually be removed by pressing filament circuit and other low potential wiring close to the chassis. This reduces ground pickup.

● OSCILLOGRAPH ALIGNMENT OF SUPERHETS ●



High Frequency Converter

The frequency expander by RME, when attached to a standard short wave receiver, permits reception from 27.8 mc. to 70 mc. It attaches to the receiver as does any converter, feeding into the antenna-ground terminals. There is only one requirement: that the receiver tune to 10 mc.

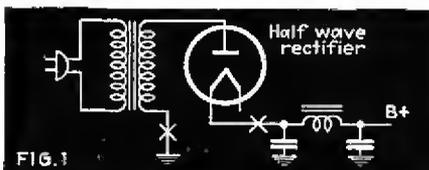
In operation, the unit converts the receiver into a double superhet. The converter puts out a 10 mc. signal, using the receiver as a 10 mc. i.f. system.

A 6K7 preselector amplifies the signal from the antenna; feeding it to the 6L7 mixer. This tube in conjunction with the 6C5 oscillator generates a 10 kc. beat with the incoming signal. From here on the 10 mc. beat enters the receiver, just as if the receiver were picking up a 10 mc. signal from the antenna. It is converted to the receiver's i.f. frequency, amplified, detected; passing out through the audio system to the speaker.

Sensitivity of the converter is considerably less than 1 microvolt. Selectivity is approximately the same as the superhet used. Image frequency ratio on five meters is 750 to 1.

Calibrated Overload Protector

A novel protecting device has been applied to radio servicing by Acro. The



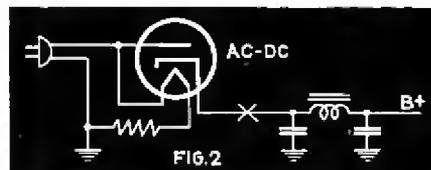
PAGE 50

unit, called Safety Seal, is shown below. It consists of calibrated fuse which is inserted in the power supply circuit of a receiver, directly after the rectifier. The current rating of the unit is governed by the type rectifier used. Thus,



everything including the rectifier is protected against high current surges and shorts.

The safety seals may be inserted in any one of the typical circuits shown in Figs. 1, 2 and 3. Available in 5 values, it is only necessary to know the rectifier in use to determine the correct value. They will not prevent defective equip-

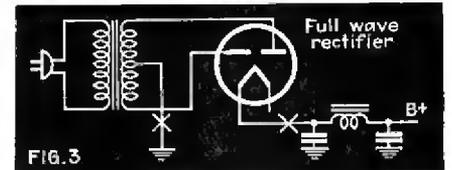


ment from blowing; however, they will protect the serviceman from costly replacements out of his own pocket on "call backs."

It is interesting to note the various cases we have seen where complete power supply replacement jobs were not contracted by the customer because the set did not warrant the expenditure. Furthermore, the customer had no protection from further occurrences. In these instances the set is usually discarded and the serviceman is out the time he spent on inspection. More-

over, the high estimate causes ill-will, no parts are sold; the customer then buys a very cheap midget.

These jobs could be turned into real money-makers by offering inexpensive protection to the customer.



Measuring Condensers

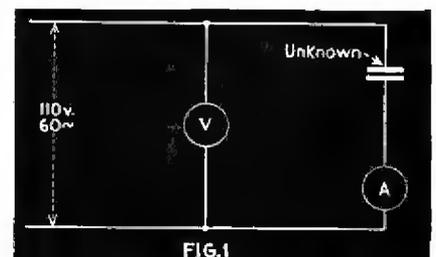
The simplest method for determining the capacity of a condenser is shown in Fig. 1 below. As outlined in an Aerovox bulletin, when a condenser is connected in series across a source of alternating current of known frequency and potential, the capacity is easily found. Neglecting the series resistance of the condenser and impedance of the ammeter the ammeter will indicate 41.5 milliamperes per microfarad. This figure is based on 110 v. 60 cycle voltage. Make sure the condenser is not shorted before connecting it across the line.

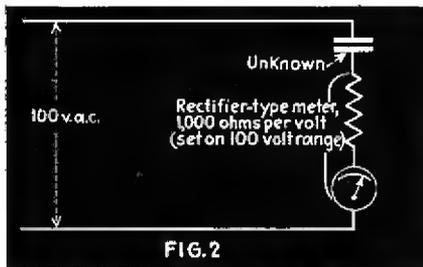
For measuring smaller condensers, the circuit in Fig. 2 is to be preferred. Assuming the use of a rectifier type meter with a sensitivity of 1000 ohms-per-volt, the full scale reading of the meter is 1 ma.; on the 100 volt range the total resistance of the meter plus its multipliers is 100,000 ohms.

Placing a condenser in series with the meter and connecting the combination across an a.c. source, the meter will indicate in proportion to the capacitance for small condensers, but the scale becomes more and more crowded for large condensers. The capacitance may be calculated from the equation:

$$C = \frac{1}{2\pi f} \sqrt{\frac{1}{E^2 - RI^2}}$$

A simple method would be to use known values of capacitance to calibrate the voltmeter. A graph could then be made so that these values could be plotted. The smallest value that will





give some indication, using the circuit of Fig. 2, is .00025 mfd. On the other end of the scale .5 mfd. gives almost full scale reading.

In order to measure smaller condensers it is necessary to employ higher voltages or a more sensitive meter scale.

Television Amplifier Pentode

1851—A specially designed r.f. and i.f. pentode by R.C.A. It is particularly adapted to television since its high value of transconductance permits unusual gain with low plate loads. The purpose of the small grid cap is to reduce input capacity.



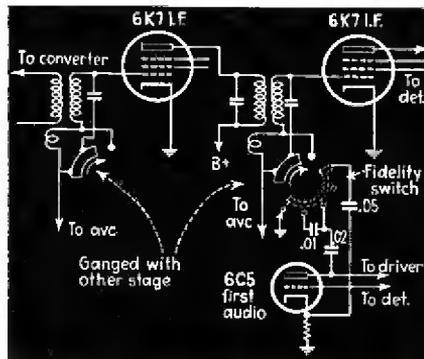
In the characteristics below, condition 1 gives sharp cutoff when a fixed screen voltage is used. Condition 2 allows extended cutoff when the screen is fed through a 60,000 ohm series resistor.

Characteristics are:

	Condition 1	Condition 2
Heater Voltage.....	6.3	6.3 volts
Heater Current.....	.45	.45 amp
Plate Voltage.....	300	300 volts
Screen-Supply Voltage.....	150	300 volts
Suppression Voltage.....	0	0 volts
Amplification Factor.....	6750	6750
Plate Resistance.....	.75	.75 meg.
Transconductance.....	9000	9000 micromhos
Plate Current.....	10	10 ma.
Screen Current.....	2.5	2.5 ma.

R.F.—A.F. Fidelity Control

The tone control system in Stewart Warner's model 1861 varies the i.f. selectivity and audio response with a single ganged switch. Referring to the diagram, when the switch is set for high fidelity (counter-clockwise position) the i.f. transformers are over-coupled due to a third link winding between primary and secondary. This action takes place on both i.f. stages. The band-width under these conditions



is sufficient to pass all the desirable audio frequencies. Maximum selectivity is obtained by shorting the link winding (switch in clockwise position).

In the first audio stage, all the large plate bypasses are removed from the circuit when switched to "high fidelity." This permits the higher audio frequen-

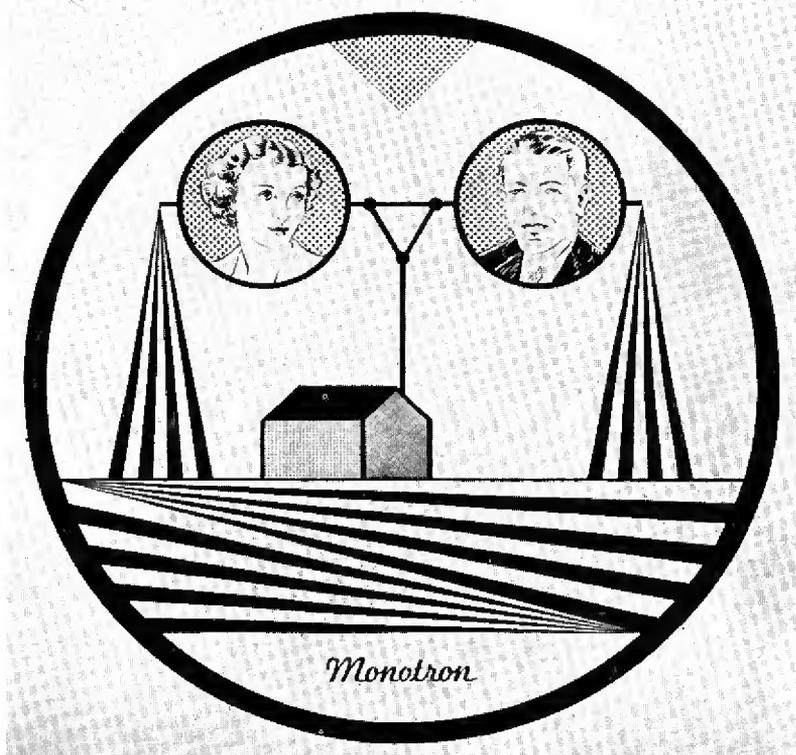
cies to pass through this stage. When high selectivity is desired the fidelity switch shunts the 6C5 plate with two separate values of plate bypasses.

Television Tester

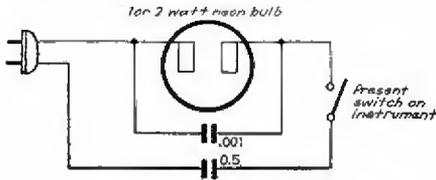
The Monoscope, a special cathode ray tube by National Union, contains a metallic disc imprinted with the design shown below. The disc is scanned by the electron beam, causing electrons to be dislodged from this plate.

The amount of electrons thrown off, more properly called secondary emission, depends on whether the electron beam strikes the inked pattern or bare metal. Greater quantities of electrons are dislodged from the bare metal than from the special ink. These then pass from the tube, into the signal circuits of a Monoscope oscillograph, (Pg. 49 Feb. R.R.) an instrument used for aligning television circuits in much the same manner as a signal generator is used today; to generate a test signal.

The purpose of the curious pattern of wedges and figures is to test the video fidelity of a television receiver. The pattern shown is standard; however, the purchaser of the tube may design a different pattern or supply his own photograph to the manufacturer.



SHORTCUTS



Auxiliary Pilot Light

By S. Balsam

In many test instruments, especially battery operated units, no safety measure is incorporated to insure that the instrument will be turned off when the

testing is completed. It would be impractical to wire-in an ordinary pilot light since this would decrease battery life.

A satisfactory system is shown in the following diagram. A small neon bulb serves as a pilot. This may be mounted in the instrument cabinet. It connects to the a.c. line and shunts across the present off-on switch. A .5 and .001 condenser prevents the a.c. line from shortening when the instrument switch is closed. Since the pilot light is a.c. operated it adds no additional drain.

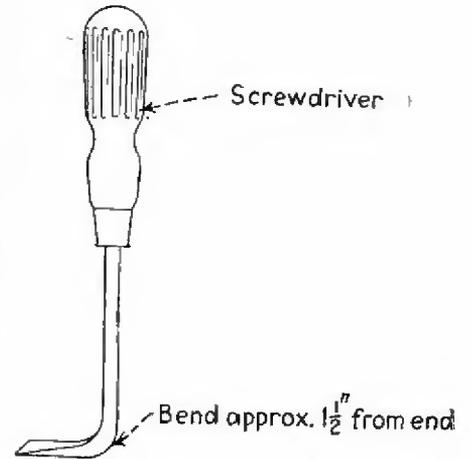
Versatile Screw Driver

By Marion L. Rhodes

An invaluable tool for the serviceman is the right-angle screw driver shown below.

To make it, simply take a medium size screw driver and bend it at right angles, about $1\frac{1}{2}$ inches from the point. The point may be left flat or made pointed.

It is the perfect tool to pry off auto radio lids. It is also handy for removing tubes. Work it under the tube base, and with a slight backward motion the tube will pop out.



Long Shortcut—Taping auto lead-in connections under the cowl is a tough job, says Jim Long, of Long and Stouder, Columbus, Ohio. "Slip a piece of spaghetti over the wire. When reaching under the car it is a simple matter to pull the spaghetti down over the joint, insuring the installation against shorts and leaks."

Only C-B Graphoscopes offer These ADVANCEMENTS!



QUALITY STANDARD OF THE RADIO INDUSTRY

SUPERIOR performance characteristics and dependability are coupled with astonishing ruggedness and compactness in the C-B 126 Graphoscope, measuring only $9\frac{1}{4}$ " x 9" x 13", and weighing only 21 lbs.

Reflecting the completeness of improvement throughout is the demountable tube shade, for improved visibility of trace at reduced voltage, and correspondingly reduced risk of costly tube replacement.

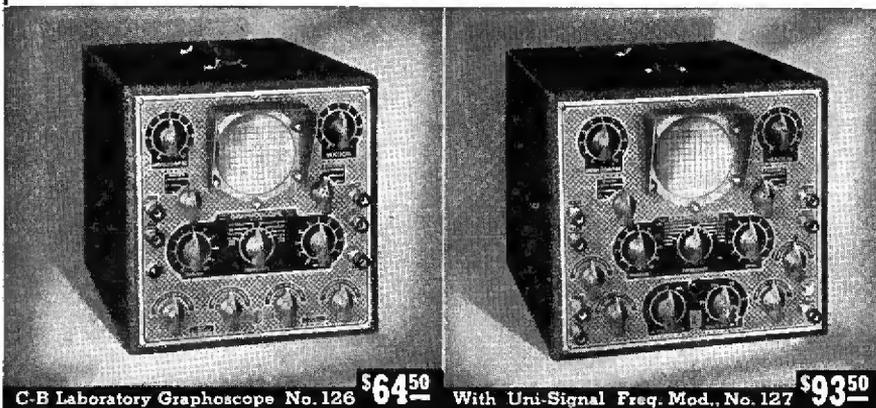
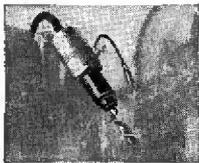
Height of $9\frac{1}{4}$ "—uniform for C-B instruments—contributes to orderly, impressive customer-arresting display of complete C-B apparatus assemblies, whether in factory-made racks or custom-built installations.

Delivers Only Wanted Signal

Alone among combination instruments, C-B ten-tube Model 127 delivers only the wanted signal, free from confusing, time-wasting harmonics. Key instrument of eye-arresting and customer-convincing visual examination, it is the cornerstone to better service at better rates of pay. Provides full visual coverage of receiver stages, from antenna to speaker. No demodulator needed. Clough-Brengle Co., 2819 W. 19th St., Chicago.

ANTI-CAPACITY DEMODULATOR

Avoids error produced by self-contained demodulators in misalignment and distortion of signal image through high capacity effect of test leads at radio and intermediate frequencies. The roving tube correctly brings the demodulator into the receiver circuit, instead of extending the circuit to the demodulator, and so avoids upset of receiver constants. Applicable to any oscilloscope without change.

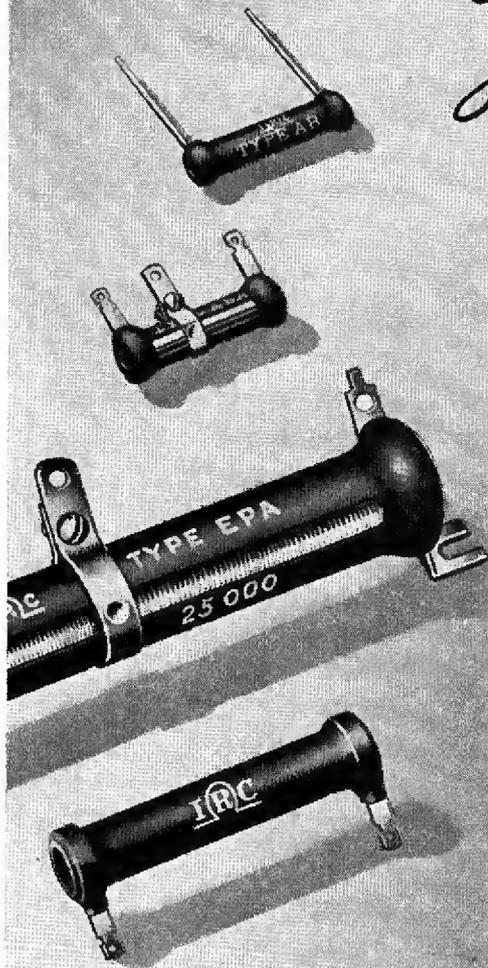


C-B Laboratory Graphoscope No. 126 \$64⁵⁰

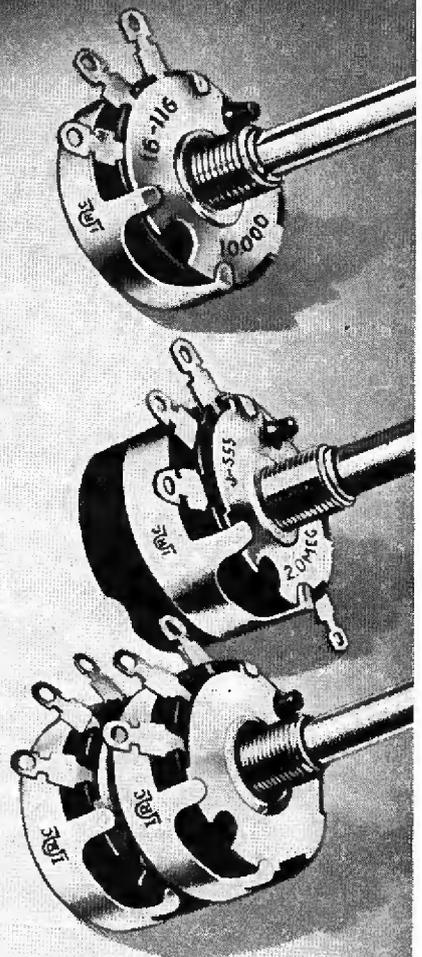
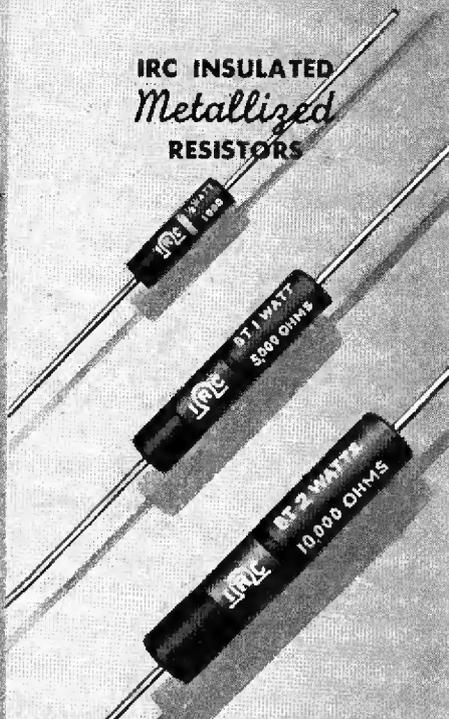
With Uni-Signal Freq. Mod., No. 127 \$93⁵⁰

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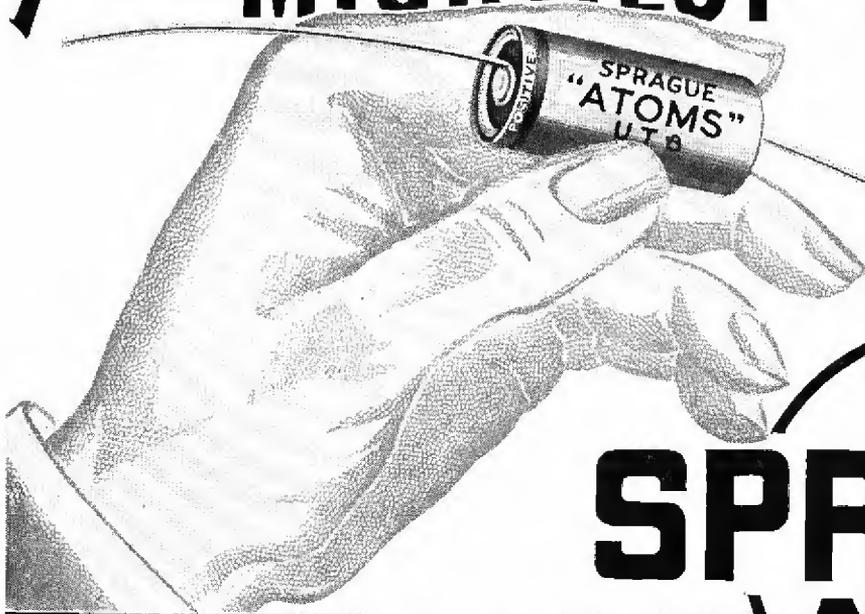
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**EXTREMELY LOW LEAKAGE—HIGH SURGE VOLTAGE
EXCEPTIONALLY GOOD SHELF LIFE**



FIVE YEARS AGO, Sprague brought out the first small 2½" 600-Volt Condensers

Today, Sprague scores again with a revolutionary new "midget" development—Sprague **ATOMS**. These are unquestionably the smallest, most reliable and the most complete line of tubular dries on the market.

ATOMS are guaranteed to have low leakage, exceptional shelf life and to withstand high surges. Use 'em without fear of failure. You don't need any manuals. All you have to know is the correct capacity and voltage.

The unusually small size and amazing durability of Sprague **ATOMS** are made possible by an exclusive Sprague etched foil process. They are hermetically sealed—yet are absolutely protected against "blow-ups" by an exclusive Sprague design feature.

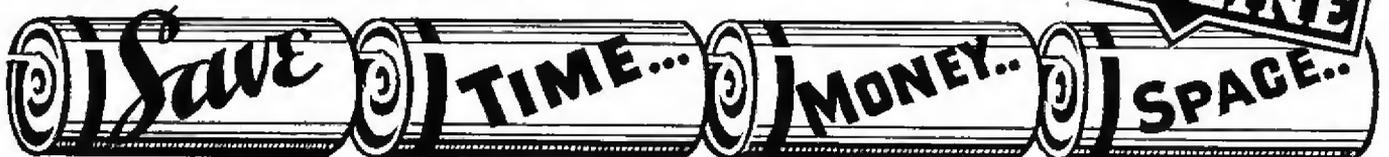
Sprague engineering supremacy as maintained for years in the set manufacturing trade is now brought to bear in full force in the jobbing business. Cash in on it! Use **ATOMS** universally!

Cat. No.	Cap. Mfd.	Working Voltage	List Price	Metal Tube Diameter	Tube Length
TA-10	10	25	\$0.40	9/16"	1-5/8"
TA-25	25	25	0.50	9/16"	1-5/8"
TA-525	25	50	0.55	5/8"	1-5/8"
UT-41	4	150	0.40	5/8"	1-5/8"
UT-81	8	150	0.45	5/8"	1-5/8"
UT-121	12	150	0.50	5/8"	1-5/8"
UT-161	16	150	0.55	11/16"	1-5/8"
UT-201	20	150	0.60	3/4"	1-5/8"
UT-401	40	150	0.65	7/8"	1-5/8"
UT-42	4	250	0.45	9/16"	1-5/8"
UT-82	8	250	0.50	5/8"	1-5/8"
UT-122	12	250	0.65	11/16"	1-5/8"
UT-162	16	250	0.75	3/4"	1-5/8"
UT-43	4	350	0.50	5/8"	1-5/8"
UT-83	8	350	0.55	11/16"	1-5/8"
UT-123	12	350	0.70	3/4"	1-5/8"
UT-4	4	450	0.55	5/8"	1-5/8"
UT-8	8	450	0.60	3/4"	1-5/8"
UT-12	12	450	0.75	7/8"	1-5/8"
UT-16	16	450	0.90	13/16"	2-1/8"
UT-20	20	450	1.00	7/8"	2-1/8"

DUAL CARDBOARD TUBULARS, TOO!

TA-100	10-10	50	\$0.65	5/8"	2-3/8"
TA-212	12-12	200	0.95	13/16"	2-3/8"
TA-216	16-16	200	1.05	7/8"	2-3/8"
TA-816	8-16	200	0.95	13/16"	2-3/8"
UT-88	8-8	450	1.00	15/16"	2-3/8"

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SHORTCUTS

of the 10,000 ohm potentiometer, the grids of the two 6N7 tubes are biased equally, thus balancing the plate currents in the two tubes. When the signal changes in value the grids become unbalanced, permitting more or less plate current to flow in one of the tubes, causing the voltage drop across the 500 ohm plate resistors to change, tripping the polarized relay and actuating the indicating circuit connected to it.

All parts for this device are standard. The relay should have a winding resistance of about 1000 ohms. The one used in this device is a Western Electric type cs. The winding had to be rewound as it originally comes with a 5 ohm winding.

By adjusting the potentiometer any desired degree of sensitivity may be obtained. This device has proven itself invaluable as a time saver in a busy repair shop during the past five months of use.

High Line Voltage Troubles

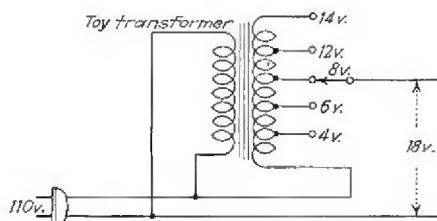
By H. Roger

Every service man has a certain routine test procedure when called to a home to service the radio. Most likely

it is to first test the tubes. I would like to suggest a change in procedure: check the line voltage first.

High line voltage is probably the cause of more trouble and headaches for radio servicemen than any other one thing. High line voltage plays funny tricks, and most generally picks on the tubes to play these tricks.

I might cite several cases. One particular set, which had recently been



serviced, and a new 47 tube installed, would not act right at the customer's home but played normal in the shop. After it was on in the home about 5 minutes the program level dropped and tone quality broke up. The 47 tube would test perfectly. After trying several 47 tubes we finally found one that would work without trouble. However, at the shop this set would play O.K. The voltage at the shop was found to be 118, and at the residence

126 volts. After making several trips to the shop and back to the home, this trouble was discovered. Since that time we have found that many other sets have caused similar trouble. 6F6 tubes are subject to distortion and shortening elements when the line voltage is running high. The 6K7 tube and all the 25-volt tubes soon blow when the line voltage is high.

Whenever a set that starts acting up after a few minutes of operation in the home, but works O.K. in the shop, it is subject to a very definite test for high line voltage. This is done by simply connecting up a toy transformer in parallel with a 110 volt line, making sure we have the phase such that it adds to the line voltage rather than subtracts. In this way we can step up the voltage to almost 130 volts and check the operation of the set. It works wonders in shooting hard-to-find troubles.

In several cases the line voltage in the home was running close to 130 volts, and we desired to drop this voltage. The easiest way to accomplish this is to use a Dim-a-Lite resistor socket. This is simply an adapter that screws into a light socket and has provision for a bulb in the outlet socket of the device. The resistor is made variable by two chains extending from the socket. To dim the light, pull on one chain; to brighten the light pull on the other chain.

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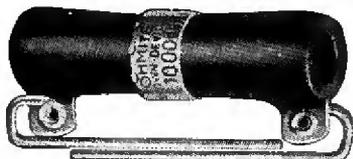
It's good business to do the job right—with OHMITE extra-sturdy Brown Devils, the resistors that put an end to resistor failures.

Built right from the core out—sealed tight with glass-like vitreous enamel—Brown Devils give you exactly the same dependable trouble-free construction found in the big Ohmite industrial units.

Ask your Jobber for Brown Devils. They come in values from 1 through 100,000 ohms, in 10 and 20 watt sizes. Priced right, too.

Send for Catalog 16.

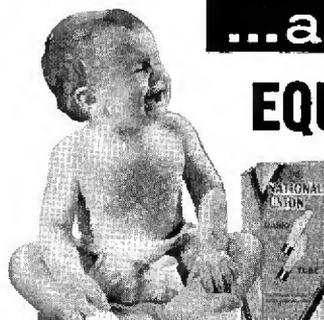
OHMITE MANUFACTURING CO.
4845 West Flournoy Street, Chicago



OHMITE
RHEOSTATS RESISTORS TAP SWITCHES

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...about business...



EQUIP YOURSELF TO DO MORE and BETTER BUSINESS

Get FREE equipment
the easy National Union way!

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Sure you can do more business . . . make more money! You have to be well equipped to do it though. That's where the National Union Plan for Service Engineers comes in. Through the National Union plan you can get FREE all kinds of Testers, Meters, Manuals, etc. All you do is agree to purchase a certain quantity of National Union tubes and/or condensers, make a small deposit, which is later refunded as a merchandise credit . . . and the equipment you need is shipped to you at once. Investigate! Get the whole story from your nearest N.U. distributor . . . ask who he is if you don't know.

N.U. TUBES AND CONDENSERS ARE QUALITY PRODUCTS

Thousands of top notchers in the Radio Service Engineering profession are depending on National Union quality. It's the kind of precision and

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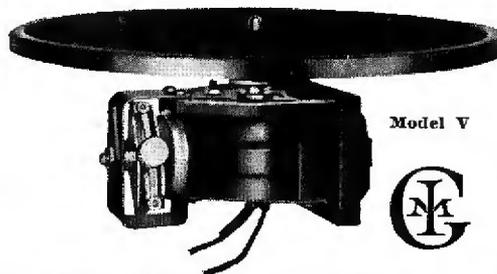
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Order test samples TODAY. AC or universal AC-DC. Be sure to specify which you want and give exact voltage and frequency of current you use.

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TRICKS

A.C. SETS

Occasionally an old set turns up that, even after a new filter is installed, hums badly. In most cases it will be found that these sets have the speaker in the negative lead. Miscellaneous bias voltages are taken from the voltage drop across the field. Additional filtering at this network is of little value.

An effective cure is to remove the

field from its original position and connect in the B+ lead, as shown in the diagram. An 8 mfd condenser, each side of the field will then be sufficient to remove all hum.

The disadvantage of this system is that another bias network must be devised. This may be accomplished by grounding the B- lead through a re-

(Continued on page 60)



FROM LITTLE ACORNS—Three years ago Stine and Nunnery, Rock Hill, S. C., had only a pair of pliers. Contrast that to the fine equipment of their new shop. Satisfied customers did it they modestly admit

LEADING SERVICING ORGANIZATIONS

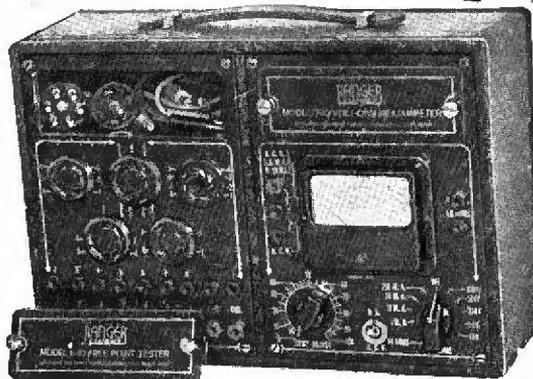
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Precision built throughout, yet designed to withstand rough field work. That's why you find Readrite-Ranger testers used by so many leading service organizations. Volt-Ohm-Milliammeters, Tube Testers, Free Point Testers, Oscillators, available in combinations or in single units. No extra cases to buy. Today's biggest values in Precision Testers.

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Remember

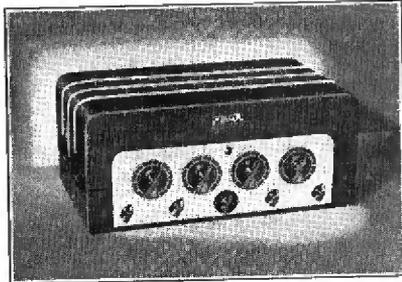
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- Beam Power Tubes
- Inverse Feed-back
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Feedback is reduced to a minimum through the use of bass and treble compensating controls and also by a volume compressor feature. Three dimensional reproduction of recording is accomplished by volume expansion.

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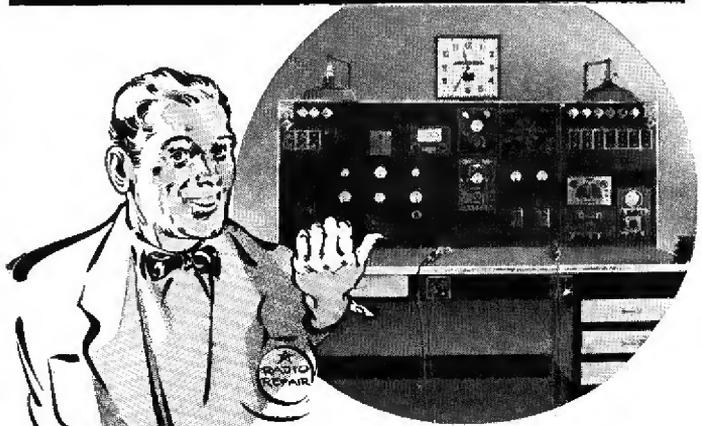
**What is the RSA? What is its Purpose?
What will it do for you?**

The Radio Servicemen of America, Inc., is independent, democratic, self-governing—organized to foster greater co-operation and better understanding between radio servicemen all over the country—and to help you do a better, more profitable servicing job. * RSA gives its members: * Free, expert technical information. * Regular mailings of advance information on new circuits. * A monthly house organ, exclusively for members. * An educational program in the interest of better servicing. * A publicity program in newspapers, trade publications, and on the air. * A National Speakers' Bureau to provide authoritative speakers for local chapters. National membership costs only \$2.00 A YEAR . . . that's only 4¢ a week, or less than a penny a day! * Are you Man or Ostrich? Don't dodge the issue. Write us today for an application blank.

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**GET THE FACTS!
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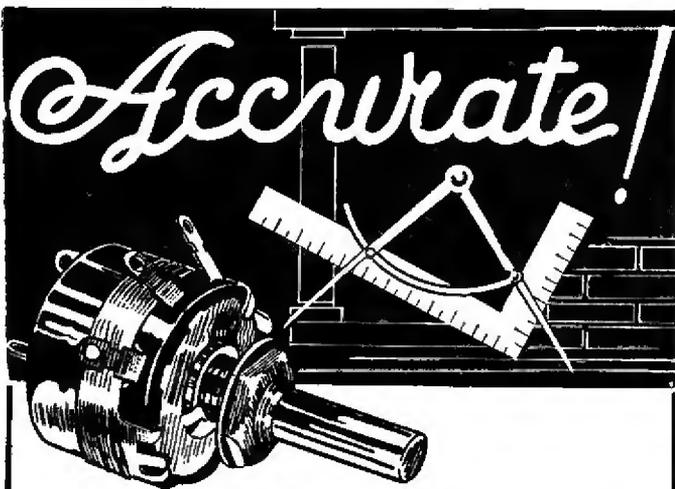
Name.....

Street.....

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

I am a dealer I am a serviceman My jobber is.....

For your convenience this coupon can be pasted on a penny postcard



Closely fitting shafts and bushings.

Resistance values well within tolerances set.

Production test equipment unexcelled.

100% inspection on all parts and assemblies.

Outstandingly so. And understandably so. Because: Mechanically, CLAROSTAT controls are the product of tool makers and machinists second to none in the industry. Electrically, CLAROSTAT engineers specialize in resistance and resistance devices—and nothing else.

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signment Plan works for dealers who can
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premium for financing, places a stock of
tubes in the dealer's care...the dealer sells
them...deducts his profit...and pays once a
month for those sold. A simple, clean-cut
plan that assures full profit from every tube
sale. Capital usually tied up in tubes is
released for other profitable investment;—
and the dealer is protected from losses
due to slow turnover—reduction in price,
obsolescence and cut-price competition.
The best quality tubes, backed by a sound
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will put your tube department on a money-
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tube profits you'll undoubtedly
want complete details—Write
our sales office nearest you.*



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begins—miles from the
nearest station—your
car needs SUPPRESSORS**



T20

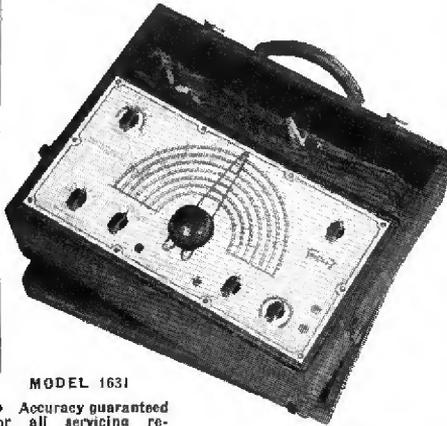
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in a few moments' time. REC-
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SUPPRESSORS ON EVERY RA-
DIO EQUIPPED CAR YOU
SERVICE! List price, 30c each.

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Now Ready ELECTRONIC WOBBULATOR plus A. C. OSCILLATOR in one Tester



MODEL 1631

- Accuracy guaranteed for all servicing requirements.
- Continuously Variable Modulation 5 K.C. to 40 K.C.
- Triple Shielded

DEALER PRICE

Leatherette Case **\$59.00**
Metal Case **\$55.00**

Model 1631 combines a new model electronic wobbulator with Model 1630 DeLuxe Signal Generator. A.C.—60 Cycle operation.

The electronic frequency modulator does away with amplitude distortion and modulation introduced by mechanical sweeps.

Width of sweep can be varied 5 K.C. to 40 K.C. irrespective of frequency of generated signal; beat frequency type of oscillator holding fixed frequency at 2,000 K.C. eliminates beats and unwanted oscillations in broadcast band.

Uses double trace method for aligning sets with scope or can be used for conventional output meter alignment. Ladder type attenuation, 6 bands. Can be externally modulated.

Signal Generator is triple shielded for zero leakage, using both magnetic and electrostatic shielding. Accuracy for all servicing requirements. Each coil is individually calibrated and tracked for linearity over the entire range. Reads 100 K.C. to 30 M.C. Scale length 52 3/8".

Complete with all necessary accessories. Silver and black etched panel.

Model 1630—Signal Generator—

Same as above, but does not have electronic wobbulator.

Dealer Net

In Leatherette Case.....Only **\$49.00**
In Metal Case.....Only **\$45.00**

A DELUXE TRIPLETT MODEL



The Triplett Electrical Instrument Co.
204 Harmon Dr., Bluffton, Ohio
..... Please send me more information on Model 1631.....Model 1630.

Name

Address

City State

T R I C K S

LAFAYETTE M83

A continual crackling noise, covering weak broadcast stations and short waves . . . replace volume control with 1/2 meg linear control.

MAJESTIC 66

Intermittent, low volume . . . check .03 mfd condenser (C1 on diagram) in the secondary grid return of the antenna coil. This unit frequently opens.

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Insensitive . . . to increase pep break screen lead on mixer tube and insert tuned i.f. circuit. This supplies regeneration, increasing gain.

MOTOROLA 75

Vibrator failure, especially on sets mounted upside down over the steering-column . . . check the rubber covered leads in the vibrator where they are tied with cord at one end of the vibrator frame. Very often these leads break from the constant movement of the vibrator frame. Replace leads with flexible wire.

WHY You should install 1938 TOPSTREAM Mobile Aerials

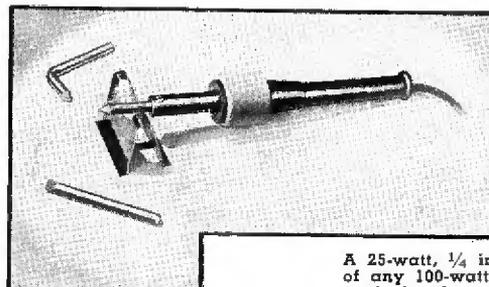
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1811 S. Lyndale Ave.
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\$1.50 (list price)

A 25-watt, 1/4 inch soldering pencil that does the work of any 100-watt iron. The result of extensive research, made by the makers of the famous Standard Soldering Iron. Extremely economical. Brass wound, mica covered element guarantees durability. 3 tips and stand, as shown. 6-ft. approved rubber cord and plug. Complete, only \$1.50. (Model 231, with 3/8 inch tips, 40-watts, for only \$2.00.) Jobbing Territories open. Send for detailed information.

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WAITING FOR!

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Master Station

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"TOKFONE," JR. **\$10.75**
Consisting of Master, Remote Station and 50 ft. of wire.

The Biggest Buy in Communication Systems
NOTHING CAN TOUCH IT!

GET YOUR SHARE!

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If you're in a position to "CASH-IN" with FAST MOVING-LOW PRICED intercommunication systems then you owe it to yourself to get in touch with REGAL—NOW!

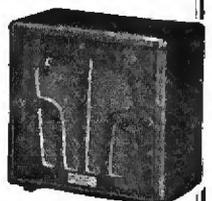
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OTHER TOKFONE SYSTEMS—adaptable to meet all requirements—from 2 to 40 stations—beautifully hand-rubbed cabinets—Special Units if Necessary—Manufactured in our own factory.

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REGAL AMPLIFIER MANUFACTURING CORP.

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TOKFONE, Jr.
Remote Station

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Selling Agencies—Sales Executives
Salesmen—Additional Lines

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SALESMAN with excellent contact throughout Florida and Georgia on electrical appliances. Can handle additional line, commission basis. SA-118, Radio Retailing, 330 West 42nd Street, New York City.

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Large stock of many makes and models.
Trade-Ins. Clean and Complete.

Prices on Request

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for an ideal summer line. Cameras list \$9.95, long films 50¢. Nationally advertised. Over 250,000 sold last year. No competition. Write for dealer proposition today, ON YOUR LETTERHEAD.

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OVER 10,000 PARTS FOR VACUUM CLEANERS AND WASHING MACHINES

24-HOUR SERVICE!

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HERE IS YOUR "GUIDE"

LOWEST PRICES

SEND FOR YOUR COPY NOW!

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Every item you get from Radolek is guaranteed. It must be right or we make it right. Standard merchandise produced by leading Manufacturers with Radolek's guarantee added!

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Everything in Radio promptly when you want it—and exactly what you want. Radolek's efficient organization backed by a huge stock of standard guaranteed quality merchandise insures you the fastest service in the Radio business. Twenty-five Thousand Servicemen customers depend on Radolek service and benefit by Radolek's LOWEST PRICES. Send Now for your copy of the Radolek Radio Profit Guide. It will help you make money.

Rely on Radolek for "Everything in Radio"



RADOLEK

601 W. Randolph St., Dept. A18, CHICAGO

Name

Address

Serviceman? Dealer? Experimenter?

Audio Frequency...

Fury About Sound

I have noted several times parties connected with the wholesale game hollering about firms selling sound equipment at a discount to nearly anyone. Apparently they figure it is up to the servicemen to do away with this evil by boycotting such houses.

We servicemen are pretty small fry when it comes to getting anything done. Wonder if the distributors and wholesalers themselves have thought about banding together and telling the manufacturers: "Until you quit selling the outfits guilty of cutting prices and quit selling the outfits guilty of selling at a discount to almost anyone we will be forced to discontinue handling your products."

I think the manufacturers would be more likely to listen.

CARRINGTON, N. D. GEORGE OLSON
Olson's Radio Service

War Correspondent

Your December issue is here and, nursing a bad cold in bed, my eye hit page 62 and I immediately got up and went to work!

Thanks to you and to friend Jim Kirk for the mention. It will be as good as cash in my pocket a little later, as it seems that the Japs will soon force us all to vacate . . . this time for good. So in the good old U.S.A. I hope to meet you, in the not too distant future.

SHANGHAI, CHINA ROBERT L. STEWART
American Radio Equipment Co.

Will This Help?

A subscriber of yours for the past several years, I am wondering if you can direct me to a reliable source of practical servicing technique with cathode-ray equipment.

As far as alignment work is concerned, I have been able to obtain excellent results with my oscillograph and frequency-modulated oscillator in this phase of servicing. However, although much time has been spent studying articles on the use of the oscillograph for general service work, I have not yet achieved any worthwhile results.

If you can throw any light on how to use cathode-ray apparatus for checking through a receiver, I would appreciate your sending the sources of this kind of information.

MOBILE, ALA. J. R. QUINLIVAN, JR.
Quinlivan Specialty Co.

The "Technical Topics" page of our March issue deals with the use of oscilloscopes for testing audio circuits. In this present issue you will find still another page dealing with

use of such instruments for general servicing. And we intend to go on for at least four issues in all with this series.

Money To Spend

I am going to spend around \$1,000 for laboratory type testing and research equipment. So far I have written to two companies and have not received an answer.

I want panelboard type of equipment. I will certainly appreciate it if you can help me get literature and prices on this type of equipment for radio testing and research work.

BENTONVILLE, ARK. PAUL LOWMASTER

Tube Price War Again?

Two ads have just appeared in our local papers advertising tubes at cut prices.

I thought — and — did not permit price-cutting. Was my face red when confronted by these prices during a sale.

One type, the 80, which lists for 70 cents, was advertised for 22 cents. This is 16 cents cheaper than the 38 cents I paid for mine.

How come?
CLIFTON, N. J. MICHAEL VINCENT

Reader Be Pleased

I write these few lines to tell you how pleased I am with your publication and with "Tricks of the Trade". Any serviceman who hasn't received them is sure losing money and time.

I never miss a page and think you have about the best magazine on radio in the field so far. At present I am building a complete new shop bench and when finished I will mail you a picture of it.

SAN FRANCISCO BECK'S RADIO SHOP

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FALL RIVER, MASS. JOSEPH LATWAY

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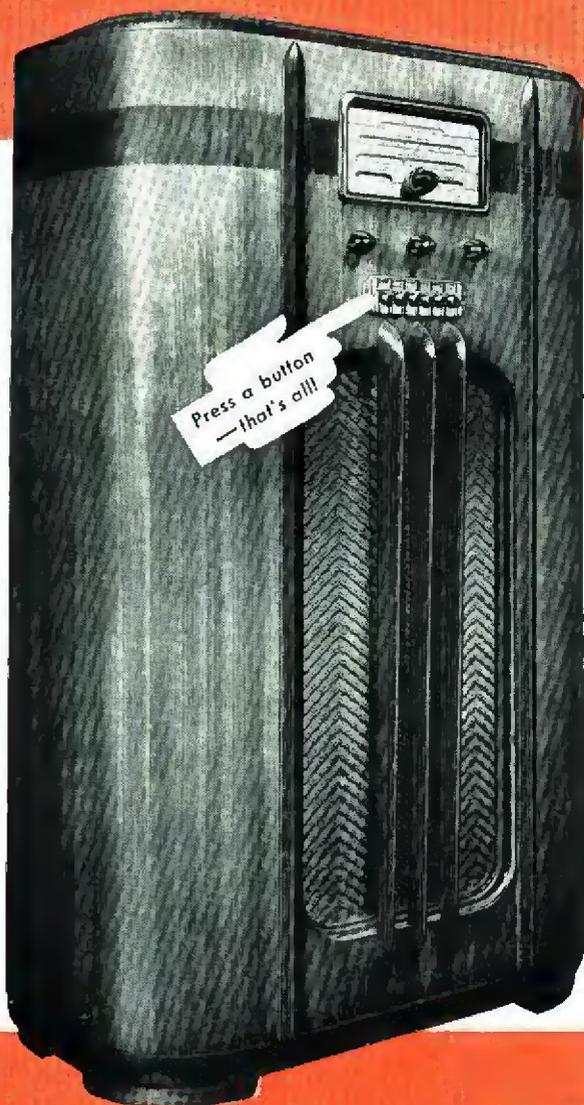
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