

The Most Popular Condensers in the Field

because of advanced design, quality construction and ease of use



RADIO RETAILING



PUBLICATION

DECEMBER 1938

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SALES STATIC . . . "I don't think there's really anything wrong with its just won't work"



GROSLEY

DEALERS ARE ALREADY AWAY TO A SUCCESSFUL 1939



DELIVERED AND INSTALLED ... 5 YEAR PROTECTION PLAN \$5.00 ADDITIONAL ... PRICES SLIGHTLY HIGHER IN SOUTH AND WEST

REFRIGERATION'S NO. 1 SALES APPEAL . THE CONVENIENT SHELVADOR PLUS

GIVE DEALERS A RUNNING START IN GETTING PROSPECTS . CLOSING SALES



THE SMARTLY CONCEIVED AND SMARTLY PRICED "DELUXE LINE" OF NEW 1939

CROSLEY SHELVADORS ATTRACT CUSTOMERS NOW - ARE HIGHLY SALABLE - AND MOST PROFITABLE



Radio Brings ALL Music To ALL People

NRC Symphony Orchestra, under di

Radio Lets the Nation Enjoy U. S. Army, Navy, and Marine Bands



CAPT. THOMAS F. DARCY, JR. Leader U. S. Army Band

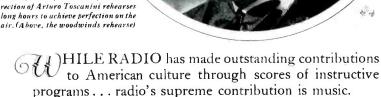


LIEUT. CHARLES BENTER Leader U. S Navy Band



CAPT. TAYLOR BRANSON Leader U. S. Marine Band

Every village has its band, but Uncle Sam's Army, Navy, and Marine Bands rank with those great concert bands which have glorified brass music.



TOSCANINI

Consider the musical contributions of NBC, one member of the family of RCA! It is generally conceded that the most brilliant musical accomplishment of radio is the NBC Symphony Orchestra, under the leadership of the great Maestro Arturo Toscanini.

Another member of the family of RCA, RCA Victor, manufactures outstanding radios. And, through Victor and Bluebird Records, RCA Victrolas, and inexpensive RCA Victrola Attachments, RCA Victor offers to all the opportunity to repeat the music they want when they want it.

By helping make all America music conscious, the Radio Corporation of America has created a market of unlimited possibilities for the retailers and wholesalers who go "RCA All the Way" and reap the benefits of the public acceptance of all things made by the only organization that makes and does everything in radio and sound.

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



Radio Corporation of America

RADIO CITY, NEW YORK, U. S. A.

National Broadcasting Company • RCA Institutes, Inc. RCA Manufacturing Co., Inc. • R.C.A. Communications, Inc. Radiomarine Corporation of America

COILS ARE NOT JUST WIRE

-when they're Meissner Coils!

REMEMBER this—most replacement coils are built to a plus or minus 25% tolerance. Consequently, certain radio sets which have a preponderance of parts of +25% by accident are extremely hot—and dangerously near the point of oscillation. These wide tolerances create a serious problem because the addition of a +25% coil to a set already too hot would produce an inoperative condition of oscillation.

Meissner Coils—built of high quality materials to the most exacting engineering requirements—are held to a plus or minus 5% tolerance and therefore are perfect replacement parts for any radio.

"UNIVERSAL-ADJUSTABLE" ANTENNA-R. F.-



It is no longer necessary to order hard-to-get exact duplicates when an Antenna, R.F. or Oscillator coil needs replacing. These new adjustable-inductance Ferrocart (Iron Core) coils will replace the Broadcast Band coils in practically any receiver! The Oscillator coil is also designed to provide complete adjustment for receivers having intermedi-

OSCILLATOR COILS

ceiver! The Oscillator coil is also designed to provide complete adjustment for receivers having intermediate frequencies from 175 to 520 kc. and may be used in either cut-plate tuning condenser or padding condenser circuits!

I. F.

TRANSFORMERS

This is the ideal replacement transformer for Servicemen and Experimenters who demand the utmost in I.F. trans-

former performance at low cost. Unusually high gain—extremely wide frequency range—and double-tuned with Meissner Low-Loss Ceramic Bass Mica Di-electric Trimmer guarantees you a superior, more efficient transformer.

FERROCART ANTENNA AND R. F. COILS



Constructed with Iron Core material which adds substantial gain, and increases the selectivity of radio frequency transformers by improving the "Q" of the windings.

These (Iron Core) coils are designed to cover the broadcast band (540 to 1600 kc) with a 365 mmf condenser. Will work with any of the standard types of tubes, including metal and the battery-operated 2-volt series.

SEE YOUR PARTS JOBBER OR WRITE DEPT. R-12 MT. CARMEL, ILL.

MT. CARMEL, ILLINOIS

"A FAMOUS NAME FOR TWO DECADES"

More Going After Customers Instead of Waiting For Customers

HARRY BOYD BROWN

National Merchandising

Manager of Philo

IT is pretty generally agreed that things look good for 1939. Business is certainly on the upgrade. Some economists definitely

predict a boom. Employment figures, income figures, news of wage increases—all point to increased purchasing power for the coming year. With more money in their pockets, people are certainly in the mood to buy—and in the mood to spend more money for what they wish to buy.

So far as the radio dealer is concerned, he had better re-examine his policies and practices and be sure that they fit in with customer's psychology and buying power. Particularly those dealers who have sold themselves on the idea that the public wants nothing but low-priced merchandise.

When we sit around the luncheon table, most of us who are interested in retailing, readily agree that the idea of "selling-up" is pretty sound. We agree that its the only way to put the real profits into the radio business. In fact, when some of us get real worked up, we insist that it's the only salvation of the radio industry.

But when we go back to our stores and find that "selling-up" requires effort and initiative, all too many of us are ready to take the line of least resistance and accept the sales that come easy. Such sales require no salesmanship and build no very satisfying bank accounts.

Surely no one can blame the radio manufacturer for supplying the kind of merchandise that the dealer sells. But the dealer can well blame himself if he puts his main effort on price brackets that yield meager profits. And when it gets to the point where so many dealers are complaining that they make a lot of sales but make no money, the matter has become a major problem for the industry.

I have talked to many dealers in recent weeks who laughed when I told them that some dealers don't seem to be able to sell higher-priced merchandise. They tell me that higher-priced sales are as ripe for the picking as ever. But the picking methods have changed. The sales are there and the profits are there as much as ever—but it takes resourceful advertising—more selling—more "going after" customers instead of "waiting for" customers.

To be specific the smart dealer today uses his windows and the floor of his store to display the better quality, the higher-priced radio merchandise, He emphasizes terms and tradein allowances, and he uses the newspapers and direct mail with heart-to-heart, human interest, proposition copy that brings REPLIES—INQUIRIES—BONA FIDE PROSPECTS.

And, while those dealers who sell higherpriced, more profitable radio merchandise in real volume, also carry low-priced radio merchandise, they use it intelligently. They advertise their low-priced merchandise—the \$39.00 and \$49.00 and \$59.00 furniture models—only to pull traffic—to create prospects. And then is when they really go to work.

They see to it that their retail salesmen thoroughly know the quality radio merchandise in stock—every feature—every improvement—every reason why it is worth more money. They train their salesmen to Sell-Up, and they pay them accordingly. They teach them not to be in constant fear of "walk-outs" but instead to go after bigger, better sales and make money.

And finally, the wise radio dealer in 1939 will place PHILCO MYSTERY CONTROL RADIOS—just as many as possible—on FREE TRIAL in the homes of responsible people. Every day sees more and more Philco Mystery Control Radios sold by Free Trial in the home—because after a few days' use of Mystery Control in the home—with no more jumping up from the easy chair every 15 minutes to change programs—people are never again satisfied with the old-fashioned, troublesome method of radio tuning.

HILCO

TheRADIO MONT

DECEMBER

1938

Twins Team Up Already existing prospects for continued improvement in radio business through 1939 are further brightened by the good news that radio's Siamese Twins, the manufacturers and broadcasters, are going to join forces in a nationwide campaign to increase public interest and appreciation of radio.

A more propitious time for such effort could not have been selected. Within the last year or two, justly or unjustly, radio has been assailed increasingly by scores of critics. Some of these directed their wrath at the broadcasters, others at the manufacturers. Much of the criticism had its foundation in misunderstandings or misconceptions of radio's problems and limitations, but at no time has an authorized voice of the industry risen to explain, to appease, to conciliate.

That situation is to be corrected by the Joint Committee for Industry Cooperation which has just been created by the National Association of Broadcasters and the Radio Manufacturers Association for the purpose of organizing and conducting a nationwide, industry sponsored campaign.

The committee faces a stupendous task. Particularly it must weld all the interests of the industry—the broadcasters, manufacturers, distributors, dealers and servicemen into one great cohesive group, of which each member will know and tell the story of radio so that the public will understand.

Much of the success or failure of the whole campaign will depend upon the radio dealers and servicemen for they and they alone are in constant personal touch with the public. They may be expected to cooperate widely and effectively, if given proper opportunity to function.

Dumping? We have just completed a long circuit of visits to the factories of most of the well-known manufacturers of radio sets. What we were after (and

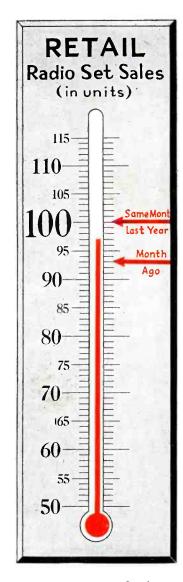
obtained) was some first-hand information on existing production schedules, factory inventories, distributors stocks, etc., so that we might determine by our own methods of calculation just what the chances are for the industry to go through the forthcoming post-holiday season without any serious dumping of sets or destructive pricecutting campaigns.

Our findings emphatically confirm our earlier predictions, namely: That stocks all along the line are clean and well down to current requirements. Excepting isolated cases involving a few slow moving models, sets finished and in production would cover no more than minimum December requirements and that in the face of a steadily growing wave of consumer buying.

Several manufacturers had accumulated an enviable log of back orders on their "hot" models while their reserve stock on others was dwindling down rapidly. Not a single maker was seriously worried about either inventories or commitments and looked forward to entering the new year with the cleanest slate in many years.

Thus it seems that the old bugaboo of dumping and price cutting has been licked through closer gearing of production to consumption. In that process the R.M.A.'s new system of reporting undoubtedly has been a factor. If Radio Retailing's barometer of retail sales has helped also, its purpose is being accomplished.

offwed No. **EDITOR**



November Sales

Business Barometer

N November radio set sales by dealers climbed four points above the level of the two preceding months, pushed our unit sales barometer to the 97 mark, highest point that it has reached this year only 3 per cost below the this year, only 3 per cent below the same month f last year. Many dealers, principally those located in cities

or industrial areas, for the first time this year reported unit sales that equalled or exceeded the total for the same month of 1937, while all along the line the dollar value per sale continues

along the line the dollar value per sale continues to hold well below last year's average. Encouraging fact is that the average dollar value per set sold in November was higher than at any time since June, thereby confirming the reports coming from many quarters to the effect that more higher priced table models and consoles are moving into the hands of the public, although it must be expected that sub-priced midgets will continue to account for a large slice of the industry's total unit volume.

Studied individually, the sales reports for November indicate that many aggressive dealers have been successful in a concentrated drive for large unit sales so as to overcome thereby the handicap of low dollar value. Thus increases in unit sales ranging from 10% to 55% above last year were produced.

year were produced.

year were produced.

Specifically, total reports from dealers in nineteen of the nation's forty-eight states showed
varying increases in unit sales over November
1938, in ten other states the score was nearly
even, while from the balance, mostly agricultural
states, dealers still report their sales below last
year, with spots where new rural extensions have
been built providing the exception.



New Sales Aid Catalog

Ask your RCA Radio Tube distributor for a copy of the new 1939 Sales Aid Catalog. Contains many interesting pages of sales help for your use.

chandising assistance but should expect 100% cooperation from the maker of his tubes. In 1938 RCA gave this cooperation and will continue to do so during 1939. You do not have to use extra selling effort "to get the goods across" because the public acceptance for RCA Radio Tubes, backed up by sound promotional programs, will do it for you. So stock these tubes and we'll

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 every Sunday, 2 to 3 P.M., E.S.T., on the NBC Blue Network

RCA Manufacturing Co., Inc., Camden, N. J. A Service of the Radio Corporation of America

RADIO RETAILING

DECEMBER, 1938



TRAINING THE VOICE

with a smile...

AVE you ever wished you could listen to yourself selling? These girls did, and as a result learned to do it better.

They are telephone solicitors for classified advertising in the New York World-Telegram. Their ingenious boss quietly installed a Presto recorder in his office, had it connected to the output of the switchboard. In three days he made 100 recordings of sales solicitations, customer responses. From these he selected the most effective methods of approach, incorporated them in a set of training discs.

The girls listened to the training discs, later had an opportunity to blush when they were permitted to play back their own recordings in private.

Here's a novel but highly practical use for recorders that once again illustrates the tremendous sales potential of such machines. Industrial prospects for recorders are everywhere, require only ingenuity and imagination to interest.



MUSIC UP, OVERHEAD DOWN

Photoshorts for July pointed out the possibilities for record-player sales to dancing teachers. Here's another typical example, one of the 24 Ansley D-l's used by the famous Arthur Murray school in New York. Murray also owns several Dynaphones scattered throughout the building



BLIND MAN NO BLUFF

Featured in a Bob Ripley cartoon not long ago is John Smith of LaCygne, Kansas, believed to be the only totally blind radio dealer in the country who runs a store without help, does all of its selling and servicing. In addition, Smith sells Philcos door-to-door, is an expert watch repairman and piano-tuner on the side

"BOLOGNA BULLS," TIPS STRAIGHT FROM CHICAGO'S STOCKYARDS

Dean of the country's farm market broadcasters is Jim Poole of WLS, whose stockyard reports to listening farmers bear a note of authenticity, are liberally spiced with vivid terms

such as "yellahammas", "snipes", "rats", "phoney yearlings", "trash", "pea vines", "canners", "cutters" and "bologna bulls". His kind of stuff makes good farm radio a necessity





RADIO RETAILING, DECEMBER, 1938



DEPARTMENT STORE HITS RECORDS HARD

Virtually stagnated for several years, the record department of Milwaukee's Boston store has been revitalized by a new island sales counter, (left) three air-conditioned audition rooms. Result: A new crest of disc sales

WINDOW OF THE MONTH

High in interest during the peak of the football season was this display (right) featuring one Stewart-Warner model by the Sales Furniture Company of Louisville. Local sports shops loaned tie-in props

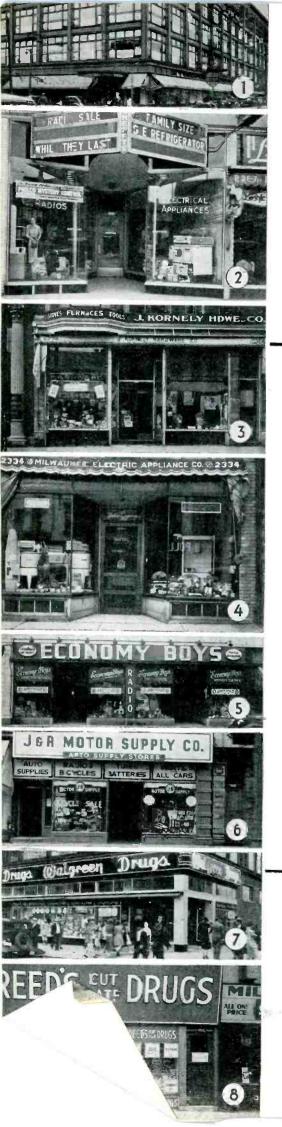


COMPLETENESS OF STOCK IS HIS STRONGPOINT

Master of display is Sam Schwartz of New York's Sun Radio, whose first floor (lower left) illustrates. Note effective island displays, featuring of catalogs. Parts attract the amateur and

experimenter at the right. Tubes, at the left, keep staple sales separate. Upstairs (lower right) are sets, another island display for small appliances. Note plug for consoles in wall sign





TRAFFIC and TURNOVER

Pedestrian count in Milwaukee's mainstreet throws new light on importance of store location. Careful weighing of rent vs. walk-in prospects suggested

By MARTIN FRANCIS-

RACTICALLY every radio dealer, and every other retail merchant for that matter, wishes at one time or another that he could obtain accurate information concerning the volume of pedestrian traffic flow past his store, as well as the traffic flow on the entire street on which his store is located.

Sales are definitely related to pedestrian traffic flow, especially in the case of radios and electrical merchandise, for from the surging stream of people traveling the streets every day, a radio dealer draws many, many prospects. "Drop in" prospects can amount to a great deal to any radio dealer on a day when the streets are full of people.

Radio stores located on N. Third Street, Milwaukee, between W. Lloyd and W. Meinecke Sts.,-Schefft's, Schuster Department Store, Milwaukee Electric Appliance, Kornely Hardware, Walgreen Drug, Reed's Drugs, Economy Boys, and J.&R. Motor Supply-recently got some valuable information pertaining to the relation of sales to volume of traffic through an extensive, twelve hour, three block pedestrian count made by the Milwaukee Board of Public Land Commissioners, with WPA checkers.

This count, complete in every detail, revealed that the west side of Upper Third Street gets three times as much pedestrian traffic on a normal shopping day as does the east side of the street.

Radio dealers and other merchants immediately began studying these traffic figures, and some raised the question as to whether rents on the poorer side of the street, as well as taxes, should be three times lower than on the good side of the street. It was argued that since most retail sales, especially radios, electrical appliances, etc. come from "draw in" prospects, that rental and taxes should be based on the volume of pedestrian traffic.

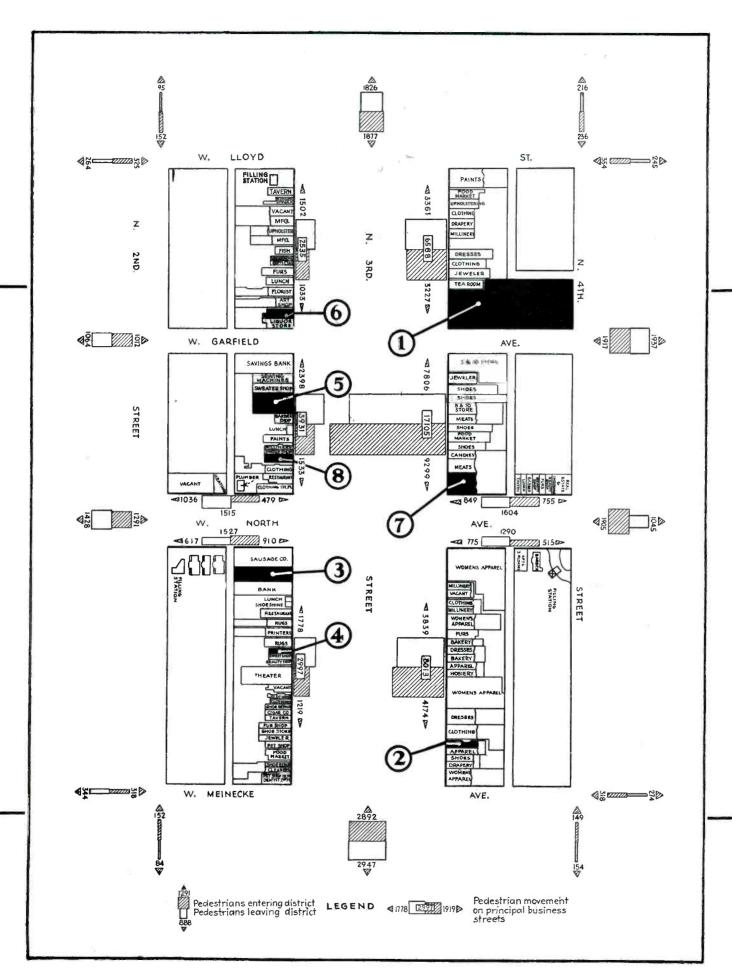
The Milwaukee figures show that approximately 12,000 people entered the checked area within a twelve hour period. One block, the center one, got a traffic count of more than 17,000, indicating that many people passed back and forth in this block. This spot is also a street car and bus transfer point, which accounted for part of the high total.

Ernie Schefft, well known, progressive Milwaukee radio dealer, and the Schuster Department Store, operating a large radio department,

(Continued on page 60)

- 1. SCHUSTER—Has a big, extremely active radio department on an upper floor
- 2. SCHEFFT—Radio and electrical appliances split volume about 50.50
- 3. KORNELY—Display near door and basement showroom move many sets
- 4. MILWAUKEE—Heavily in electrical appliances but still a radio factor
- ECONOMY—Majors in small sets, car radios; moves some inexpensive consoles
- 6. J & R—Gets fair radio volume, principally in table model receivers
- 7. WALGREEN—Sells small, low-priced sets only, sometimes using windows
- 8. REEDS—Has limited line of small, low-priced sets, rarely publicized

RADIO RETAILING, DECEMBER 1938



Selling Sound takes

By T 0 M

BLACKBURN

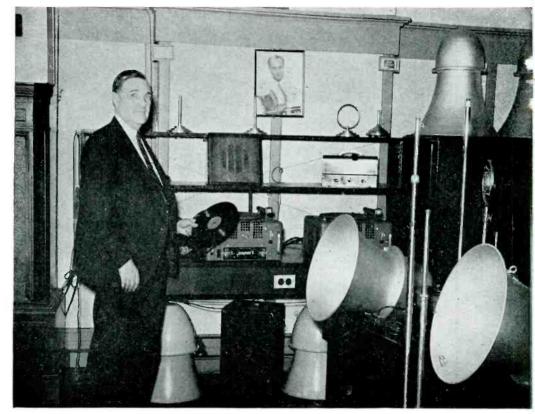
Has a little bird told you that Susie McCarthy is going to throw a swell church wedding? Do you know that the merchandise manager over at the Innes Department Store wishes he could have some Christmas carol singers like Marshall Field has up in Chicago? Did you know that the iron voiced announcer down at the Pere Marquette station has laryngitis?

That, mister, is your stock in trade as a sound equipment dealer if you work under the system set up by the K.L.A. Laboratories in Detroit, Michigan. About half of Michigan is apportioned into this network of dealer tipsters, about twelve areas in all.

All you carry in stock is one small public address system for lastminute rental use. Your job is to keep an ear to the ground, and when Mother Machree dies, you suggest a set of synthetic chimes in the First Methodist Church as a memorial instead of another stained window. Then when you get a nibble you excitedly call the K.L.A. Laboratories and either Stanley L. Almas or George H. Howell comes on the run and buttons up the business. Your commissions are good for \$500 to \$1,000 a year. It's a swell business if you have that precious nose for news.

Sell, Don't Rent It

The K.L.A. firm—which started life as Kraus, Ludringsen and Almas—both wholesales and retails. Its dealers, with their 20 per cent commission for leads, are playing a wing part in the picture. Rental pre or less avoided unless neces-



USES BIRD DOG METHOD—George H. Howell of Detroit's K.L.A. Laboratories. He has "spotters" sending in sound equipment leads on a commission basis all over Michigan

sary or seasonal. Out of a \$35,000 volume last year only \$6,000 was for rental of sound equipment. Reason for this, says Stanley Almas, is due to the fact that rented equipment is abused more than when owned and, furthermore, there is quite a good deal of obsolescence in this material, which interferes with its renting returns.

Stanley puts on a gaudy show when he is presenting his story. He pops into the picture with a signal generating device and proceeds to measure up the place, taking a record of the noise level in various portions of the building. This stunt fascinates the prospect and proves that Stanley knows his business, as the sound equipment invariably works out.

Because Detroit has been hard hit by strikes, K.L.A.'s method of selling sound equipment has delved down to bedrock fundamentals.

Competition with home-made

outfits has been largely stifled in its cradle in three ways. First of all, the Ford Motor Company in Detroit is known as a very economical buyer. Ford will not fool with home-made sound equipment, preferring apparatus made for the job, which sets an example. Second, when a fellow buys a home-made set he must accept what is built for him, no matter how punk. Third, it is possible to demonstrate factory-made outfits in advance which is impossible with the home-made layout.

Show Prospects Their Need

Beer gardens have afforded K.L.A. some of its juiciest business. Generally considered bad credit risks, nevertheless Stanley Almas has had less than 1 per cent of reverts from this source of trade which incidentally flourished all through the worst strike.

Reason for this success, says

RADIO RETAILING, DECEMBER, 1938

a NOSE For NEWS



FASCINATES PROSPECTS—With the aid of an amplifier and output meter Stanley Almas checks noise levels

Flashy demonstrations turn leads into contracts, onesyllable-word operating instructions make equipment stick



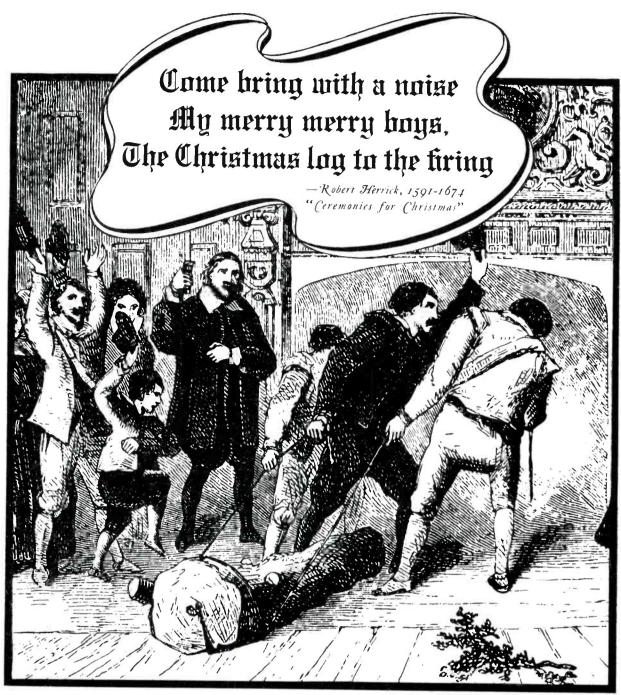
STRAWBERRY, NOT STRUMBERRY!—Essential when selling inter-comms to restaurants, says salesman George Stevens, is a short course in English for the waitresses. There's a right way to get over a short order and a wrong way that drives chefs wild, jeopardizing the job

Stanley, is his understanding of beer garden psychology. Once a week, mind you, he sends a collector around. Now this collector isn't foolish enough to come buzzing in on a Friday which is the day the beer garden buys its liquor. No, he appears on Monday morning when the till is full. He not only gossips and gets leads for future customers but also meets the orchestra. He cultivates the glassware salesman and the floor finishing people who know better than anyone else when new businesses are going to set up.

One salesman realized the perpetual fear in a synthetic chemical plant over explosions or fires. When things go wrong, they have to be taken care of in a hurry or the place is wiped out. His intercommunicating system paid for itself in a month, as a big resin kettle took fire, sound equipment brought

(Please turn to page 60)





"Firing the Yule Log"—From a wood-cut by ELTER, illustrating the festive ceremony that in olden times officially opened the Christmastime season.

Holiday Greetings

FROM HYGRADE SYLVANIA CORPORATION



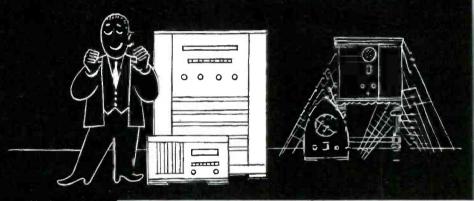
Is your OLD RADIO really worth what you think it is?

4 Reasons Why The Dealer Who Takes a Used Set In Trade Rarely Disposes Of It Without Loss:



Willingness to pare new set profits and so keep factories running through a recession has wiped out past price standards

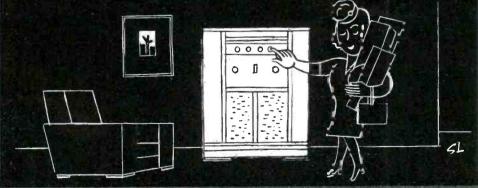
Seven-league design strides by manufacturers who need business at once make earlier models look crude and cumbersome





Engineers spurred by the demands of their sales departments have substituted realism for mere good tone

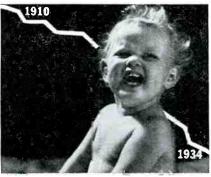
Conveniences such as push-button tuning so widely advertised to hasten replacement buying have convinced the public that older sets are truly obsolete



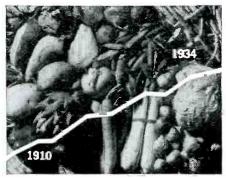
RADIO RETAILING THERE IS NO SUCH THING AS "SOMETHING FOR NOTHING" ...

When an allowance is offered that you know is out of proportion to the old equipment's actual resale worth you may be sure that the price-tag on the new merchandise offered is fictitiously bigh

YOU HAVE DONE A NOBLE THING —YOU RETAILERS WHO HAVE SOLD REFRIGERATION TO AMERICA!



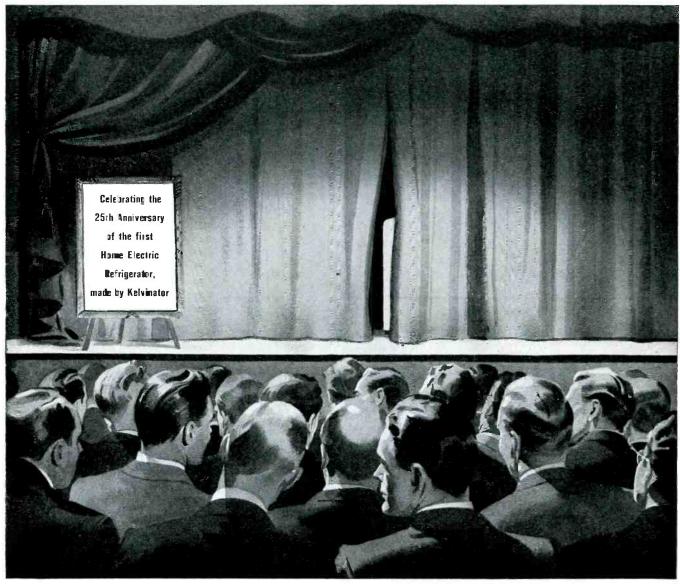
Thousands saved yearly by better refrigeration. In one disease alone (enteritis), the electrical refrigerator has been called a main factor in the death rate drop from 100 per 100,000 to 13.

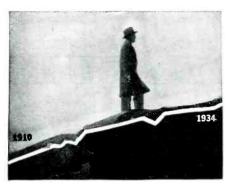


America eats over twice as much of health protecting, body building fresh fruits and vegetables . . . shipped from all over the world, foods only in demand because of home refrigeration.

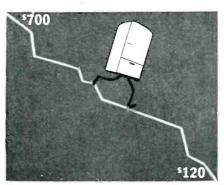
As America Celebrates the 25th Anniversary of Electric Refrigeration in the Home







Every ten years, a year of life is added through better living conditions. Doctors credit electrical refrigeration with changing America's eating habits from heavy to well-balanced diet.



Ever-lower prices have brought electrical refrigeration within the reach of every wage-earner. Contrast the cost of the first Kelvinator with present prices, for a Kelvinator many times more efficient.



Millions of dollars saved yearly on food which would otherwise spoil. Electrical refrigeration introduced a new and better way of marketing and of keeping perishable foods constantly safe.

Milbe Mhahmatr!

Kelvinator Invites Every Refrigerator Dealer in America to Share in the Golden Opportunity of the Silver Jubilee

NEW SILVER JUBILEE KELVINATORS TO BE SHOWN JANUARY 2ND

Today, every electrical refrigerator salesman and dealer can be proud of the part he's played in making this a finer world. The pictures above tell the story of what has happened since, in 1914, Kelvinator built the first electric refrigerator for the home and began this great industry.

Naturally, you can expect outstanding models in keeping with the Silver Jubilee occasion. These new models are completely new—completely redesigned—the most beautiful refrigerators built.

A new cold-making story will add laurels to Kelvinator's title of Champion Ice Maker . . . a new interior setup will put the teeth in any sales talk ... a new advertising campaign will sell the Jubilee program to the public ... a campaign planned to start people thinking about not just the money they can save ... but the luxuries they can afford ... an ideal dealer's campaign.

This year we expect people to choose Kelvinator as their first refrigerator . . . or as their second on trade-ins. This year we expect so much because the Kelvinator line offers so much.

We urge you to take advantage of this chance of a lifetime—to feature on your floor this new line of Silver Jubilee models . . . to share the spotlight and the profits with us. KEL-VINATOR, Division of Nash-Kel-vinator Corp., Detroit, Mich.



of vital, personal interest to retail salesmen and to dealers in electrical appliances. This announcement will affect the net profits of dealers and will have a lasting influence upon the earning power and the business future of retail salesmen.



The Silver Juhilee KELVINATOR

GET IN THE SPOTLIGHT WITH KELVINATOR!

FIVE FURNITURE



HE average furniture merchant's objective in St. Louis calls for better profits in radio selling. He tries to avoid losing profit on trade-in deals. The sales pioneering in new things is relinquished to others but the furniture dealer later gets his share of the business when the new radio or home appliance has come to be looked upon as a necessity. It is an axiom that the "old furniture customer" drops in at his store to look over a radio set or electric refrigerator before buying.

Radios as much as two years old are repaired at no cost to a furniture customer at some stores. The latter expects it and gets a service call and some parts without charge because it is considered a necessary merchandising practice in order to hold the customer's furniture business.

Cold canvassing for prospects in radios is generally out of the question for a furniture store's specialty salesman, and to get floor traffic the neighborhood furniture store uses shopping news sheets, and the major business district stores, the metropolitan newspaper. The furniture stores usually hammer away on "house prestige."

To meet the speciality store's competition, as well as to maintain a business tie with old customers who have not been in the store for some time, a contact man calls at their homes. If he is a prospect for radio or anything else it is the contact

ByHOWARD BARMAN

man's business to find it out and persuade the old customer to drop in.

How do furniture-minded managements view the basic problems of radio selling today?

FRED DAU of Dau, the House Furnisher, Inc., operating three stores

"The speciality salesman's activities sometimes make quite a problem for the furniture dealer. He (the specialty salesman) runs helter skelter

over town, making a house-to-house canvas and he winds up by making all kinds of deals. What is the result? The specialty dealer has made little profit from his outside selling. Then when the buyer comes to the furniture store for a new radio he expects us to give him the same kind of a generous deal. We can't do it and make money.

"The furniture merchant doesn't pioneer in new things. He didn't pioneer on the radio or the electric refrigerator. We consider ourselves a washout on electric ranges today. And we operate in three sections of the city. After appliances have been introduced and the missionary work done a large part of the business, however, comes to us.

"As far as outside selling is concerned we don't follow up on leads and we don't give home demonstrations unless it is for an old customer whom we know quite well. However, our extensive community newspaper advertising has made our furniture stores more widely known as radio-appliance stores in some quarters.'

GEORGE SAUTER, radio department manager of Hellrung & Grimm H. F. Co., makes this comment:

"Radio sales in a furniture store are of a different type than those closed by the specialty store. Re-

Common RADIO Problems:

Necessity of giving practically unlimited service guarantees in order to avoid jeopardizing other business

Successfully competing with cold-canvassing specialty shops while at the same time maintaining expensive stores

Selling at prices expected by the conservative management against more flexible small outlets offering concessions

Minimizing allowances made for trade-ins to avoid criticism by other departments with no used merchandise problem

DEALERS speak their mind

pairing radios as old as two years at no charge is an item which the furniture store feels obliged to do. If you don't keep your old furniture customer satisfied you will lose one who has been a profit to you in furniture sales. Nevertheless, we like radio business. It is added volume.

"Some instances of old customers bringing in old radios which they think we should repair without cost to them took place only last week. A newly married couple furnished their home at our store and bought a radio console costing \$80. After they had owned it for eighteen months, the young woman came to the store and said they never got satisfaction out of the set. A radio service man (a friend of the couple) had put in the wrong volume control, and as they were fine paying customers our service man put in a new tube and made the service call at our expense.

"A customer bought a \$100 console and after a year's use stopped payments because, he said, the radio wouldn't play. He was a good customer in furniture and we gave him a service call and a tube to adjust the radio without charge. Customer was satisfied and resumed payments.

"If they are to come back for more house furnishings, we must please in every possible way."

JOHN HART, radio and appli-

ance buyer of the Lammert Furniture Co., looks at radio problems from this angle:

"Selling against specialty dealers who canvas house-to-house and who will sell at some kind of a discount is competition we cannot meet. We offset this kind of competition by sustained metropolitan newspaper advertising of current models and emphasizing our house prestige; advertising last season's radio models at the largest possible discount, and following up all prospects with our radio-appliance selling force.

"We have capable radio service men to make new radio installations and we take care of the customers' interest as long as the expense involved is compatible with reasonable

"Our store is departmentalized and it is necessary to keep all departments interested in the radio end by holding meetings when we show all the new features. We also strongly tie in the radio department with all store-wide activities and large sales promotions.

"While we do no outside canvassing, in every other manner the radio department has a strong specialty slant

"The main factor in whatever success we have had in the applianceradio department is the fact the department stands distinct from all others and does all of its own selling. Employees of other departments simply bring in the furniture customer as a prospect for radio. If a sale results the outside employe is compensated."

WM. F. IGOE of Igoe House Furnishing Co. says:

"Our common problem is to get store traffic not only for radio but for all other departments. To get prospects we'll use the metropolitan newspaper.

"Our problems in selling radio are no more annoying than they are in merchandising furniture where we have to contend with the curbstone broker who tells the engaged-to-wed couple that he will get a bedroom suite for them at a price a little above wholesale.

"We have this advantage: We can sell the bride-to-be a radio, refrigerator and all her house furnishings and put everything on one bill. She then has only one monthly payment to make for everything needed to furnish her home."

WALTER BARUTIO, radio buyer of the Schaab Stove & Furniture Co., says:

"Our No. 1 problem for the last two years is long trade-in allowances which really amount to a discount. Competitive practices have forced us to allow \$25 on an old radio set that won't sell for more than \$3. If an old customer of ours is offered a long discount by another dealer, we will go along. If we didn't meet this competition we might lose a furniture customer permanently.

"To keep in touch with our customers, we employ a contact man who calls on them at their homes. He may have a few items with him which will give him entree to the home. If he reaches the old customer's home before the man doing a cold canvassing job on radios rings the doorbell, we may not have to compete with a big trade-in discount. Furniture stores have a large overhead and they must get a better profit out of radio sales."

Typical RADIO DEPARTMENT Solutions:

Willingness to let others pioneer new products, thereby holding sales costs down while a demand is created

Use of "contact men" who, while not attempting to sell in the home, do regularly invite customers to the store

Heavy pressure on the sale of house prestige, principally by substantial expenditures in community newspapers

Joint financing of radios along with any other home furnishings the customer may be paying for on time.

Dramatize Low Readings

By HAROLD F. JENKINS*

Wholesaler
Elmira, N. Y.

SELLING radio tubes to over 300 dealers during the past four years, our company has constantly campaigned to increase sales to the radio owner. Many methods have been suggested and tried by our dealers. The one that has shown outstanding results is quite simple, requiring only a little salesmanship by the man doing the selling.

First, we know that any tube having more than a year of use, when tested, will show a somewhat lower reading than a new one, although probably still registering on the "Good" part of the meter scale.

Usually, by showing this minute difference by direct tube comparison, tube for tube throughout the radio, with a simple explanation, a complete new set can be sold the owner, rather than only one or two tubes.

The explanation? Simple. Point out that the small difference is the reading of each tube, multiplied by the number of tubes in the radio, makes a very noticeable *total* drop of emission, with lowered set efficiency.

Clinching this, is a simple comparison of the radio with a water supply system. The power unit furnishes a constant, predetermined pressure of plate voltage to the various tube circuits. Each tube, acting as a valve, is supposed to pass a definite portion of the total current flow.

Now, if every tube is slightly weak, failing to pass its share, a back-pressure is created. The plate voltage builds up, and the resulting strain may break down other components, such as condensers, bleeder resistors, transformers.

Such a breakdown, it is pointed out, may cost the owner more in repairs than would a complete new set of tubes.

This plan does work. In 1936 our tube distribution increased over 40 per cent after a campaign in which our dealers cooperated in trying it. Now, after a two-year test, we are sure that it is one of the very best plans for increasing tube sales that we have found.

PAGE 22

For More TUBE Replacements

Demonstrate Common Troubles

By JOHN T. FRYE*

Retailer

Logansport, Ind.

B UILDING bigger, legitimate tube sales reduces simply to a problem of locating defective tubes and persuading the owner to replace them with new ones.

Locating the defective tubes is the greatest problem. Of course, the serviceman catches the ones that actually burn out and render the receivers inoperative; but these represent a very small percentage of the noisy, gassy, weak and worn-out tubes that are causing distorted, unsatisfactory reception in a fourth of the homes in the United States.

The trouble lies in this fact: Most radio owners still consider a tube that lights a good tube. They are not aware of just how many ills a radio tube is subject to or how many different types of poor reception a bad tube can cause. If they can be made to understand these facts, tube sales will soar.

Across one end of my shop there is a streamer bearing these words: "Every One of These Tubes Lights, BUT . . ." Directly beneath this banner are suspended six placards, each having a defective tube mounted upon it. One placard says: "This Tube is Gassy"; another "This Tube Has an Open Element"; still another "This Tube Has a Loose Connection"; a fourth "This Tube Has a Shorted Element"; a fifth "This Tube is Microphonic" and a sixth "This Tube Has Lost Its Emission."

When one of my customers comments about this display, and nearly everyone does, I demonstrate just what each defective tube does to reception. All the defective tubes fit one or two radios I keep in the shop, and I let the customer hear the difference in reception when one of the bad tubes is used in place of a good one. The gassy tube makes a popping noise; the microphonic tube causes a howl; the open element tube and the low emission tube both cause a great drop in volume and distortion; the tube with the loose connection causes a scratching, rasping sound and the shorted tube kills reception and produces a loud

While I am giving this demonstration I give a little talk on tubes that is filled with simple analogies illustrating the importance of good tubes to radio reception. I tell the customer that the tubes in the set are arranged in series so that one bad tube can destroy the operation of all the good ones. I explain that a tube's lighting is no more an indication of its quality than a dog's wagging tail is of his good intentions. I run over the bad effects that poor tubes can have on reception: Low volume, distortion, scratching, rasping, howling, popping, whistling and fading. I emphasize that tubes are to a radio what sparkplugs are to a motor. Finally, I impress upon the customer that his tubes should be tested twice a year and must be tested once a year to insure good reception.

The proof of this simple, practical method of boosting tube sales lies in the fact that I get as many "tube checkup calls" as I do straight service calls.

^{*} Honorable Mention in Radio Retailing's Tube Sales Idea Contest
ADDITIONAL PLANS WILL APPEAR IN EARLY ISSUES



E hear a lot about how to sell electric refrigerators. We are told to canvass for prospects, contact users for prospects, circularize the neighborhood, advertise, and do a lot of other things.

All this is very well, of course, as far as it goes. But it comes, more specifically, under the heading of how to get prospects. After we get the prospects, we still have to sell them.

This series will concern itself with getting the name on the dotted line.

There are different ways of getting a name on a dotted line, and the difference depends, largely, upon the article you are selling. Generally speaking, some articles of merchandise are bought, others are sold.

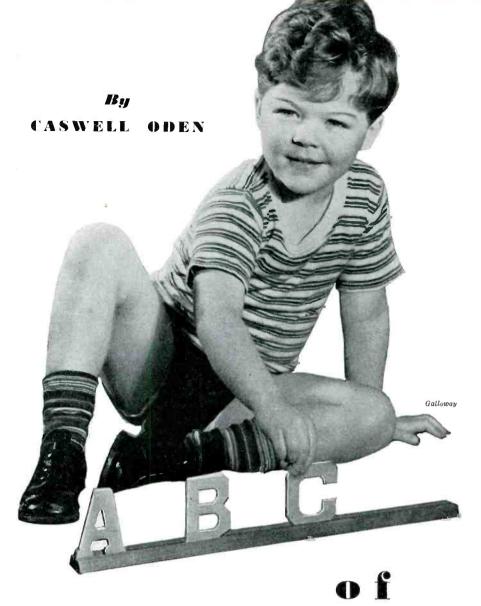
An article of merchandise which is bought is usually, but not always, one the purchase of which effects no economy or actual saving for the purchaser. It is always one concerning which it is difficult or impossible for a salesman to develop an irresistible sales talk. He may know his product well, and be able to talk about it convincingly—but there is nothing about it or its nature on which he can build an irresistible argument. The prospect has at least got to want it, or the salesman can't sell it. The prospect may not feel as if he can afford it. but he's got to want it.

The Irresistible Argument

For example, a radio, much like a suite of furniture, comes under the heading of merchandise which, ordinarily, is bought. There is no irresistible argument that can be advanced concerning why a prospect should purchase a radio—if she already has one, which she usually has.

We sell radios, of course (and to people not admittedly in the market for them), but we have to be very smart to do it, due to the lack of an irresistible selling argument. Because a radio is sufficiently portable, we get it in the prospect's, or suspect's home, any way we can. But then what do we do?

We can't show the lady where she will actually save money by buying it. So we simply have to use a lot of Body English. We talk about the weather, we pat the baby on the head, we sell ourselves. True, we point out, in great detail, what a magnificent set it is and how easily it can be bought. But we still cannot say, in effect (though euphemistically): "Why, Mrs. Jones, you're positively stupid if you don't buy this set."



Refrigeration

All this is one way, and what I consider the most effective way, of telling you that with the electric retrigerator you have an entirely different proposition. If Mrs. Jones doesn't buy a box from you, after you have talked to her, it is either because she is very stupid, or because you do not know, or use to its best advantage, the irresistible sales argument. (I'm assuming, of course, that she can buy it; that her husband is working, etc.)

We can sell electric refrigerators to people who want them, and we can sell boxes to people who don't want them—or at least to people who had no idea of buying before we started talking to them. In other words, we have more than just an article of merchandise to sell; we have an *idea* to sell too. If a person doesn't want

a box, we can sell him the *idea* of wanting it. After we have done that, then we can sell the box itself.

The three things to sell when selling an electric refrigerator are the Box Itself, the Convenience, and the Economy involved in its purchase. The order in which we sell them, however, depends upon the prospect.

It is extremely difficult to explain the proper procedure to be followed in selling an electric box, because different people have to be handled in different ways. With a pushover, with a person who admits he wants a box and is going to buy one (rare creature though he is), we have merely to sell the Box Itself. (Always giving the gentleman to understand, however, that we can sell him any make box he wants. We are

merely pointing out the advantages of this particular box because we honestly believe it is the best buy for him,

everything considered.)

But I am not dealing with pushovers; I am dealing with people who have been contacted on a canvass, and who have, as a rule, evinced only a slight interest in a box. The desire may be there, but the interest is slight; and this is nearly always due to the fact that the person in question has not been sold on the *idea* of electric refrigeration, the *economy* or actual *saving* involved, and consequently believes that a box is too expensive a proposition for her to consider.

This is true in at least nineteen cases out of twenty. In nineteen cases out of twenty the outside salesman, dealing with canvassed prospects, has only to sell *electric refrigeration*. The rest is easy; he can sell any *make* box he chooses.

In spite of this fact, we should always try to sell the Box Itself first. Because the thing to do, in selling anything, is to create a desire for the product, first, and then sell it. Wherever possible we should have the Box Itself and along with it the Convenience thoroughly sold, before swooping down with our irresistible argument: the Economy. Even if the desire is already there, we should increase it, build it up to the high-

est point, before talking Economy.

In some cases, however, this cannot be done. In these cases it is impossible to create any *interest* (even though the *desire* is there), because the lady simply *knows* she can't afford it, and therefore will not even look at your pictures. In such cases, although you are putting the cart before the horse, the only thing to do is sell the Economy first.

Economy as a Weapon

I'm going to assume, however, that we have an average prospect, a prospect who admits that she'd like to have an electric box, but is quite sure she can't afford it. Let's even say that she is very emphatic about not being able to afford it, but not to the point where she won't even look at our pictures.

One of our men canvassed this lady and when we ring the bell she comes to the door and says, "Oh, yes, I remember him. But I told him I

couldn't afford it."

There are so many different things that you can say right here, that it may be unwise to be specific. The important thing is your attitude, your bearing; you should be just about the most agreeable cuss in the country; no matter what the lady says, at this particular moment she's right. Bearing this in mind, one of the things you can say, with an engaging smile, is:

"Well, Mr. Brown told me that, Mrs. Jones. But I wanted to talk to you, anyway." Now you take another look at the card the carvasser gave you, as if you are a little puzzled by the paradox; as if, forgetting business, you've got something here which interests you personally. "Mr. Brown tells me that you are spending 15ϕ a day for ice. Is that true, Mrs. Jones?"

Mrs. Jones says it is quite true. I'm not going to say more. From now on the best thing to say depends entirely upon what Mrs. Jones says.

Inside the Home

But what we want to do is get inside the house, and do it without selling her the Economy, if possible. Why? Because selling her the Economy, alone, is going to take longer than she will want to stand at the door.

Of course, as a last resort, we'll sell the Economy at the door, or try to. But there are devious ways of getting into the house. (Don't get discouraged—they're not all as tough

as Mrs. Jones!)

None of these ways are sure-fire, of course, but some of them work quite often. And some of them look much sillier on paper than they really are. For instance, asking Mrs. Jones to let you use her telephone (but only if you're sure she's got one) looks very silly on paper. But the fact remains that after you've called the office and said you'd be in about four, and hung up while they're saying "Who cares?" you are inside the house; and Mrs. Jones isn't going to let you stand up with all those chairs around.

But one of the best ways I know is to get to talking to Mrs. Jones about her ice box. It's a shame how interested in it you can get, if you try. She keeps telling you things about it, and you keep asking questions, and finally she tells you something that you, obviously, find just a little hard to believe. Then she takes you in and *shows* you.

Anyway, we finally work our way into the house. It is in the afternoon, and we know we'll have to come back to see the husband. But now, where the lady won't get tired of standing up, we are going to sell her so thoroughly that she will get our story across to her husband—not as well as we ourselves will later, but well enough that he will, in all probability, be willing to talk to us.

Salesmanship

First of a Series for RADIO DEALERS NEXT MONTH: "Selling the Box Itself"



A Company is Known by

Distributors Like These-can Pick and Choose!

-THESE CHOSE LEONARD

Let <u>Them</u> Tell You—in Their Own Words—Why They Handle Leonard Electric Refrigerators—Why Leonard Dealers Like the Leonard Way of Doing Business



A DEALER, handling many different articles, might choose something less than the best line for a particular department of his busi-

ness and still prosper.

A distributor, with his merchandising eggs in fewer baskets, must select the goods he handles with the greatest care. He investigates, studies, compares—constantly.

On the right are listed Leonard's distributors, together with some of the major appliance lines they handle. It is significant that these merchandising leaders should have chosen the Leonard line of electric refrigerators. Sound, experienced business men with established businesses and ample finances, they could pick and choose among the many refrigeration franchises. They chose Leonard.

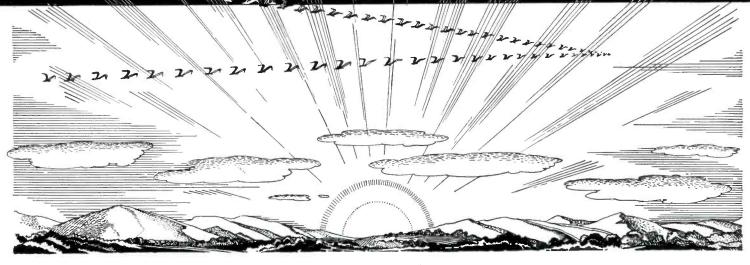
At the start, this choice was probably largely due to

the Leonard refrigerators themselves. Year after year, the line has been made up of brilliantly designed, soundly engineered, correctly priced models, filled with selling features and fitted to the current markets. (All this, incidentally, will be true of the 1939 line to be shown next month.)

But there was something more. For instance, the Leonard way of doing business. Hard to put into words, but recognized as a real advantage by distributors who keep in close touch with dealers and their daily problems. Maybe "friendly understanding on a personal basis" describes it. Anyhow, dealers who have handled Leonard know what we mean.

We suggest that you have a talk with the Leonard distributor in your territory—or his representative—before you make any refrigerator decisions for 1939. Ask this question, "Why did you take on the Leonard line?" Ask about the Leonard way of doing business. And—

Se the 1939 Leonards -



Leonard Travels in Good Company!

E. S. & E. CO., INC Zenith	Thor	Albany, N. Y. Leonard
ELECTRIC APPLIANCE Stromberg-Car	DISTRIBUTORS	Leonard
NUNN ELECTRIC CO. Zenith	Easy	Leonard
RCA	Apex	Leonard
	ABC	Leonard
WATTS-NEWSOME CO Philco	Easy	Leonard
BERTRAM MOTOR SU Gilfillan	PPLY CO	Leonard
Gilfillan J. H. BURKE CO Detrola	ABC	Leonard Mass.
JOSEPH STRAUSS CO. Zenith	Bendix	Leonard
VERMONT HARDWAR RCA-Victor	ABC	Leonard
ESKEW, SMITH & CAI Zenith		
Zenith A. K. SUTTON, INC Philco L. C. WISWELL CO Estate SCHUSTER ELECTRIC RCA-Victor	Easy	Leonard
L. C. WISWELL CO Estate	Easy	Chicago, III.
SCHUSTER ELECTRIC RCA-Victor	Bendix	Cincinnati, Ohio Leonard
ARNOLD WHOLESALE Zenith	ABC	Cleveland, Ohio Leonard
APPLIANCE DISTRIBU Zenith	TING CO ABC	Leonard
Zenith PEASLEE-GAULBERT RCA-Victor, I		
YORK SUPPLY CO	Easy	Leonard
LINN & SCRUGGS	Easy	Leonard
HENDRIE & BOLTHOI RCA	Bendix	Leonard
A. A. SCHNEIDERHAF Zenith	IN CO Easy	Des Moines, Iowa Leonard

BUHL SONS CO. Detroit, Mich. Zenith, Emerson ABC Leonard	
MULLIN FURNITURE CO. Dodge City, Kans. Philco, Emerson Easy Leonard	
DELTA HARDWARE CO	
J. A. WHITE DISTRIBUTING CO Grand Rapids, Mich. Zenith Meadows Leonard	
KNERR, INC. Harrisburg, Pa Zenith Thor Leonard	
UNITED DISTRIBUTING CORPIndianapolis, Ind Motorola ABC Leonard	
FEDERAL DISTRIBUTING CO. Kansas City, Mo Zenith Bendix Leonard	
MAYTAG APPLIANCE CO	•
GRAYBAR ELECTRIC COLos Angeles, Cal Stewart-Warner Meadows Leonard	
STRATTON-TERSTEGGE COLouisville, Ky Stromberg-Carlson, Arvin Thor Leonard	
HARRY T. WILSON CO Memphis, Tenn Majestic Apex Leonard	
MAJOR APPLIANCES, INC. Miami, Florida RCA-Victor Basy Leonard	
TAYLOR ELECTRIC CO Milwaukee, Wisc RCA-Victor Bendix Leonard	
THE ROYCRAFT CO. Minneapolis, Minn Philco Frogil Leonard	
MATHEWS FURNITURE CO	
McWHORTER, WEAVER CO	
Monarch Easy Leonard E. B. LATHAM CO. Newark, N. J Zenith Bendix Leonard	
SHAPIRO SPORTING GOODS CONewburgh, N. Y RCA Quality Leonard	
H. M. TOWER CORP. New Haven, Conn Motorola 1900 Leonard	١.
RADIO SPECIALTY CORPNew Orleans, La Zenith Easy Leonard	١.
E. B. LATHAM CO. New York, N. Y Zenith Thor Leonard	•

PARAMOUNT RADIO SHOP, INCOmaha, Nebr., Majestic Thor Leonard	
PARAMOUNT RADIO SHOP, INC. Omaha, Nebr, Majestic Thor Leonard GLEAVES & SON Paducah, Ky. Majestic Speed Queen Leonard	
COHEN FURNITURE CO Peoria, III. Philco-RCA Leonard	
MOTOR PARTS CO. Philadelphia, Pa.	
GRAYBAR ELECTRIC CO. Phoenix, Ariz, Easy Leonard	
J. A. WILLIAMS CO. Pittsburgh, Pa. Zenith Bendix Leonard	
CRESSEY & ALLEN Portland, Maine RCA-Victor ABC Leonard	
ELECTRICAL DISTRIBUTING, INC	
BALLOU, JOHNSON & NICHOLS CO. Providence, R. 1. Zenith ABC Leonard GRAYBAR ELECTRIC CO. Richmond, Va. Stromberg-Carlson Thor Leonard	
GRAYBAR ELECTRIC CO	
BEAUCAIRE, INC. Rochester, N. Y. Philco Leonard	
GRAYBAR ELECTRIC CO San Francisco, Cal. Stromberg-Carlson Meadows Leonard	
ELECTRIC LAMP & SUPPLY CO St. Louis, Mo. Zenith Thor Leonard	
UNITED ELECTRIC SUPPLY CO Sait Lake City, Utah Motorola Easy Leonard	
HOUSEHOLD APPLIANCE DIST. Scranton, Pa. Emerson Leonard	
Emerson Leonard SEATTLE HARDWARE CO. Seattle, Wash. Zenith ABC Leonard CLOUD BROS. South Bend, Ind.	
Emerson Electromaster Leonard	
MORRIS DISTRIBUTING CO. Syracuse, N. Y. RCA Bendix Leonard	
ELECTRIC RANGE & EQUIP. CO	
SOUTHERN WHOLESALERS, INC Washington, D. C. RCA-Victor ABC Leonard McKELVEY'S	
PERSINGER SUPPLY CO. Williamson, W. Va.	
Zenith Thor Leonard	

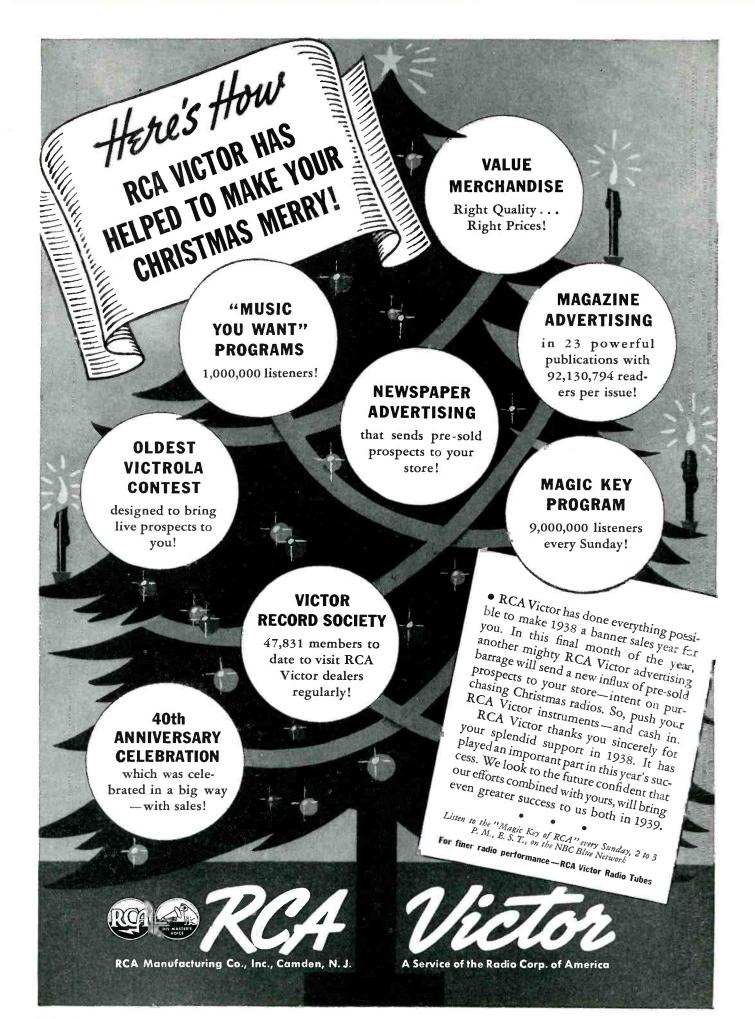


MAKE YOUR PLANS

IF YOU PREFER, MAIL THIS COUPON TO US

LEONARD, L-6-14250 Plymouth Road, Detroit, Mich.

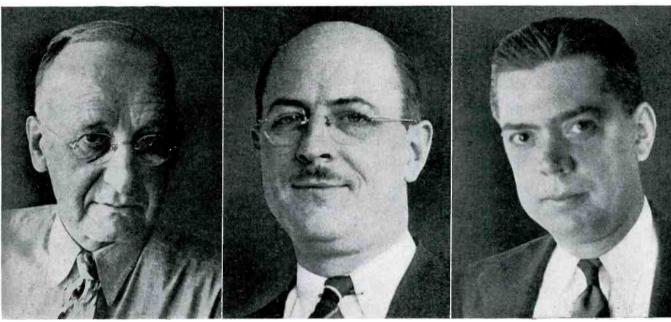
Please send information about 1939 Leonard Electric Refrigerators and your dealer proposition.



MINUTE BIOGRAPHIES

The first the same of the same

Third of a Series... INDIANAPOLIS Set Distributors



ADOLPH WAGNER (Wagner Radio Co.)—Thinks phono-combinations are in for a big year, says scarcity of merchandise is his present headache. Thinks Gaborieau is still the best detective story writer, says won't play golf until too old for anything else. Handles Philco.

GERALD F. HYDE (Griffith Dist. Co.)

This sales manager who has Stewart-Warner sets under his wing comes from LaCrosse, Wisc., is just learning to put kite-shaped wearing apparel on 1½ year old daughter Frances. Hobby is photography.

C. J. KRUSE (United Dist. Co.)—The boys in his office say this Motorola distributor plays golf for exercise, reads for pleasure, is a "doodler" who chews paper to help him think. A Wabash college man, he took over the business at his father's death.

S. C. KAHN (Capital Paper Co.)—His queer merchandise combination, paper and radios, works out well. Collection machinery functions nicely on both and travel dovetails to permit excellent coverage at low cost. Distributes Fairbanks, Morse.

HUGH C. GREEN (Kiefer-Stewart Co.)
—Feeling good is this RCA-Victor department manager who increased record business from \$200 in January to \$5,000 in September. Out of office hours grows roses, pets dog "Jinks," tears off to every available ball game.

PAUL D. CAVE (Specialty Dist. Co.)—Does a job for Crosley throughout the area. Has recently opened a retail department to prove to dealers that Bendix washers really roll with the right kind of specialty effort behind them.

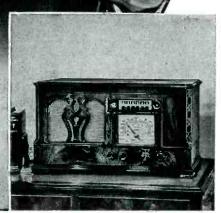


RADIO RETAILING, DECEMBER, 1938

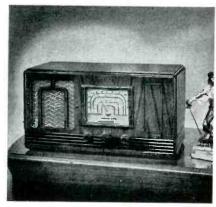




No. 325-H Table Model







No. 310-H AC or 6 volt Battery

There Is Nothing Strom

ACCING BURNESS OF TO STATE OF THE PARTY OF T

The eight reindeer of Saint Nick never brought more joy than these new Stromberg-Carlsons will bring to the heart of a radio dealer. Something to sell—that sells easy. Something to sell that sells at a profit. Something to sell that freshens up your whole store.

A Table Model in authentic Chippendale design—brand new in radio. New authentic Corner Cabinets—one in mahogany, one in walnut—completing the choice of woods in this distinctive style. A new Streamlined Modern Console and two Console Grands that appeal to a wide, new market. And four of these new sets with the Labyrinth—biggest selling feature of them all!



No. 345-X Authentic English 18th Century Console Grand. Labyrinth



No. 340-W Authentic Tudor Corner Cabinet. Labyrinth



No,340-Y Authentic Georgian Corner Cabinet.



No. 350-S Streamlined Modern Console. Labyrinth

2 CORNER CABINETS ONE IN MAHOGANY ONE IN WALNUT

4 MORE AUTHENTIC DESIGNS including a table model

A Streamlined modern CONSOLE WITH HIGH FIDELITY

2 SLANTING PANEL CONSOLE GRANDS



Stromberg-Carlson Telephone Mfg. Co. 228 Carlson Road. Rochester, New York

I am interested in these new models,

l	
ĺ	Name
l	Address

COMMITTEE CHAIRMEN IN IMPORTANT JOINT RADIO CAMPAIGN



BROADCASTER-Neville Miller. president, NAB



MANUFACTURER-James M. Skinner of the RMA

TRADE TO PLAY ACTIVE PART IN RMA-NAB DRIVE

Window display awards may be offered cooperating dealers. Listener competition with merchandise or cash awards also possible

CHICAGO-Proposed as part of the imminent RMA-NAB joint campaign to increase consumer use and appreciation of radio was a nationwide listener competition involving merchandise or cash awards, Radio Retailing learns. Also contemplated is some method of actively linking radio retailers into the promotional effort, possibly by the use of window display awards. Neither activity was definitely okehed but will, it is understood, come in for close scrutiny as possible ways of further strengthening campaign plans al-

ready agreed upon.

Not reported by the daily press following the December 1 meeting of the Radio Manufacturers Association here at the Stevens Hotel, in which delegates of the National Association of Broadcasters secured a definite RMA commitment of cooperation certain to be echoed by the entire NAB board of directors as this issue mails, were the above possible campaign plan amplifications. Nor had it been reported that a 10-man joint RMA-NAB committee has already been formed to work out actual campaign details which may conceivably be completed by February to be placed in effect at a time when both broadcasters and the trade most need such promotional help. Joint committee members representing radio manufacturers include James M. Skinner, H. C. Bonfig, Powel Crosley, Jr., E. F. McDonald, Jr. and A. S. Wells. For the broadcasters, members of the committee are: Neville Miller, H. Bliss MacNaughton, I. R. Lounsberry, E. Klauber and Theo. Streibert.

Basic objective of the joint campaign, similar to one proposed some time ago by the RMA and tabled by the NAB because the latter was at that time going through reorganization, is to aid both groups by making the public more conscious of the entertainment and educational advantages of radio and the importance of not only listening more often but of maintaining equipment capable of doing quality programs full justice. Obvious interest of the broadcaster is to swell the listening audience, improve public relations. Similarly, the radio trade expects to benefit through the sale of additional sets per home, replacement of obsolete receivers and repair of sets now functioning poorly. To this end the RMA has agreed to contribute one-half of whatever sum the joint committee decides is necessary to substantially influence the buying public, a like amount to be contributed by the NAB.

Total appropriation for the important RMA-NAB promotional effort has not yet been decided upon as Radio Retailing mails. Nor has any decision been reached regarding the media to be used in the drive. Certain it is, however, that broadcast time will be the spearhead.

WQXR Sets Seen

NEW YORK-WQXR, high-fidelity broadcasting station, has placed on the market for limited sale a new "WQXR High Fidelity Radio." Designed to render the best possible quality, the receiver tunes from 540 to 1,800 kc., works on a.c. or d.c., is incased in either a walnut or mahogany cabinet approximately 1 yard square by 17 inches deep. Dials and other controls are concealed under a top

lid, space is provided for a record turntable and pickup (available for \$30 or \$35 extra.)

As we go to press an exhibit of the new set is being set up at the station's studios by John V. L. Hogan and R. M. Wilmotte, under whose direction it was designed. Address is 730 Fifth Avenue. Simultaneously, the Ansley Radio Corporation at 128 West 57th Street, actual maker of the unit, opens a showroom exhibit.

The receiver, according to initial announcements, will sell for \$135, including installation and a year's service.

"Remote Control OK"... FCC

Comish adopts proposals heard in September, requires no licenses but warns against interfering designs

WASHINGTON-The Federal Communications Commission adopted November 21 rules relative to the use of wireless remote control devices essentially the same as those proposed early in September and printed in their entirety on page 27 of Radio Retailing for that month.

In essence, the FCC's ruling okehs wireless remote control but says it will treat it just like licensed radio transmitters should emissions carry more than a specified distance (15 microvolt limit at ft $\frac{\lambda}{2\pi}$ from the apparatus) or 157,000 f (kc.) interfere generally with other services. Rulings are left sufficiently flexible so that use of unnecessarily high power radio control devices or other violation of FCC design recommendations could be spiked before doing serious injury to other serv-

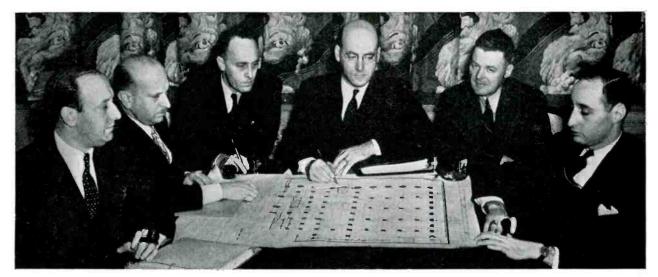
The Commission offers to work with designers of wireless remote control devices to assure interference-free opera-

Amplifier Co. Moves

NEW YORK-The Amplifier Company of America has moved to larger quarters at 17 W. 20th Street.



"SO BIG"-Cloaked in mystery is one set in Continental Radio & Television's new line. All the press has been able to ferret out is that it is "about the size of six detective stories, will be shipped book-fashion to the trade. Entire line is to be in dealers' hands January twentieth



THESE MEN WILL RUN THE JUNE PARTS SHOW—Left to right: Arthur Moss, A. A. Berard, Ken Hathaway, S. N. Shure, H. E. Osmun, K. C. Prince. All are directors of the important exhibit to be held at Chicago's Stevens Hotel June 14 to 17

Parts Show June 14-17

First two days for jobbers. Last two for entire trade

CHICAGO—The board of directors of Radio Parts Manufacturers National Trade Show, Inc., at its annual meeting held here late last month, voted that the 1939 National Radio Parts Trade Show should be held at the Stevens Hotel June 14 to 17 inclusive.

Unanimous approval was given the proposal to designate the first two days, June 14 and 15, as "Jobber Days," during which time only jobbers, manufacturers, manufacturers agents and manufacturers engineers would be admitted to the exhibition hall. On Friday, June 16 and Saturday, June 17, the Show is to be opened to all groups in the radio trade with special emphasis among the exhibitors on manning their booths with technically trained attendants.

Show hours on Jobber Days will be from 10 a.m. to 6 p.m., on Friday the Show will open at 2 p.m. and continue until 11 p.m. and on Saturday it will open at 2 p.m. and continue until 10 p.m.

Elected to succeed themselves in office for the coming year were the following men: S. N. Shure, president; Arthur Moss, secretary-treasurer; A. A. Berard, vice-president and H. E. Osmun, director.

Gale Products Formed

GALESBURG, ILL.—Gale Products is a newly formed division of Outboard, Marine & Manufacturing Company, will take over all refrigeration and air-conditioning activities formerly handled by the Johnson Motors Division. Products heretofore sold under the name "Briggs" will bear the trademark "Gale." A new factory and office just completed alongside the first unit constructed here about a year ago will provide substantial production.

Executive personnel of the new division consists mainly of men long connected

with other divisions of the company and thoroughly coordinated. Included are C. P. Rossberg, manager; L. H. D. Baker, general sales manager; C. A. Thompson, assistant sales manager; J. E. Armes, advertising and sales promotion; J. F. Furry, George Lindgren, Bill Walters, Chuck Geske, Harold Bourdon and Don Tharp.

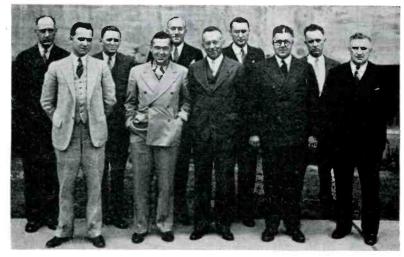
Four Big Shows Next Month

House furnishing men to find electrical appliances, radio much in evidence

CHICAGO—The bleak January sun, which finds buyers with the load of Christmas off their minds, will rise on four trade shows here this year. New arrival is the House Furnishing Manufacturers Association, which will show at the Palmer House, January 8 to 14.

Records kept by the oldest of the Chicago shows, the American Furniture Mart, reveals that a surge of 15,000 merchandisers now annually stream into the Windy City each year, a trade migration that equals anything Leipsig or any old world town has to offer. Style trends will be especially observable at the Furniture Mart, whose doors will be open from January 19 to 21, and will feature a Kitchen Clinic and a design show. At the Merchandise Mart, same dates, the 14th floor will be full of electrical equipment and the lamp displays will be especially complete.

From January 8 to 14 at the Stevens Hotel is held the 12th Annual Exhibit of the National House Furnishing Manufacturers Association. With it will be given the first home laundry equipment display in Exhibition Hall, sponsored by the American Washer and Ironer Manufacturers Association.



RCA EXECS VISIT INDIANAPOLIS—Visiting the RCA Manufacturing Company's Indianapolis plant late last month, left to right, front row: Vance C. Woodcox, Thomas F. Joyce, F. H. Corregan, Lewis M. Clement and Robert Shannon. Rear: N. A. Mears, F. R. Deakins, H. C. Bonfig, Eugene W. Ritter and J. M. Smith, vice president in charge of the plant

TRADE GIVES TELEVISION TOPIC THOROUGH AIRING

Manufacturer now marketing televisors outlines plans. Radio makers say "ready when there are satisfactory programs," tell dealers television will supplement rather than supplant sound broadcasting. Milwaukee may "loan" public televisors.

NEW YORK-In the news this month are numerous happenings and statements which may logically be grouped and mentally appended to Radio Retailing's November "Report On Television."

Growing among the trade and rapidly counterbalancing early hysteria is a practical conclusion that, while television publicity may conceivably dent radio sales initially, no mass buyer's holdback is likely to last long in the face of intelligent radio selling since even those manufacturers to whom television will eventually be a major activity are willing to be quoted that television will supplement rather than supplant sound broadcasting. Greater appreciation among hitherto radio-minded men of the fact that while television cannot be talked into the background commercial and even technical hurdles prevent it from starting a national stampede overnight indicates a similar willingness to be broadminded on the other side of the fence. Thus two industries heretofore considered by some to be "lion and lamb" take the first steps toward a mutual bed in the established radio store and, lo, it becomes increasingly apparent that they are, rather, two branches of the same home entertainment

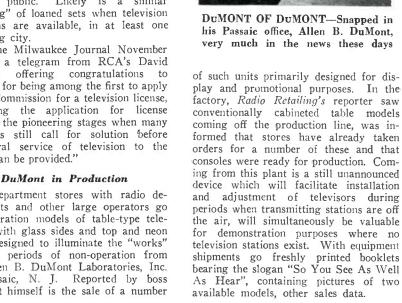
Milwaukee Queries FCC

In Milwaukee Harry C. Eldred of the Milwaukee Journal, owner of WTMJ and

awaiting FCC permission to transmit television programs, announces that a department is being set up to handle transmissions of both studio talent and film. The station would distribute at its own expense to strategically located homes 50 television receivers of various types so that practical field tests might be made. Several public places will also get televisors which may be seen by the general public. Likely is a similar 'planting" of loaned sets when television programs are available, in at least one other big city.

To the Milwaukee Journal November 9 went a telegram from RCA's David Sarnoff, offering congratulations to WTMJ for being among the first to apply to the Commission for a television license, approving the application for license "during the pioneering stages when many problems still call for solution before a general service of television to the public can be provided."

To department stores with radio departments and other large operators go demonstration models of table-type televisors with glass sides and top and neon lights designed to illuminate the "works" even in periods of non-operation from the Allen B. DuMont Laboratories, Inc. of Passaic, N. J. Reported by boss DuMont himself is the sale of a number



McCanne Suggests "Converters"

From Stromberg-Carlson's Lee Mc-Canne to dealers November 17 went a letter which, in essence, said that television would supplement rather than supplant radio, that two company models would tune in television soundtracks in the ultra-high frequency ranges and that all Stromberg-Carlson receivers could be used with suitable converters to receive such soundtracks and would, because of their inherent quality of reproduction, be ideal for this purpose. Ownership of a really good radio now, according to Mc-Canne, would reduce the television purchase later. He further stated as his opinion that it would probably take years for television to serve the entire nation,

Galvin in the Ring

Another open letter to the radio trade went November 30 from P. V. Galvin of the Galvin Manufacturing Corporation to 20,000 Motorola dealers and distributors. In the covering letter to Radio Retailing from Victor A. Irvine, Mr. Irvine stated: "We have no quarrel with those who are promoting television and believe that it is now time for home television set distribution. But we do feel that a publication such as yours should help to clarify the situation as to the limita-



NOT TO BE CAUGHT NAPPING-To Europe on the Statendam went General Electric's radio division manager E. H. Vogel (third from left) last month. He will study television, discuss its commercial applications in several foreign countries in which it is already marketed. "Seer-offers," left to right: D. W. "Winnie" May, P. F. Hadlock, Mr. Vogel, A. A. Brandt, Tom Erwin and J. F. Bahn. Simultaneously from G-E comes the announcement that the firm will arrange to have the public participate in as well as see television programs at its New York World's Fair 1939 exhibit





"STUBBY" TUBES — Admiring new "Stubby" cathode ray tubes which permit large screens for the image without great length from back to front of the housing cabinet (RR news-note page 28, September) are National Union's F. M. Paret, A. Harcher, Marshall P. Wilder and F. Jinks

tions of television in the minds of your readers."

Mr. Galvin's open letter advised that Motorola's engineering department was carrying on experiments and is keeping fully abreast of all television developments both here and abroad, that the firm would market television when a satisfactory transmission service was achieved. Mr. Galvin pointed out that television standards had not yet been adopted by the FCC, that the ultra-high frequency transmissions would provide a 50-mile service limit, that expansion of the art commercially required heavy investments everywhere for transmitting stations and programs, that televisors would initially be much more expensive than sound receivers, that chain service was unlikely for some time. These points have repeatedly been reported in detail by Radio Retailing. (See "Television Retailing in England", November 1937; "Two Statements on Television," December 1937; "Report on Television," November 1938 and numerous editorials and news items throughout the past year.)

Philco Statement

Still another statement not available for Radio Retailing's November report went in late November to Philco dealers and distributors from the Philadelphia plant, advising that Philco had already proven through its extensively publicized television experiments that it would not be caught napping commercially. In a press release Carlton L. Dyer, manager of Philco Radio and Television Corp. of Great Britain, where television has been sold commercially for more than two years, stated: "The current stir in the United States over television seems to me like much ado about nothing." Dyer indicated a belief that, while television definitely can become a great industry

in the future, overemphasis at the start would prove to be a tremendous financial, industrial and artistic dissappointment. He predicted, however, a much more rapid rise for television in the United States than in England because of its handling by individual enterprise. He also, like most men making statements this month, insisted that television would supplement rather than supplant sound broadcasts

Simons With Rowe

CHICAGO—Robert Simons has joined the staff of the Rowe Radio Research Laboratory Company, will handle DuMont, Deutschmann and Rowe Robot Motor lines in the area.



Do you know how easy it is to keep your shop up to the minute with latest high efficiency test equipment...the

NATIONAL UNION WAY?

HERE'S WHAT YOU DO:



- 2. Sign a National Union tube and/or condenser purchasing agreement.
- Place a small deposit which will be refunded to you as a merchandise credit when your purchasing agreement is completed.
- Order a small quantity of National Union tubes and/or condensers at the time you sign the agreement.
- Apply your regular monthly purchases of tubes and condensers against the requirements of the contract.

Come On! Build Customer Confidence with NATIONAL UNION TUBES and CONDENSERS!

For name of nearest Distributor write-

NATIONAL UNION RADIO CORP'N Newark, N. J.

RR-12 38



EXTENSION TELEVISOR—What an extension speaker is to radio American Television Corporation's "kinet" may be to television. Portable, adjustable, equipped with its own cathode-ray tube and magnifying lens, the pictured accessory works from the output of a television receiver elsewhere in the home

Andrea In Television

WOODSIDE, N. Y.—From Frank A. D. Andrea of the Andrea Radio Corporation comes word that three complete televisors and one kit are shortly to be placed on the market. A table model televisor will, according to Mr. Andrea, sell for about \$200, a console using the same 9-inch cathode-ray tube for \$275 and a combination televisor, radio and automatic phonograph for just under \$600. The kit, including all components for both sight and sound, with a 5-inch cathode ray tube, will go on sale for \$125.

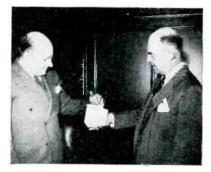
More New RSA Chapters

CHICAGO—The RSA has affiliated during the past several weeks the Lehigh Valley Radio Service Association of Allentown, Pa., under the direction of T. W. Reichard, J. A. Muthart, H. H. Fillman; the Hartford Institute of Radio Technicians, under the direction of Gerald Miller, James H. Smith, Jr., Kenneth G. Anderson; a Washington, D. C., chapter under the direction of J. B. Austin, Jr., Pat Hendrican and Bill Carrick.

The Association, beginning shortly after the first of the year, is to sponsor in conjunction with the regular meetings of all its local chapters business meetings during which individual members may have the benefit of business and advertising advice. RSA will use as a textbook for these meetings a publication secured through courtesy of the magazine Radio Retailing.

Leonard Ups Jeffrey

DETROIT—Walter Jeffrey, with the Leonard refrigerator division of Nash-Kelvinator for the past nine years, has been upped to position of assistant general sales manager of this division. For the past few months he has been acting director of advertising and sales promotion for Kelvinator.



"LIKE THIS"—Stewart-Warner's John F. Ditzell (left) receives a model of the company's newly announced electric range from president J. E. Otis. The real thing is already in production

Philco In Refrigeration

Subsidiary to manufacture Conservador line

PHILADELPHIA—Starting with 1939 a subsidiary of the Philadelphia Storage Battery Company will manufacture and Phlico Radio & Television Corporation will sell a new line of Conservador refrigerators.

Contracts for distribution, according to Larry E. Gubb, will be separate and distinct from contracts for distribution of Philco radios. In some cases the distributors and their territories may be the same. In most cases they will probably be different. The policy will be to give equal consideration to applications for distributorships from former Conservador distributors, Philco radio distributors and, in some cases, from distributors who have not sold either in the past.

School For Salesmen

DETROIT — Announced during Nash-Kelvinator Corporation's recent convention of distributors was a "National Salesman's Institute," a new type of sales training school designed to improve technique not only in the sale of Kelvinator products but in others.

Launched at the convention was the "Silver Jubilee Year of Refrigeration," celebrating Kelvinator's 25th anniversary in the field

New Solar C.E.

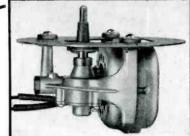
NEW YORK—Solar Mfg. Corp. of this city and Bayonne, N. J., announces the advancement of J. I. Cornell to the position of chief engineer, recently vacated by the resignation of N. Schnoll. Cornell came to Solar as consulting and field engineer early in 1938, having previously been a chief engineer and director of the Magnavox Company.



CHARLOTTE'S SHAW—Charley Golenpaul of Aerovox (left) drops in on J. R. Ledbetter, Fred Eastep and Robert Thompson of Charlotte, N.C.'s Shaw Distributing

NEW Constant Speed Model CX Motor for Portables

Model CX. An 8". 9"
10" or 12" turntable, not shown, is supplied.



YOU'LL sell more portable and table-model phonographs with this new-design, light-weight constant speed General Industries motor.

Self-starting induction type. Quickly develops full required speed. Fan cooled. Silent, helical-cut gears and bearings in sealed oil chamber. Patented drive gives turntable (not shown) positive insulation between the turntable and motor.

Order a sample of Model CX for testing. Be sure to state frequency of current you use, and size of turntable.

The GENERAL INDUSTRIES CO.

3837 Taylor Street

Elyria, Ohio

Janette Rotary Converters



For Converting D.C. to A.C.

Built for radio and sound apparatus -capacities 110 to 3250 volt amperes —with or without all wave filters. Dynamotor construction-economical to operate-ruggedly built for years of trouble-free service-used or recommended by the largest manufacturers of radio and sound apparatus—in use all over the world.

Why Experiment-Insist on a Janette

Ask for Bulletin 13-25

Janette Manufacturing Company 556-558 West Monroe Street Chicago, Ill. U.S.A.

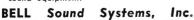
PUBLIC ADDRESS SYSTEMS

A leader in dependability and quality! Sizes and types for every installation, permanent or temporary, Easily serviced, as they are made of standard parts. Exceptional tone fidelity. Easily operated! Modern in appearance! Whenever or wherever sound amplification is required, think of

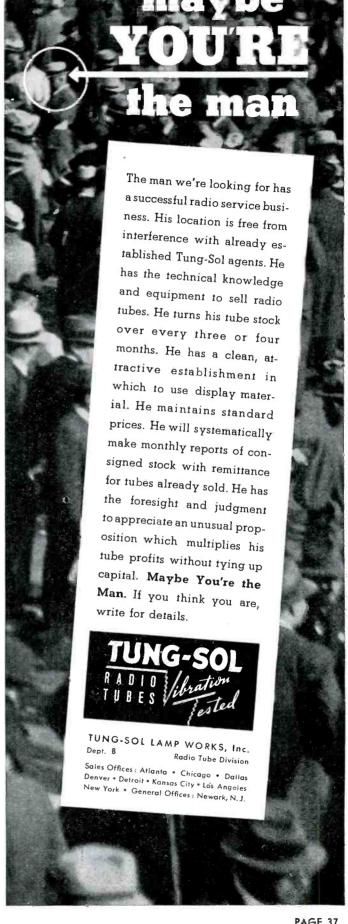


Belfone INTER-OFFICE SYSTEM

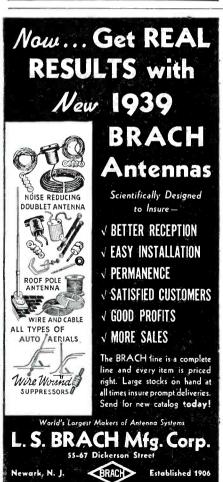
Permits conversation between departments by merely pressing a key and talking!
Any number of stations can be combined.
Operates off regular line current. Write
for details on this modern business essentlal, and on BELL'S complete line of
sound equipment.



1185 Essex Avenue Columbus, Ohio., U.S.A. Export Office: 308 W. Washington St. Chicago, Illinois, U.S.A.









STROMBERG-CARLSON DEALERS BANQUET—Dealers hearing sales drive plans at the Denver Athletic Club. One of several meetings in the Rocky Mountain area recently, including the cities of Casper and Cheynne, Wyo., Colorado Springs and Pueblo, Colo. and Albuquerque, N. M.

Sonora In New Plant

Appoints new production superintendent. Gerl, Fetterman travelling schedules heavy

CHICAGO—Close upon the heels of important announcements concerning the acquisition of Ferguson Radio & Television Corp. of New York and the physical assets of the Clinton Mfg. Co. of Chicago Joe Gerl, president of Sonora Radio & Television Corp. of this city announces removal of Sonora manufacturing activities to a new and expanded radio factory. Located virtually in the center of Chicago, the new plant is in a modern six-story structure, has its own railroad siding.

Simultaneously with the announcement of the move comes word that James G. Oldfield has been made production superintendent of the new plant. He has in the past been associated with such firms as Detrola, General Household Utilities, Crosley and Majestic.

Traveling on a heavy schedule following attendance at the IRE's Rochester Convention is chief engineer Don Fetterman, keeping abreast of current radio and television developments. Also riding the Pullmans is president Joe Gerl, who, following supervision of construction at

the new Chicago plant, left for the East to negotiate still another program of major importance to the company but to date undisclosed to the press.

C-D and Standard Cooperate

SOUTH PLAINFIELD, N. J.-Announcement has been made by Octave Blake, Jr., president of Cornell-Dubilier Electric Corp., and H. M. Pease, vicepresident of International Standard Electric Corp., 67 Broad St., New York, of an agreement reached between their respective companies. Under the terms of the contract the assistance of the engineering, manufacturing and commercial divisions of Cornell-Dubilier for the production and sale of electric capacitors becomes available to the International Standard Electric through its following manufacturing companies
Le Materiel Telephonique, affiliated abroad: France; Bell Telephone Mfg. Co., Switzerland; Standard Telephone and Radio A. G., Switzerland and the Bell Telephone Mfg. Co. of Belgium.

Several engineers from the companies abroad are at present visiting Cornell-Dubilier's plant here and C-D engineers will visit Standard factories in Europe in an advisory capacity in the near future.



300 EAT—Here's the heavy turnout that resulted when Denver's Harry Moll invited dealers in his territory to see the new Majestic set line

Sideline Interest High

Survey points to good market among radio dealers for electrical appliances, cameras, other merchandise

NEW YORK—Among 579 typical radio dealers subscribers located in virtually every State during the last two weeks of November Radio Retailing's editors conducted a survey to determine what additional products these dealers sold, or intended to sell shortly. 94.3 per cent were found already merchandising electrical appliances and other allied products or about to stock such lines. The remaining 5.7 per cent handled radio only.

The following tabulation shows at a glance what appliances are handled, or will shortly be handled by the retailers contacted:

Product	% Selling (
Electric refrigerators	90.11%
Washing machines	87.
Electric ranges	66.85
Electric razors	60.99
Gas ranges	
Oil-burning heaters	43.77
Room coolers	29.85
Camprag	21 98



"MAC" BACK IN PARTS GAME— Eddie Riedel (right) of Raytheon and the Sales Managers Club congratulates McMurdo Silver upon his return to the amateur kit and parts game. "Mac" has just joined Edwin I. Guthman & Company, at present making a concerted drive in the field through sales representatives, amateur and parts jobbers



TWO MEN, ONE PACK—Water Bauman (left) sales manager and Paul H. Tartak, new president of the Ariston Manufacturing Co. and Laboratories, Chicago. Paul continues as head of Oxford-Tartak

Needles, Bluebirds, Tubes

RCA active on all three products

CAMDEN—Featuring Victor and Bluebird records and the newly developed RCA Victor coin phonograph needle, one of the most comprehensive displays ever devised by RCA Victor will be exhibited at the eleventh annual Coin Machine Show to be held December 12-15 at the Stevens Hotel, Chicago, under the auspices of the National Association of Coin-Operated Machine Manufacturers. In addition to the display, the firm will have a suite of rooms at the hotel for the convenience of visitors. Standard Phono Company, which handles distribution of RCA Victor's foreign records, will have an adjoining suite.

Inclusion of the 35-cent Bluebird record repertoire in the Victor Record Society plan has just been announced by Edward Wallerstein, manager of RCA Victor's recording and record sales. Members of the society can now choose from the firm's complete series of recordings in making their personal selections of records under the plan.

Four new types of radio receiving tubes which are being used as initial equipment in many new radios have just been made available to RCA tube dealers and servicemen for replacement sales,

in the RCA Radiotron, Cunningham and RCA Victor brands. All are single-ended metal tubes with interlead shielding. Types are: 6SF5, 6SJ7, 6SK7 and 6SQ7.

Philco In New Movie

PHILADELPHIA—From Philco Radio & Television Corp. comes word that a Philco "Mystery Control" set will appear in the forthcoming movie starring Constance Bennett and Roland Young, entitled "Topper Takes a Trip." Ernest B. Loveman, Philco's advertising manager, is devising ways and means of tieing in with the picture following its release.

Rider Addresses RSA

NEW YORK—To the Metropolitan New York Chapter of RSA, of which A. E. Rhine is secretary, John F. Rider of Service Instruments, Inc. demonstrated his "Chanalyst" instrument at the Hotel Capitol December 12. Several instruments were on hand so that attending radio service engineers, radio repairmen, amateurs, experimenters and service students could instantly grasp the many different functions of the instrument.



BELL-LESS BELFRY—Up on top of Rangertone's building at Newark Major R. H. Ranger has installed a speaker. When his new chime records are played downstairs in the office the neighborhood is flooded with sweet music



Sentinel Radio Corporation · Dept. RR · 2222 Diversey Pkwy., Chicago

Prevue of New

R C A VICTOR



R C A Manufacturing Co. Camden, N. J.

MODEL 96X-11 — One of a series of eight molded plastic table model radios. Four of the series are available in four colors with electric tuning while others are in similar cabinets without electric tuning. Five tube, a.c.-d.c., domestic and foreign short wave reception. Model illustrated in walnut \$19.95

GE

RADIOGRANDE -Model G-76 cabinet is styled with Eighteenth Century classic feeling. Eight station touch tuning, oscillator stabilization circuit, cathoderay tuning indicator, multi-vision louver dial, 12 in. speaker, visual 4-point tone fidelity control, automatic band indicator, manual tuning, automatic volume control and automatic tone compensation.

General Electric Company Bridgeport, Conn.



DuMONT



Allen B. DuMont Labs., Inc. 2 Main Ave., Passaic, N. J.

TELEVISION RECEIVER — Simply operated table receiver with 8 x 10 in. black and white screen image. Six operating controls for both sound and video make adjustment comparatively simple. Twenty-one tubes include the cathode ray tube, 8 in. dynamic speaker for sound. List \$395 complete with tubes but without antenna. Console model, list \$445.

LITTLE NIPPER SERIES, named in honor of the Victor Dog are 5-tube a.c.-d.c. superhet miniature radios housed in moulded plastic and wooden, cabinets. Receive standard broadcasts, have illuminated dial, electro-dynamic speaker, built-in antenna.



DETROLA



Detrola Corp. 1501 Beard Ave., Detroit, Mich.

COMBINATION — Model 258PC — Radio Phonograph — 7 tube a.c. with automatic tuning, continuous tone control, 8 in. electric dynamic speaker, self-starting induction motor, tone and volume controls same on phono and radio, latest type crystal pickup. Slightly inclined dial, top raises to show phonograph turntable. List \$79.50.

EMERSON

MODEL BW-231 — Six tube a.c. superhet with Miracle Tone Chamber and Miracle Dial. Covers American, foreign, police bands. Automatic volume control, 61/2 in. dynamic speaker, tone control, dynamic-coupled power output. List \$39.95.

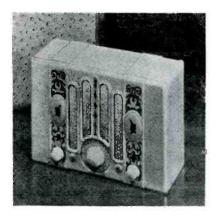


Emerson Radio and Phonograph Co. III Eighth Ave., New York, N. Y.

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Radio Merchandise

KADETTE



International Radio Corp. Ann Arbor, Mich.

TRAVEL SET-Model K-150 in walnut and Model K-151 in ivory Plaskon is a 5-tube a.c.d.c. superhet with electro - dynamic speaker, tone control, broadcast range of 535 to 1625 kc. Has 20 foot antenna, 2-position tone control, wave trap. List

PHILCO

MODEL 31XF-Electric push-button tuning for eight stations, 6 tubes, inclined control panel, balanced field cathedral speaker. Broadcast bands cover standard, foreign and American shortwave, state police and day amateur broadcasts. List \$69.95

Philoo Radio and Television Corp. Philadelphia, Pa.

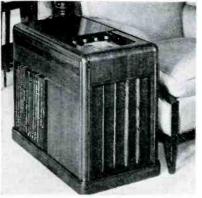


MAGNAVOX

COMBINATION -Radio-phono. Chairside model covers tuning range from 540 to 18,000 kc. Tone control, electric-eye tuning, automatic volume control, illuminated dial, 12 in. double cone high fidelity speaker. Phono has crystal pick-up, selfstarting constant speed motor, automatic stop and automatic tone compensating volume control.



Electro-Acoustic Products Co. Fort Wayne, Ind.



Ansley Radio Corp. 240 W. 23rd St., New York, N. Y.



model line of superhets selling from \$9.95 up, employs new loktal tubes. Cabinets are plastic in brown, ivory and brown and amber. Model TP-51 is a 5-tube superhet with push button tuning to 5 stations and manual tuning. Ivory Bakelite, covers standard broadcasts, state, local and municipal police calls.

TRANSITONE - A 5

ANSLEY



COVENTRY - The 18th Century cabinet in a variety of woods will contain any Ansley console, Dynaphone or combination, single record or the R-2 automatic record-changer. Controls and speaker behind right door, record cabinet behind the left.

DECCA

RECORD PLAYER-De Luxe player handles 10 or 12 in, records with the top closed. Constant speed motor, automatic stop and start feature, hand rubbed walnut cabinet. List a.c. \$27.50.



PREVUE OF NEW RADIO MERCHANDISE

SHELVADOR

REFRIGERATOR -Model LL5-65 has a net food storage capacity 6.5 cu. ft. and total shelf area of 13.98 sq. ft., 112 cubes at one freezing. Eighteen point temperature control, patented Shelvador feature, two position sliding shelf, porcelain enamel food compartment with acid resisting bottom, fast freeze compartment, drawer type vegetable crisper.





DETROLA

Detrola Corp. 1501 Beard Ave., Detroit, Mich.



ELECTRIC SHAVER—Hollow-ground chromium plated shaving head takes care of long as well as short hair, retaining channels eliminate scattering of cut hair, can be cleaned without removing shaving head. Constant high speed self-starting motor, simple construction, no radio interference. List \$7.50.

PERMO

Permo Products Corp. Chicago, III.

PHONOGRAPH
NEEDLE—Two Permo
Round needles mounted
on "Speed Checker"
card make an effective
and noticeable merchandising package, retail
for \$1.00. Patented
construction makes it
possible to play over
1000 records without
needle change, it is
claimed. Speed Checker
card aids in testing
turntable speed



CONSOLIDATED WIRE

Consolidated Wire Corporations 512 S. Peoria St., Chicago, III.



ANTENNA SYSTEM—
Especially effective in a partment buildings and hotels is the All-Wave Multiple Antenna System which accommodates I to 25 receivers from one aerial. Universal receiver coupler for each set assures equal distribution of energy from the antenna.

AVNET—A trim-mast aerial by Charles Avnet Co., New York, mounts easily on roof, wall, pole or window. Rustproof and non-directional, it is available with all-wave noise reduction transformer.

AMERICAN PHENOLIC—American Phenolic Corporation, Chicago, offers an 8-position, single pole switch for impedance matching, universal power transformers, circuit selection on oscilloscopes and similar applications. Base is molded bakelite, contacts brass, switch arm phosphor bronze. All electrically charged metal shielded by snap-on cover. Side set screw locks switch in any position. List 75c.

KENYON—Kenyon Transformer Co., New York, introduces a magnetic focusing yoke, Type T-701, for use with short neck type television tubes. The d.c. resistance is 1000 ohms, current for magnetomotive force of 500 ampere turns is 70 ma. and maximum current is 85 ma. Magnetic circuit is designed to concentrate a flux pattern of proper shape in the neck of the tube to focus the electron stream.

CLAROSTAT—Much the same in general appearance to usual midget potentiometer is the rotary type power switch operating on a 30 degree arc which Clarostat Manufacturing Co., Brooklyn, is making for the radio trade. Switch is available in S.P.S.T., D.P.S.T., S.P.D.T., S.P. with bushing terminal, S.P. reverse operation and 4-wire S.T. Rated at I amp. 250 v., 3 amp. 125 v., and 10 amp. 12 v.

GORDON—Of interest to radio amateurs is the new Gordon heavy duty r.f. relay for antenna change-over, multi-band transmitter tank switching and 60 cycle power switching. Handles 1 k.w or more, 3/8 in. silver contacts self-cleaning wiping action, double pole double throw. List \$15.00. Gordon Specialties Co., Chicago.

IRC—Three new types of precision wire wound resistors by International Resistance Company, Philadelphia employ an ingenious method for bringing both terminals out at one end. Base is designed so that resistance wire is returned internally through ceramic, yet completely insulated. IRC precision resistor line now comprises fourteen units, sizes, shapes and in both inductive and non-inductive types.

RANGERTONE—Rangertone, Inc. of Newark, N. J. is building up a library of stranght chime recordings with echo and extra resonance properly controlled for best reproduction. Material used is harder and more durable than usual pressings. Record 530 features Christmas songs. The Tower Tone, a special unit for church installations, incorporates latest playback facilities with sturdy turntable motor and speed regulation.

RALSTON—Three double-sided 10 in, records and an instruction book are offered by the Ralston Record Company of Philadelphia as a practical and inexpensive method for amateurs to learn the code. When played properly, the student hears the transmissions in the same tone and under virtually the same conditions which prevail in actual radio code work. Records are divided into parts, or lessons, clearly marked. A simple learn-by-ear method.

RIDER—A revised 64-page section, "How It Works" of Rider's Manual, Vol. IX, explains mechanical features and anticipates growing importance of mechanical knowledge in servicing automatic frequency control, electric tuning and newly incorporated technical features in the 1938-39 receivers. The 1650 pages contain service data on 1938-39 American made receivers, information on electronic musical instruments, etc., \$10.00.

UNIVERSAL—An automatic titler for use with a movie camera produced by Universal Camera Corporation, New York, is capable of setting up three rows of letters of twelve characters each. Small wheels, each operating a continuous ribbon of 42 characters (alphabet and numbers from 0 to 9 and punctuation marks) give white letters on black background. \$3.95.

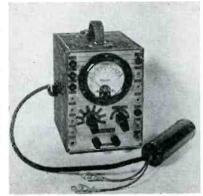
WARD-LEONARD—A new cover for midget type relays is announced by Ward Leonard Electric Company, Mount Vernon, New York. Available where relays with molded base are mounted on a panel. Covers are of modern design and are held in place by "snap on" fit to the base. Provide protection against dirt and damage to relay.

PREVUE OF NEW RADIO MERCHANDISE

PHILCO

Philco Radio and Television Corp. Philadelphia, Pa.

TESTER—Model 028 vacuum tube volt meter and circuit tester, which, in addition to being a complete circuit tester with necessary a.c.-d.c. voltage, milliampere, ampere, resistor and capacity ranges gives service as an efficient vacuum tube voltmeter. List \$55.00.



STROMBERG-CARLSON—A new mahogany corner cabinet model 340-Y in authentic Georgian design which will retail at \$132.50 f.o.b. Rochester, N. Y., has been added to Stromberg-Carlson's corner cabinet line in which models are now offered in maple and walnut.

TOKFONE, JR.—An inexpensive two-way communication system made by Regal Amplifier Mfg. Corp., New York, for use between any two remote points in office, factory or home. Master station, remote station. Master station has talk-listen, off-volume controls. List \$26.95.

WESTON—Model 763 ohmmeter has ranges from 0.2 ohms up to 300 megohms and is designed for use where resistance measurement requirements call for extremely broad coverage plus constancy in operation. Requires only 50 microamperes for full scale deflection. Measures leakage on all types of condensers, even those with resistances of approximately 300 megohms. Operates from 60 cycles a.c.

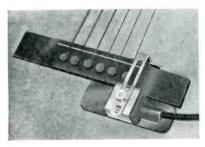
PRECISION—A tube tester, push-button operated by Precision Apparatus Co., Brooklyn, N. Y., incorporates ballast test facilities. Designed to emphasize tube selling appeal in addition to usual Precision engineering and construction features, it features large 9 in. meter and chromium reflector which lights up the meter.

WARD PRODUCTS—Aerial made by Ward Products Company of Cleveland, Ohio, mounts vertically to any suitable surface such as soil pipe, cornice or window frame. Mast made of nickel-plated bronze tubing, four sections, 12 feet in height.

WINCHARGER—A 6-volt heavy duty unit generator is said to increase current output nearly 100% over previous 6-volt wind-electric machines, has a top output of 25 amperes, starts charging at wind velocity of 6 mi. per hour. Wincharger Corp., Sioux City.

AMPERITE

Amperite Corp. 561 Broadway, New York, N. Y.



MODEL SKH contact unit for home radio sets is suitable also for concert work. Actually a high output contact mike which can be connected to any stringed instrument. Uses standard receiver as amplifier and reproducer. High or low impedance. \$12.00 list.



110 VOLTS AC ANYWHERE!

With KATOLIGHT. Furnish standard 60-cycle AC for operating sound truck equipment, AC radios, transmitters, flood lights, motors, moving picture projectors, etc.



A complete line of light and power plants ranging up to 10,000 watts capacity. Also 6, 12 and 32 volt battery charging plants, Diesel plants, rotary converters, and frequency changers.

List prices \$50.00 and up.

Kato Engineering Company
MANKATO, MINN., U.S.A.

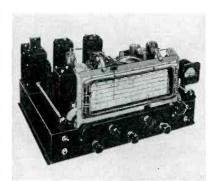


MEISSNER

COMMUNICA-TIONS RECEIVER—"Traffic Master" Model 10-1115, 14 tube, 5-band, receiver in kit form. All parts supplied, including tuning-unit, dial, coils, sockets, condensers, resistors, power transformer, filter choke, controls, knobs, tuning meter. Frequency range 530 kc. to 32.4 mc., 5-band pre-aligned tuning unit, full avc operation, 8.5 watts output

BOGEN

Meissner Manufacturing Co. Mt. Carmel, III.



David Bogen Co., Inc. 663 Broadway, New York, N. Y.



AMPLIFIER — Seventy watt DX70 Binaural model. Electronic tone correction, twin 35 watt output channels, four microphone and two phonograph inputs. Provision for 2 channel remote control operation. With dual circuit design auditory perspective is achieved. Obtainable in low impedance inputs if specified.

WEBSTER-CHICAGO

Webster Company 5623 Bloomingdale Ave., Chicago, III.

INTERCOMMUNI-CATOR—System 305-7 provides for five speakers with amplifier developed up to 7 watts. Amplifier utilizes four standard radio tubes, equipped with pilot light, master control and volume control switch. Possible to talk or listen to any one or all five speakers at once.



SERGE

Connecticut Telephone and Electric Corp. Meriden, Conn.



INTERCOMMUNICATOR — Master instrument may be connected with two or more other stations. A person may talk with any one or all stations at the same time. "Call" and "talk" button control. Station selector knob is available for multiple station systems. Portable,

AUDAX

Audak Company 500 Fifth Avenue, New York, N. Y.



PICKUP—Model AT-12, a low priced pickup that is designed to approximate compensated microdyne performance for records up to 12 in. Smart, streamlined offset head, response to over 6000 cycles, new needle guide, new nonresonant arm, precision ball-bearings, 200-500 ohms or high impedance.

THORDARSON

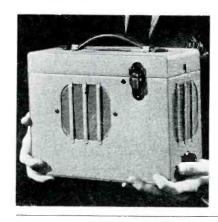
TRANSMITTER KIT---A
100 watt "multi-band"
transmitter kit. Instantaneous band switching
for any three preselected amateur bands,
100 watts input on all
bands from 10 to 160
meters, power supply
r.f. section on one chassis, provision for either
CW or phone operation. The r.f. lineup
has 6L6 oscillator, 6L6
Buffer Doubler and TZ40 final; 6L6 modulator
unit has own power supply on single chassis.

Thordarson Electric Mfg. Co. 500 W. Huron St., Chicago, III.



Operadio Manufacturing Co. St. Charles, III.

OPERADIO



PORTABLE P. A. UNIT—The entire unit, weighing 15 pounds is enclosed in gray metal carrying case. Consists of amplifier with output of 5 watts, 2 speakers and microphone with 25 feet of cord. Designed for use at Bingo games, concessions, small gatherings, etc.

R C A VICTOR

PORTABLE SET—Completely self-powered, encased in a sturdy cabinet covered with airplane luggage cloth, it is suited for home, vacation, travel or outing use. Employs low-drain tubes for long battery life. Measures 8 in, high, 14 in. long, 81/4 in. deep. List \$29.95 fob less bat-

teries.





HYGRADE'S GRAHAM — Re-elected to serve a second term on the I.R.E.'s board of directors is *Virgil M. Graham*, Hygrade-Sylvania's tube application chief

Reps Announce Meeting Dates

NEW YORK—From "The Representatives" of radio parts manufacturers, active national group, comes the following schedule of meetings to be held in the Fifth Avenue Tavern, 4 West 40th Street, New York: December 13. January 10, February 14. March 14, April 11, May 9 and June 13.



SUPREME'S NEW C.E.—E. G. Perkins, Supreme Instruments' new chief engineer, has been in the engineering department for three years. "Perk" was a member of Tau Beta Pi and Kappa Mu Epsilon fraternities while obtaining his B.S. degree in electrical engineering at college. Claims he majored in baseball and football!

RASU Moves

MILWAUKEE—The Retail Appliance Salesmen's Union has moved its offices from the Metropolitan Block to Room 300, third floor, at 734 North Third Street. New 'phone number is Marq. 6880.

2 NEW PROFIT OPPORTUNITIES for Radio Merchants, Sound Equipment Specialists, and Radio Service Organizations.

1. TOWER-TONE — A number of desirable territories open for reliable representation for the sales, installation and servicing of the famous Rangertone Amplified, Electric Chimes.

Large unit sale—a virgin market—attractive profit possibilities for aggresive, reliable organizations. Send for details.

2. CHIME RECORDS—Electrical transcriptions of the famous Rangertone Chimes. For homes, churches, institutions, etc.—12 inch, durable, long-life recordings (not acetate)—excellent tonality—very low surface—will also help promote amplifier sales—one or two sides—five minutes each—78 R.P.M.

Our custom recording division will make chime records to order of special music to your specifications—quality guaranteed—prices reasonable.

Standard library of chime records being added to regularly.

For quick Christmas profits — our double 12 inch chime records of Xmas Carols—record numbers 528, 529, and 530. List \$4.00 each—prompt deliveries. See our advertisement on page 32—November issue of Radio Retailing.

Write for details.

RANGERTONE, INC. ELECTRIC-MUSIC

201 Verona Ave. Newark, N. J.

YOUR LAST CHANCE!

* DUES WILL BE INCREASED JANUARY 1, 1939

★ \$1.00 of 1938 dues will be credited on 1939 dues if you join before Jan. 1, 1939

1

MAIL THIS COUPON:

RADIO SERVICEMEN OF AMERICA, INC.

304 South Dearborn St., Chicago, III.

Gentlemen:
I hereby make application for membership in the Radio Servicemen of America.

Name
Home Address
City
Firm Name
Address
Address
I am enclosing \$2.00 National Yearly Dues. (Nominal Local Chapter not included.)

RSA has pioneered and established these benefits for you. Join now—so you can get them:

★ Membership in the only Independent Servicemen's Organization in the industry. ★ Advanced Service Courses for Members. ★ Technical advice and assistance for members asking it. ★ Recognition by and representation in the entire servicing business. ★ RSA is as important to you as your job or your business. Don't wait—send your application in today!

THE BEST \$2.00 YOU EVER INVESTED.

RADIO RETAILING, DECEMBER, 1938

RADIO SERVICEMEN OF AMERICA, INC.

JOE MARTY, Jr., Executive Sec'y.

304 S. Dearborn St., Chicago.

FIX IT ON YOUR BENCH - Says E. F. Staunton

YOU can't do a good job without good tools and you can't fix a radio in the home with the few tools you can carry in a car and be certain of doing a good job.

All I carry into the home on a service call is a screwdriver, pliers and combination tube and set analyzer. If the tubes are all right but the set doesn't perk, I check each socket for the normal voltages and plate, screen and cathode current. A circuit diagram isn't necessary as I have enough knowledge of the general principles of all circuits to reason out tube functions.

This checkup is just to get a line on the trouble. If I can positively identify it I can give the customer an estimate, otherwise, I tell him frankly that I have to use the instruments at my shop to find the trouble and I'll 'phone him the estimate before going ahead with the repair. My card carries a good picture of my test bench and it impresses the customer with the facilities which will be used to repair his radio.

Bringing the set into the shop gives me a chance to do a real job. Not one set in a dozen is lined up right after having been in service several months. Furthermore, by pulling the set, I can make more calls in daylight and have the evenings free for the tough repair jobs. If I stayed with each set, cluttering up the house with tools and instruments, dropping solder on the carpet and then failed to do a good job, I couldn't make a living out of service work.

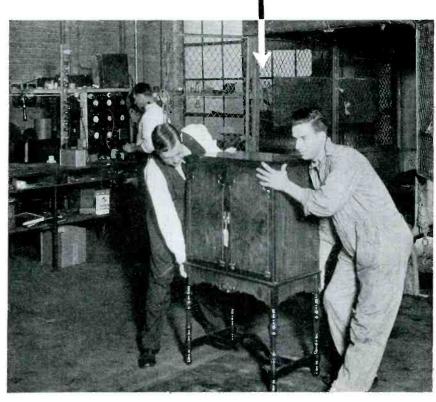
As it is, I bring everything back to the shop, take my time about fixing it without the owner on hand to make wise cracks or ask dumb questions. I charge a price that nets me about \$2.00 an hour except on the tough ones where I know the trade will only stand about so much. I charge the extra time up to my cost of education, because I learn enough on the tough job, to know what to do on the next one like it. On shop service, I can get full list price for the parts I use whereas if the customer saw

me putting a 30c. list resistor in his set, he'd expect to be billed 6c. for it, the same as resistors are quoted in radio catalogs he receives. (Yea bo, and do those catalogs circulate in my town!)

I used to leave sets in the customer's house while fixing his old set in the hope of selling a new job, but that's out because it creates too much suspicion that you are more interested in sales than in service. If a customer wants a set while I'm fixing his old one, I offer to rent him a midget set for 50c. I've got just as good a chance to sell it as if I left it for nothing and it's 50c. more on the final bill. You'd he surprised how quick a little set pays for itself and begins to earn a profit at 50c. per rental.

Another advantage of bringing the set in for repair is that I get to spend

SHOP vs.



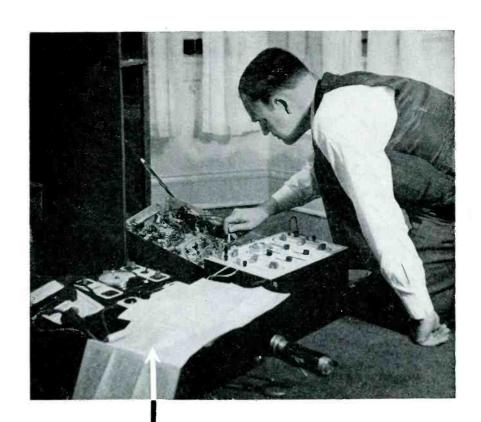
more time in my shop. While my helper can handle store trade and answer the 'phone, he is not so hot on actual service. Besides, I'm developing a fair auto-radio service business and you know how that is-a customer can only spare his car a few hours, during which you must be on the job and have his set fixed by the time he calls back for it. Taking a tip from the shoe store clerk who takes off your shoe and prevents you from leaving while he finishes up with the other customers, I always have my assistant take the auto radio sets out of the car while I'm away and make a stab at fixing them. If he can't get the set working right after testing the tubes, he calls me in when I 'phone to pick up any new calls. Meanwhile the customer can't get away without our fixing the set unless he will put it back himself.

Maybe you think I'm running a racket, but I give the customers good service and I've got three kids that eat regularly. They'd go hungry if I fooled around with each set trying to fix it in the customer's home.

FIX IT IN THE FIELD - Says Charles Phillips

HERE I can do a good service job in the customer's home without taking the chassis to my shop, I do it. And I make a good living at it. It is honest and convincing service. The customer is not without the use of his radio for more than the time it takes me to fix it. And I save the time of a double trip, the danger of jarring the set out of alignment when bringing it back from the shop, and I earn the confidence of my customer. If, at a later date, I have to bring the chassis to my lab, my customer is convinced that the trouble is serious and he is in a mood to pay the higher cost, which includes my time both ways at \$1.50 an hour.

Home radio service requires good portable instruments. I take only a tube tester and a multirange meter into the house when called to repair a radio. After a preliminary look to see if there is any obvious trouble and a few questions to determine the customer's exact complaint, I usually test the tubes and check the d.c. voltages either with a wafer socket



HOME Service

adapter or at the speaker field, if it is easy to reach.

If only a simple fault is evident, such as an open resistor, a burned or open condenser, bad contacts or speaker rattle, I ask the customer if he will permit me to bring the rest of my equipment in from the car and make immediate repairs, or if he wishes me to take the set to my shop. The usual answer is to fix it on the spot. What if a few papers do have to be spread on the floor-it is not unusual for a doctor to perform a minor operation in the home, and at the worst a radio serviceman will not make any worse muss than a plumber.

On my second trip to my car, I bring in a signal generator, a small oscillograph-frequency wobbler, my soldering iron and stand, and if I suspect a defective resistor or condenser, I bring in a small kit of uni-

versal spares consisting of a wide assortment of resistors and condensers. The first thing I do with the soldering iron is to unsolder one of the voice-coil leads and hang a small variable resistor across the output transformer leads to provide a suitable load and to eliminate the noise of the oscillator. If I have located the trouble in a resistor or condenser, I replace the defective part, otherwise I go through the set methodically with the signal generator and the oscillograph until the exact trouble is located. If possible, I repair the trouble, then continue with the oscillograph until every stage is functioning right.

During my examination of the radio, the customer doesn't hear a sound. If he watches me, and I enjoy having an interested customer, he is properly impressed with the oscillograph patterns and is made to

realize that radio has changed since he built his B-T Nameless set back in 1927.

Once in a while—and it is very rare, I find a set with a bad i.f. transformer, or a burned out power transformer, or a broken range selector switch. These cases leave no alternative. The chassis must come into the shop and an equal or duplicate part must be installed. On other occasions with sets that have poor tone, I sell the customer on the idea of installing a tone compensating volume control or a better speaker. These jobs are logical service bench problems and my fees are commensurate with the time consumed and the parts supplied.

If the job can be completed in his home, I present my bill and go on to the next call, satisfied that I have earned an honest fee and rendered good service.

Servicing Wireless Remote Controls

By C. A. Nuebling

FIG. 1. Schematic of the "Tunemaster." Energy couples to the controlled receiver by means of the electromagnetic field set up by L1

JUST when many servicemen were beginning to get familiar with new tube types, a.f.c. action, and push button tuning; what should pop up from behind the woodpile but wireless control devices. Unnoticed by many at first, wireless control became popular in the intercommunicator field. From there it attracted set manufacturers' attention, so that today it is a new nut for the serviceman to crack. It's part of your business to know what makes 'em tick, and what to do when they don't tick.

A novel remote control recently introduced is the "Tunemaster" by Kadette (Fig. 1). With this unit it is possible to select any 4 stations automatically, or any station manually, and control volume from any convenient point in a home. It consists of a 6K8 detector-oscillator, a 6K7 first i.f., 6B8 second, i.f. and avc., and a 25Z5 rectifier. Fundamentally the unit is a converter with two i.f. stages and a.v.c. The i.f. frequency generated is in the neighborhood of 1550 kc.

Energy transfer takes place from a tuned circuit in the plate of the 6B8.

This consists of a large coil or loop which sets up a magnetic field coupling the Tunemaster to the receiver to be controlled. Thus with the receiver tuned to 1550 kc. and the wireless control in operation, the net result is a double superhet. The Tunemaster serves as a first mixer stage inductively coupled to the rest of the circuit.

Installation of this unit is quite conventional. Place the Tunemaster in the desired location within convenient listening distance of the radio. Plug the power cord of the Tunemaster into an a.c. outlet and stretch out the antenna to full length. An outside antenna may be connected with somewhat improved signal pickup. Place the radio in operation and turn the volume well up. Then with the Tunemaster turned on, warmed up and tuned to one end of the band so that no signals are received. tune the radio set in the vicinity of 1550 to 1570 kc. until a slight hiss is heard. Tune the set carefully to resonance with this hiss and note the dial setting.

Next, tune the Tunemaster to an average station and turn the volume up

full. Then reduce volume at the receiver to customary listening volume. Volume may then be controlled at the Tunemaster. This procedure will keep static and undesirable noises at minimum.

For quietest operation, disconnect any long outside antenna from the receiver and use an indoor type 10 to 20 feet long. If the indoor antenna can be stretched in the direction of the Tunemaster, an increase in performance will be noted. This is particularly desirable in noisy locations.

To realign the circuits of the Tunemaster, should it be necessary, place it near a standard broadcast receiver accurately tuned to 1570 kc. with a signal generator. Connect an output meter to the voice coil of the receiver.

Feed a 1570 kc. modulated signal from a signal generator directly to the antenna of the Tunemaster. Adjust both i.f. trimmers to maximum reading on the output meter. Then adjust the output coil trimmer C1 to maximum.

For r.f. trimmer adjustment set the Tunemaster dial at 1500 and feed a

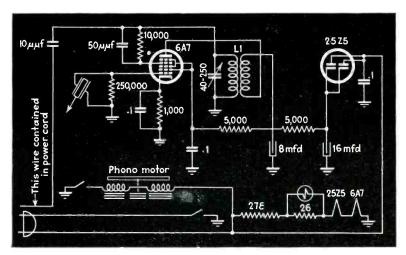


FIG. 2. Typical wireless record player. R. F. radiation takes place from the wire contained in the power cord.

1500 kc. signal from a signal generator to the antenna input. Set the antenna trinmer approximately \(^1\) turn from tight. Peak the oscillator trimmer at 1500 kc. Then set the dial at 600 kc. and peak the series oscillator trimmer. Rock the dial and trimmer simultaneously by small amounts to get maximum output at 600 kc. Tune back to 1500 kc. and again peak oscillator trimmer. Repeat the process again at 600 kc. Then set the dial at 1400 kc. and tune the signal generator to resonance with Tunemaster. Under these conditions, peak the antenna trimmer.

Wireless Record Players

Record players which operate through a standard radio with no direct connection are another phase of wireless systems. Comprising an oscillator which generates a signal in the broadcast band, a pickup and phono-motor plus a small power supply, these units are extremely popular. Schematic of a typical player is shown in Fig. 2 (Wilcox-Gay).

Most wireless record players operate between 550 kc. and 700 kc. To install such a unit, tune the receiver to a clear channel somewhere within the limits recommended by the record-player maker. With the record player in operation, tune the oscillator trimmer of the R.P. until the recording is heard. Carefully adjust this trimmer so that it is exactly in resonance with the receiver. Usually no further adjustment is necessary.

Sometimes static and other noises will be present in the receiver. This may be due to an extremely noisy location or insufficient output from the oscillator. In either case the remedy is the same. Attach a short length of wire to the radiation lead of the R.P. or ground this lead to the BX shielding. This tends to increase radiation. Where such procedure does not improve conditions sufficiently, it is recommended that a wire is run from the radiation

lead of the R.P. to the radio. Twist this lead around the insulated antenna lead; do not make direct connection between the two wires as this would normally overload the receiver. On record players where there is no radiation lead, merely bring the wire into the immediate vicinity of the R.P. or ground it to the case.

"Radio Nurse"

In Fig. 3 is illustrated the Radio Nurse by Zenith. Composed of two units, the transmitter unit contains a condenser type microphone, speech amplifier, and modulator-oscillator circuit. The signal generated by the oscillator is conducted by the lighting circuit and intercepted by the second unit, the receiver. This consists of a detector, audio amplifier and speaker. The operation frequency is around 300 kc.

The Radio Nurse is not intended to be used as an intercommunicator since its high sensitivity would cause serious distortion if attempt is made to speak loudly into the transmitter unit. Therefore, for testing purposes, speak only at room volume at a distance of several feet from the transmitter.

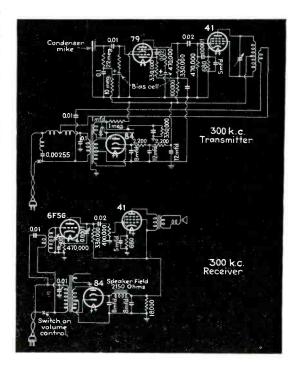
If it is suspected that the tuning has drifted on either of the units, it may easily be corrected by adjusting the trimmer on the left side of the transmitter. This is best accomplished by placing a watch on the transmitter unit. Then with the receiver unit nearby, reduce volume on the receiver to a point just below feedback howl. Adjust the trimmer for maximum volume of the watch tick. The trimmers have

FIG. 3. Another type of wireless device, the Radio Nurse. Power line conduction is used to transfer energy from transmitter to receiver. a tuning range from 250 to 450 kc. If interference from another Radio Nurse is encountered, shift the frequency of either pair of units slightly.

In cases where the electric service to the home or apartment is of the 3 wire, 220 volt type and the transmitter is used on one 110 volt circuit and the receiver on the other, it is sometimes necessary to employ a bridging condenser across the outside 220 volt leads. A special condenser has been developed for this service which contains a 2.5 volt fuse for protection from breakdown. Normally a 1 mfd. 600 volt condenser in series with a similar fuse is sufficient to bypass the line. Do not connect a condenser alone across the line.

When the Radio Nurse is operated in commercial areas, it may lack sensitivity due to heavy light or power loads, high line capacities or heavily by-passed or filtered wiring commonly used to reduce line disturbances. These conditions would tend to shunt any r.f. in the line and prevent proper energy transfer. In certain installations of the above type, it may be found impossible to improve the power line characteristics. In these cases an isolated power line must be used. This can be done by placing an r.f. choke in each lead from the wall outlet and running the 110 volt leads from the chokes to both transmitter and receiver. These chokes may be obtained from the manufacturer.

Due to the type circuit and rectification system employed in a.c.-d.c. receivers, they often cause a loud hum to be present in power line wireless devices. This can be overcome by connecting a standard filter at the socket to the receiver. Such a filter is also



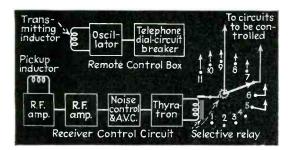


FIG. 4. Block diagram showing circuit operation of the Mystery Control. Inductive coupling between the transmitting inductor and the pickup inductor is the connecting medium.

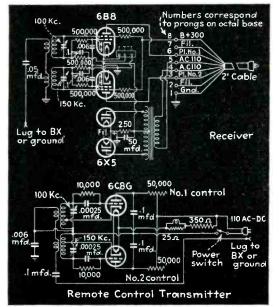


FIG. 5. Wireless remote control as applied to a sound system. Gain may be controlled on two channels.

available from the manufacturer. Soldering and curling irons cause similar interference which may be cured in the same way.

Mystery Control

The remote tuning system of Fig. 4 (Philco) makes use of a 355 to 395 kc. oscillator as a completely self contained unit. In the control box along with the 30 type oscillator is a telephone type dial, 3 volt filament battery and 45 volt plate battery. An inductor or loop in the plate circuit of the oscillator serves to set up a magnetic field in the immediate vicinity. This couples energy to a similar secondary inductance in the receiver and may be likened to the primary and secondary of a trans-

No plate or filament current flows to the oscillator until the telephone dial is moved past the first position. Thus, when the dial is operated, movement of the dial contacts to any desired position

lights the tube. On releasing the dial, plate voltage is applied intermittently by the dial contacts, therefore the signal generated is in the form of a definite number of pulses.

Turning to the receiver control circuits, oscillator pulses are induced in the pickup inductor, amplified and applied to the thyratron type control tube. This is a gas tube having the property of handling large plate currents after an initial small grid voltage ionizes the gas. The r.f. pulses from the remote oscillator now become d.c. pulses operating a selector type relay. Thus for a given number of pulses from the oscillator, the selector relay switches to a corresponding position. From here the tuning may be likened to a push button system operated by a 12 contact switch. There are three gangs in this switch. One gang switches the oscillator circuit, the second the antenna trimmers, the third handles the pilot lights, indicating the station dialed. A secondary selector and ratchet system controls volumes by actuating a motor on the volume control.

The noise control circuit between the r.f. amplifiers and thyratron prevents noise pulses from operating the selector relay.

Maximum control distance of the system is said to be approximately 75 feet due to the inductive coupling system. Therefore it is recommended that the receiver be located in the center of the home so that the limiting radius of 75 feet will provide satisfactory control from any point within the home.

Remote Volume Control

"Riding gain" on a sound installation is often an inconvenient job at best. The wireless remote system (Fig. 5, Bogen) allows the operator to stay in the audience and "ride gain" at the same time. Described in R.R. Nov. it consists of a dual channel system comprising 100 kc. and 150 kc. oscillators. The output of each oscillator is made variable by a 50,000 ohm potentiometer in their plate circuits. Each oscillator controls a separate audio channel.

Oscillator output couples to the power line; the r.f. traveling through the BX shielding and ground. This energy is rectified at the receiver located with the amplifier. The rectified voltage then controls a d.c. pentode amplifier which in turn limits the plate voltage and likewise the gain on the second audio stage in the amplifier.

Service and installation problems of this instrument would be similar to the Radio Nurse. However, line loading in the case of the R.N. would not affect this system since the actual power line

wiring is not used.

Intercommunicators

There are many types of wireless intercommunicators, all of which so far use power line conduction for the r.f. connecting medium. A typical unit is illustrated in Fig. 6.

Some models use both legs of the power line to carry r.f. Others use one leg of the line and the BX shield-Still others use the BX shielding and ground. Service hints as outlined in the Radio Nurse paragraphs would apply to the first two types of conduction mentioned. When the BX shielding and ground are used as a connector, it is important that there is good contact between all BX. If two separate BX circuits are found, bond them together. This applies to cases where a.c. and d.c. circuits are common.

Noises picked up by these devices must be filtered at the offending unit, it is impossible to filter noise at the intercommunicator since this would also bypass the r.f. signal.

(Ed. Note: Other Wireless Control Servicing Data will follow in early issues.)

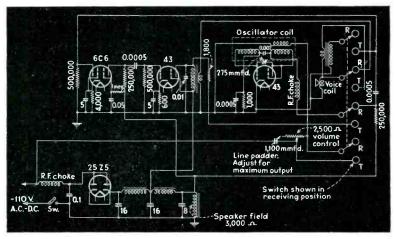


FIG. 6. Typical wireless type intercommunicator. lated r.f. travels through power line to the receiver unit.



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Please send "PINCOR"	me literature, price sheets and other information about the Ne GOLD CROWN and BLUE DIAMOND Power Plants.	w
Name		٠.,



New SUPREME MODEL 503 TUBE **TESTER**

Again Supreme is first with a new roll chart tube tester which includes a LOCTAL socket and a new obsolescence proof, push button type "double floating" Filament Return selector system. You don't have to worry about Loctal adapters or changes in new tubes filament reminations with this tester. Any filament termination combination is right at your finger tips with a Supreme 503 Push Button tube tester, most obsolescence proof tester on the market.

The Supreme 503 uses an improved Balanced Ratio Load Circuit which not only correctly tests all new Loctal tubes types 1231, 7A7, 7A8, 7Y4 and other Loctal base tubes as announced regardless of filament termination, and correctly checks the new single ended octal tubes such as the 6Sk7, 6SQ7, etc., all regular octal and non-octal tubes including the new 1.4-volt filaments, "M". "G", "MG", "G"", "Jain glass and spray shield types, "BR", "BH" (0/3, 0/24, etc., gas rectifiers, all Magic Eye types, Pilot lamps and Ballast tubes in only six sockets. You cannot use the wrong socket.

Tubes are given the new Supreme 7-way test for (1) check by

lamps and Ballast tubes in only six sockets. You cannot use the wrong socket.

Tubes are given the new Supreme 7-way test for (1) shorts between any two elements, (2) positive visual check for open filaments, (3) standard sensitivity "hot" leakage check between any two anode elements, or between any anode element and filament or cathode, (5) open test of any elements, (6) all element quality test and (7) separate section tests of multi-section tubes and separate plate tests of full wave recitiers. Bad tubes are eliminated with clockwork regularity by using this most complete tube test. The new Supreme 503 tube tester uses a fast acting, non-jamming, easily removable, rotary, two color chart mounted at a central point directly underneath the panel which has been marked with plainly understood "arroways" leading from each chart number to its correspondingly functional switch. A twist of the wrist gives you the desired tube type setting in large, easily-read figures. No separate chart or booklet to use. Set the controls from left to right. No jumping back and forth over the panel. Insert the tube and you're all set for short, leakage, open or quality test of any receiving tube type. Fastest tube tester on the market, and so easy to use that its operation is self-evident.

Ample space is provided on the chart for new listings and chart is easily replaceable. New, unique arrangement of leakage and quality push-button gang switch. When making leakage test, each button pressed releases previous button. When making quality test, each button pressed releases previous button. When making quality test, each button pressed releases in the panel and proving clip push button switches use heavily plated contacts and self-cleaning wiper blades insuring long life and elimination of switching troubles.

All quality tests are made at proper rated load for highest accuracy and separate less and loads are need to be a few and and a service of the service of

and self-cleaning wiper blades insuring long life and elimination of switching troubles.

All quality tests are made at proper rated load for highest accuracy and separate test voltages and loads are used for various classes of tubes. Uses big, 4" square, highly accurate I mit movement with a long scale, dead beat pointer, solid forged magnet and real jewel bearings. The 503 has an insulated universal top cap which is permanently connected—no separate lead to lose. The big, over-sized tapped primary, line adjusting transformer accurately matches line supply to tube tester over a wide variation in line voltages. The beautiful black mat finish and aluminum trim panel with red and ivory fittings matches any service bench perfectly, is durable and was specially designed not to cause eve strain from reflected lights, so noticeable with shiny panel instruments. Mounted in a substantial oak carrying case with slip hinged cover, with an oversize strong leather carrying handle, it has a real professional appearance which will instill instant confidence by customers in your work. Full instructions and supplementary booklet supplied. The Supreme model 50% will not pass tubes which will not operate properly in a radio and thus it will soon pay for itself in greatly increased tube sales. See this remarkable instrument at your jobber's TODAY!

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January Statistical and Sales Planning Issue

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CONTENTS JANUARY ISSUE

(All Types)

1938 SALES DATA ON PARTS, ACCESSORIES, TESTERS, SOUND, ELECTRICAL APPLIANCES, ETC.
SATURATION OF RADIO MARKET
WIRED HOME DATA
MISCELLANEOUS MARKET & SALES
DATA
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RADIO RETAILING

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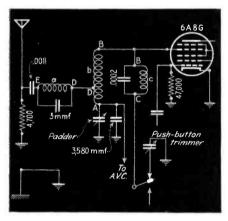
Antenna Trap Circuit

Since many modern superhets, especially pushbutton types do not use preselector stages, image response and code interference become an important factor. In Stewart-Warner's 910–82 Chassis a triple tuned circuit solves this difficulty.

The primary of the antenna system consists of the antenna proper in series with a .0011 mfd condenser, coil and condenser combination between points E and D, the section of coil "b" between points D and A and the padder and 3580 mmf condensers to ground. The 4700 ohm resistor shunts directly across this antenna primary, its purpose will be described later.

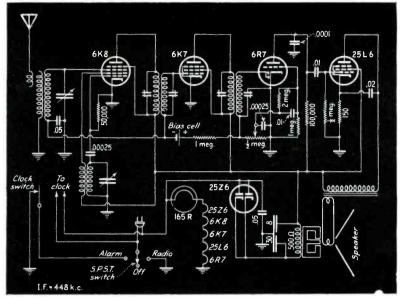
The secondary circuit comprises the padder and 3580 mmf condenser which are in series with the coil and condenser combination between points B and C and the pushbutton trimmer which tunes this circuit to resonance with the incoming signal.

Reduction of image response is accomplished with the aid of coil "c". This section acts as a wave trap reso-



nated 930 kc. higher than the signal. It is a part of the series resonant circuit made up of coil "c" and the push-button trimmer. This circuit is approximately resonant to image signals at all times and effectively reduces images caused by code or police stations operating on the high frequency end of the broadcast band. The .0002 mfd condenser serves to keep this circuit in track.

For reduction of 465 code signals the trap circuit is composed of section DA of coil "b" which is in series with the padder and 3580 mmf condensers. Coil section DA is inductively coupled to the BD section and is part of the trap. The padder condenser should be adjusted for minimum output with a 465 signal fed at the antenna. At minimum output the voltage developed across coil section AB will be balanced out by the voltage developed across the padder and 3580 mfd combination since the voltage across the condenser is 180 degrees out of phase with the voltage across the



Radio Alarm—Schematic of Kadettes Autime receiver. Built-in electric clock turns radio on or off when desired. Set operates for 1½ hours from present time, clock runs continuously.

coil. Thus, very little of this voltage is developed between the grid of the 6A8G and ground.

The "a" section of the coil between E and D when considered in series with section DA and the padder and 3580 mmf condensers has a resonant peak at 600 kc. This increases gain at the low frequency end of the band. The 3 mmf condenser across coil "a" serves to reduce images in the neighborhood of 2.5 mc.

The 4700 ohm resistor across the primary tends to make the overall sensitively more uniform and eliminates detuning effects in the secondary when different type antennas are used.

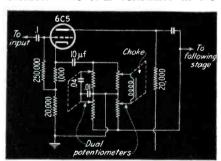
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Since tone compensation is desirable in most sound installations many systems have been devised. Among the most interesting is the circuit shown herewith taken from one of Thordarson's amplifiers.

Degenerative Tone Control

Operation of the circuit is based on degeneration in the cathode circuit of the 6C5. Audio voltage develops

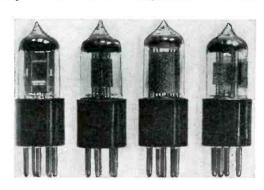
across the 20,000 ohm bias resistor. Since this voltage is opposite in phase and in series with the voltage impressed on the grid, degeneration takes place and amplification is decreased. The total resistance in the



cathode circuit is greater than the 20,000 ohm plate load resistor, hence greater voltage will be developed across the cathode circuit.

As this circuit is resistive, little or no frequency discrimination is present and all frequencies are degenerated equal. If the cathode resistance is shunted by an inductance of the proper value, the resistance at low frequencies is practically shorted out due to the low impedance of the choke at these frequencies. Therefore

Bantam Jr.—New miniature tubes by Hytron measure 15/g inches high and 9/16 inch in diameter; illustrated exact size. Available in triode, input pentode, or output pentode types with or without bases. Filament-characteristics are 1.4 volts at 70 milliamperes.





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Metal-to-metal, sliding contact between rotor arm and end terminal is "out." Noise hasn't a chance. The IRC Silent Spiral (positive contact) Connector sees to that.



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Instead of a single "rough-riding" contact to element, five separate spring-like contacts give a cushioned "knee-action" effect. Contactor acts independently; each tracks smoothly in perfect unison; each is plated, rounded, smoothed to avoid abrasion and wear.



SMOOTH S GLASS...

The ideal surface for noise-free contact is supplied by the famous IRC Metallized type resistance element permanently bonded to a moisture-proof bakelite base. You can actually feel the difference as the 5-Finger Knee Action Contactor is restant. tor is rotated across this element.

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degeneration at low frequencies is eliminated and the greater part of the signal develops across the 20,000 ohm plate load resistor. Thus since no degeneration is present at low frequencies there is more low frequency output. Likewise if a condenser of the proper value is shunted across the cathode resistor, the low impedance of the cathode resistor at high frequencies reduces the impedance of the circuit to high frequencies and high frequency response is thus increased.

The purpose of the two dual potentiometers is to permit the inductance or capacitance to be inserted gradually into the circuit to get a continuous tone control effect.

Direct Coupled Output Circuit

The use of 6AC5G output tubes in Emersons model BS-227 forms the basis for a novel power output circuit.

Referring to the diagram, the 615 at the upper left serves as a direct coupled driver for the upper 6AC5G's. Bias for the 6AC5G is obtained from the voltage drop in the cathode resistor of the 615 driver. Thus the voltage drop in this resistor is used to bias both amplifiers.

The action of the lower right 6J5 is similar. The grid of this tube is fed from the lower left 6J5 amplifier. The purpose of this tube is to reverse the phase of the signal; so that the audio on the grid of the lower driver is 180 degrees out of phase with the upper driver grid.

A losser network is incorporated between the grid circuit of the phase inverter and the first audio stage. This maintains the correct gain of the phase inverter so that the voltage on the grids of each side of the output stage is equal. It also acts as a decoupling network between the phase inverter and the other stages.

Inexpensive Time Switch

For turning electrical appliances on or off at a predetermined time the simple switch shown herewith has been patented recently. Working in conjunction with any wind-up alarm clock, to install it is only necessary to remove the alarm winding key and screw on the plastic case of the switch. When the alarm goes off the switch begins to rotate clockwise.

Inclosed in the switch is a small glass tube with two wire contacts protruding through the glass. Inside the tube is a small pool of mercury. If the right end of the switch is tilted down, the mercury runs to the



right end of the tube and shorts contacts AB, closing the circuit.

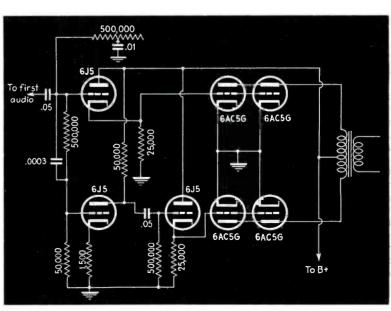
In actual operation, when installed on a clock, the turning of the alarm key shaft tilts the switch as outlined above. The switch cannot revolve completely because of the stop arm which hits the surface on which the clock is resting. In this position the mercury would cover the wire contacts and close the circuit.

It can also be used to turn a circuit off by loading in the "on" position with the stop at rest on the left side of the switch.

1.4 Volt Air Cell

In conjunction with the recent development of 1.4 volt tubes, Everyready has introduced a 1.4 volt Air Cell.

Similar in construction to the familiar 2 volt battery the new unit consists of only one cell, whereas the older type contained 2 cells in series.





"LOKTAL" TUBES IN USE—Compactness is achieved in this typical chassis through the use of the new glass types (all glass except for metal base shield) by Philco

New Tubes

6SA7—Single-ended metal pentagrid converter by RCA designed for all wave operation. May also be used as a separately excited mixer. Characteristics as a converter with self-excitation are:

Heater Voltage	6.3	6.3	volts
Heater Current	.3	.3	amp.
Plate Voltage	100		volts
Grids 2 and 4 Volt-			
age	100	100	volts
Grid 3 (control)			
Voltage	0	0	volts
Shell and Grid 5	U	v	.0160
Voltage	0	0	volts
Grid 1 Resistor	20,000	20,000	
Plate Resistance	.5	.8	meg.
Conversion Trans-			
conductance	425	450	mmhos
Plate Current	3.2	3.4	ma
Grids 2 and 4 Cur-			
rent	8	Q.	ma
	9		
Grid 1 Current	.5	G.	ma

6SC7—Single-ended twin triode amplifier by RCA intended primarily for phase-inverter service. Characteristics for each triode unit are:

Heater Voltage	6.3	6.3 volts
Heater Current	.3	.3 amp.
Plate Voltage	90	300 volts
Plate Load	.25	.25 meg.
Grid Resistor on Fol-		ŭ
lowing Stage	.5	.5 meg.
Cathode Resistor	3750	1675 ohms
Blocking Condenser		.006 uf.

VR150-30—A cold cathode glow discharge tube by RCA intended as a voltage regulator in applications where a constant d.c. output voltage of approximately 150 volts is required with varying values of d.c. current. It may also be used, like other glow discharge tubes as a relaxation oscillator or for spark-over protection. Characteristics are:

Starting Voltage						,	,							volts
Operating Voltage														volts
Operating Current														ma.
Operating Current	((n	11	n	٠,) ,			•				5	ma.

VR105-30—A cold cathode glow discharge tube similar to the VR150-30 with lower operating potentials. Characteristics are:

Starting Voltage	137 volts
Operating Voltage	105 volts
Operating Current (max.)	30 ma.
Operating Current (min.)	5 ma.



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and thus determine exactly where the signal dies—fades—becomes distorted or takes on hum. This method is not only faster—it eliminates guesswork. Testimonials by competent servicemen attest to these facts! But—don't take their word for it—don't take our word for it—get a demonstration from your jobber today—see for yourself! Plan now to save hundreds of hours in the coming year with a Rider Chanalyst!







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Try this Electro A-B eliminator on your own demonstration sets. See how easy it is to use — how it eliminates A and B battery costs and gives safe, efficient, ample service ALL the time.

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Address	
City	
Jobber's Name	

RK62. A special gas filled triode by Raytheon designed to act as a sensitive detector-thyratron. When used in a high frequency super-regenerative circuit it has sufficient power to operate a sensitive relay in its plate circuit with a plate voltage of 45 volts. It already has found many uses in the control of model airplanes. Characteristics are:

Filament Volts	1.4 volts
Filament Current	.05 amp.
Plate Voltage	45 volts
Plate Current (no signal) 1 to	1.5 ma.
Plate Current (max. signal) 1 t	o .5 ma.
Relay Resistance 5000 to 10.0	ohms

6P5G. An amplifier or detector triode by Sylvania with electrical characteristics identical to the 76; equipped with octal base. Class A characteristics are:

Heater Voltage	6.3	6.3	volts
Heater Current	.3	.3	amp.
Plate Voltage	100	250	volts
Grid Voltage	5	-13.5	volts
Plate Current	2.5		
Plate Resistance1	2000	9500	ohms
Mutual Conductance	1150	1450	umhos
Amplification Factor	13.5	13.8	

813—A new transmitting beam power amplifier by RCA. Has extremely high sensitivity and is capable of 260 watts output up to 30 mc. Special large 7 prong base; Class C Telegraphy Characteristics are:

Filament Voltage Filament Current	10 5	10 volts 5 amps
Input Capacity	16.3	16.3 uuf
Output Capacity	14	14 unf
Grid to Plate Capacity	.2	.2 uuf
Plate Voltage	1250	2000 volts
Screen Voltage	300	400 volts
Grid Voltage	-60	-90 volts
Plate Current	180	180 ma.
Screen Current	23	15 ma.
Grid Current	7	3 ma.
Driving Power	1.0	0.5 watt
Power Output	155	260 watts
Screen Resistor	42,000 1	0,700 ohma
Grid Resistor		0,000 ohms

Revision of 6K8 Ratings

The following data includes new recommended maximum values of triode-plate voltage and triode-plate dissipation for the 6K8. Other ratings and typical operating conditions are unchanged.

Hexode Plate Voltage Hexode Screen (Grids \$ 2 and \$ Hexode Control-Grid (Grid \$ 3 Triode Plate Voltage Triode Plate Dissipation Total Cathode Current	4) Volta 3) Voltag	ge	250 volts 100 volts -3 volts 125 volts 0.75 watt 16 ma.
Typical Operation			
Heater Voltage. Hexode Plate Voltage. Hexode Screen Voltage. Hexode Control-Grid Voltage. Triode Plate Voltage. Triode Plate Voltage. Triode Grid Resistor. Hexode Plate Resistance. Conversion Transconductance. Hexode Control-Grid Bias. Hexode Plate Current. Hexode Screen Current. Triode Plate Current. Triode Plate Current.	6.3 100 100 -3 100 50000 0.4 325 30 2.3 6.2 3.8	6.3 250 vol 100 vol -3 vol 100 vol 50000 ohr 0.6 me 350 um -30 app 2.5 ma 6.0 ma 3.8 ma	ts ts ts ts ms g. hos prox. volte
Current	0.15	0 15 mg	



Transformers

• For \$17.76 a service dealer can stock 8 models of Halldorson Transformers that will answer 90% of all radio service calls covering both power and audio require-

And remember, the design of each transformer covers the requirements of all the makes of sets for which it is intended. When the investment is so low, why not be prepared to give prompt transformer service with the outstanding Vacuum Sealed Transformer line.

Write for details!

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4500 Ravenswood Ave.



grand new money makers!

Every service call you make is a chance to increase your profit-making opportunities by selling a C-D "Quietone" radio interference filter. Here's an item every set owner can use. And squarely behind this filter-is C-D's pledge of performance-a guarantee that dates back 29 years. Investigate the profit possibilities of "Quietone" today! The effectiveness of eliminating radio interference, caused by household appliances of all types, with C.D "Quietone", available at your local jobber, or write direct for Catalog 166A.



TRICKS

AIRLINE 209

Erratic operation, sometimes dead on s.w. bands . . . clean band switch contacts with carbon tetrachloride.

AIRLINE 225

Intermittent distortion after several hours of operation . . . check for warping of voice coil.

AIRLINE 62-149

Distortion . . . usually caused by i.f. oscillation. Adjust i.f. trimmer for sensitivity and stability rather than any specific frequency. Shielding grid leads on 32 and 34 tubes may prove beneficial.

Generally better results are obtained when the 34 second detector is replaced by a 32 or 1B4. When this is done the "C" bias applied to the detector should be reduced to 6 volts.

APEX 7

Intermittent on low frequency end of dial . . . check filter condensers for decreased capacity.

AK 559

Motorboating and distortion as volume is increased . . . replace output filter condenser. If 2A5s do not match in emission there will also be motorboating.

ARVIN AUTO SETS

Noisy . . . check metal braid ground on gang condenser. Often this breaks and causes noise since rotor is insulated from chassis by rubber Replace ground grommets. longer braid.

Dead . . . oscillator stator lead too short when gang rocks and breaks lead. Lengthen lead slightly, if too long set will not align.

Intense motor noise . . . these sets use matching transformer in aerial lead. Check transformer for short to chassis.

AUTOCRAT 80

Low volume . . . leakage between section of dual electrolytic filter condenser shorting speaker field.

BELMONT 71C

Birdies all over dial . . . check 56 oscillator grid leak for increase in value causing oscillator to super-regenerate.

KENNEDY 63A

Pilot light burns dim when switch is off . . . look for shorted .01 mfd. condenser from one side of switch to ground.

PHILCO MODEL 71

Sometimes in order to make the oscillator tube in these sets work over the entire band the cathode resistor was lowered, if this is too low the set will lack volume on the 600 KC end of the dial. The correct value of this resistor for best operation should be about 10,000 ohms.

RADIOLA 17, 18, 50

Erratic action of volume control at maximum and minimum settings . . . movable arm of control jumps over outer terminals due to springiness of arm. Remove chassis from cabinet and bend outside terminals of control up sufficiently so arm cannot ride over them.

R.C.A. 9SX

Hum on new sets, also buzzing noise . . . connect additional 2 mfd. 200 volt filter across rectifier plate to chassis



INSTRUMENTS

2012 Harmon Dr., Bluffton, Ohio

Please send me more information on

☐ Model 1615 ☐ Model 1616

Name

City State

☐ Model 1616



Switchile for counter or portable use. Doping etched panel of silver and Model 431.....\$15.90 Checks all receiving tubes. (No ballast test.) Tester uses dependable Readrite Meter. Quartered-Oak case same as for Model 432. Write for Catalog—Section 1280 College Dr.

READRITE METER WORKS Bluffton, Ohio

Low Price * Quality A REGAL Formula for SELLING INTER-COMMUNICATION SETS



MASTER STATION supplied com with 50 feet plete of wire.

You can sell this popular model to executives, store managers, profes-sional men, factory superintendents, and for many home uses. demonstration sells the prospect.

Set one up in your store or shop for profitable demonstrations as well as your own use.



TOKFONE, Jr. can

be a fast selling article for you be-cause the QUAL-

of customers is built into this Regal

inter - communica-tion set—yet the PRICE is kept down

one-remote station simple to install

essential for satisfying hundreds

cause the

to \$26.95. Two-way systemmaster station and

REMOTE STATION

95 COMPLETE BEADY TO OPERATE

Write for catalogue showing all new models

REGAL AMPLIFIER MFG. CORP.

14-16 W. 17 St., New York Cable "Rampcoamp"

Dealer Helps

EXPOSITION TIEUP-From Detrola Corporation of Detroit is available a timely folder describing this company's complete set line under the cover title: "Exposition Radios". Should be hot stuff when the New York World's Fair opens.

RECORD SALES AIDS-From Camden, N. J., RCA Manufacturing Company, three new record sales aids are available to the trade. Full color prints of six paintings used in recent Victor and Red Seal posters can be obtained in sets of six, each mounted on heavy cardboard mats with easel backs, at 60 cents per set. These reproductions were suggested by interested dealers who thought they deserved better than mere poster use. Then there is a new complete catalog of nearly 1,000 of today's most popular dance ryhthm records in the RCA Victor Bluebird line. And, for the millions of the nation's swing addicts, a folder designed to swell sales of the new "Swing Session With Benny Goodman" four-disc album.

CHIME RECORDS—From Rangertone, Inc., 201 Verona Ave., Newark, N. J., interested soundmen and others can now obtain on request if Radio Retailing is mentioned descriptive material and sales catalogs about a truly remarkable series of chime records. Line now includes 14 selections which, when played from hitherto bell-less church towers via sound equipment (such as Rangertone's complete and reasonably priced "Tower-Tone" unit) will make the countryside wonder why it has left its church towers soundless for so long. You'll also want to get your name on the list for this firm's periodically issued house-organ called "Rangertonics".

CONDENSER TYPES - The new 1939 16-page catalog available from Sprague Products Company of North Adams, Mass. lists the most complete line ever offered by this condenser manufacturer. Contains valuable data on exact duplicate replacement types as well as similar dope about motor-starting capacitors. Write direct for a copy.

Facsimile Permit For Sparton

JACKSON, MICH.-The Sparks-Withington Company has just received an FCC permit to transmit facsimile. Call letters are to be W8XAN and the system is understood to be that of the Finch Telecommunications Laboratories of New York.

Wessner Teams With Levesque

MANCHESTER, N. H.-Fred J. Wessner has joined Arthur Levesque as a partner in the Radio Service Laboratory of New Hampshire. At one time general sales manager of National Union and more recently sales promotion manager for Webster-Chicago, Wessner will help direct distributing operations in the firm's offices at Manchester, Portland and Bangor, Me., and in Barre, Vt.

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Although Radio Retailing takes every precaution to insure accuracy, we cannot assume responsibility for an occasional change or omission in the above

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-DISCONTINUED MODELS EMPLOYMENT and BUSINESS OPPORTUNITIES -SURPLUS STOCKS

UNDISPLAYED RATE

15 cents a word, minimum charge \$3.00 Positions Wanted (full or part-time salaried employment only) ½ the above rates. payable in advance.

(See ¶ on Box Numbers.)

Proposals, 50 cents a line an insertion.

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

DISPLAYED-RATE PER INCH: 1 inch..... 2 to 3 inches. 4 to 7 inches. An advertising inch is measured vertically on one column, 3 columns—30 inches—to a page. Contract Rates on request,

Radio Retailing

YOU ARE ONE

of more than 25,000 readers of RADIO RETAILING.

Your problems of selling radio sets, accessories and other home merchandise — whether business or individual—are duplicated with other readers, but-

Still OTHER readers can provide the solution of your problem THEY KNOW WHAT IT IS!

Tell them! Here!

Through classified advertising in the Searchlight Section of RADIO RETAILING - your business paper and theirs.

Send for New 32 Page Catalog on **CAMERAS** — **PROJECTORS** PHOTO SUPPLIES The MOSTOW Co.

1506 Merchandise Mart, CHICAGO, ILL.



MICROPHONE REPAIRS

CARBON-VELOCITY-DYNAMIC ALL MAKES-ANY CONDITION Write for Quotations

ELECTRO-VOICE MFG. CO., INC.
328 E. COLFAX AVE. SOUTH BEND, INDIANA

PHILCO PARTS

For Dealers and Servicemen

FAST SHIPMENTS made anywhere.
Genuine Philico Parts and Tubes. Send loc postage for Philico Replacement Parts Book. Catalog sent FREE. WILLIAMS PHILCO INC.

Peorla, III.

NEW

"Searchlight" Advertisements for the January Issue

Must be received by December 30th



BOOKKEEPING SYSTEM Especially Designed for APPLIANCE-RADIO DEALERS

A direct, easy-to-understand system,

A direct, easy-to-understand system, devised by an expert accountantin your line of business. It is in practical use by many dealers everywhere.

Provides for cost of sales, operating expenses, inventory to date, cost of repossessions, cost of rebuilding, loss on trade-ins and every conceivable situation of your very own business.

Also system for smaller store.

Write beday for descriptive folder.

THE KNAPHURST COMPANY

WRITE FOR OUR NEW 116 PAGE CATALOG

WASHING MACHINE AND VACUUM CLEANER PARTS

The Only Complete Catalog of Its Kind in the Country, That Can Be Used Profitably as a Service and Counter Guide With Retail Prices.

Dealers net prices on back pages Established 10 Years. Reputation for Quality and Service.

MIDWEST APPLIANCE PARTS CO.

Dealer? 🗆

2722 W. Division St.

Address Serviceman?



Experimenter? \Box

Audio Grequency...

Liked November

I have received my November issue of Radio Retailing and read it through. Must say you did a swell job. I have read many radio publications but I find none better than Radio Retailing and my advice to dealers and radio servicemen if they want a real magazine is to get Radio Retailing.

MUSCATINE, IOWA MATTHEW HOLT

I think your November Radio Retailing is a "wow". Keep up the good work. D. DONNELLY MOORE BALTIMORE

And September

That article on Dynamic and/or Static testing in the September issue was a sound, common sense discussion. Can we have more of such like?

WARSAW, N. Y. ARLINGTON BALDECK

And March

Please mail me another copy of the March issue as this issue is worth far more to us than 150 years of business for the information on sound truck music alone.

CHOUDRANT, LA. FAULKNER RADIO CO.

And the Manual

I received Radio Retailing's Sales and Service Manual today. After looking it over I find that it contains many articles from back issues in a neat and concise form. This saves much time when looking for an article. Every subscriber will appreciate your efforts to give them the best in radio helps and publications.

I know that I certainly appreciate the job you are doing and wish you all the success in the world.

KEMMERER, WYO.

STEVE PODLESNIK

TRAFFIC and TURNOVER

(Continued from page 13)

and Walgreen Drug, which also sells radios, are located on the side of the street receiving the most traffic (west), therefore, theoretically, they receive three times as many walk-in

prospects as do the radio dealers on the east side of the street. The Milwaukee Electric Appliance, Kornely Hardware, Economy Boys, Reed's Drug Store, and J.&R. Motor Supply, are on the east side of the street, but do a good radio business, too. The question naturally arises, however; could they do much more radio volume if located on the other side of the street?

A private survey, following the city survey, shows that rents for an average retail store on the west side of the street range from \$175 to \$500 monthly, depending on location, while on the east side the rental range is from \$75 to \$300. A store on the east side of the street paying \$75 monthly rent, located directly opposite one paying \$175 appears to be getting a better break in proportion to volume of pedestrian traffic than the store on the east side paying \$300 as against \$500 across the street where the pedestrian traffic is three times heavier.

When it comes to property taxes, there is not as much difference as in present rental scales, but many radio and other dealers say taxes ought to be revised, too. So numerous have been the complaints of retailers since this traffic count, that the City of Milwaukee tax commission has indicated that pedestrian traffic figures as obtained in this and other surveys in Milwaukee will play some part in tax assessments for 1938.

This, and other Milwaukee surveys, will have far reaching effects. Some of the general conclusions that can be drawn from the survey for radio dealers everywhere are as follows:

1. Arrange to have a pedestrian traffic count made of your street. If you can't afford to do it alone, co-operate with other merchants, or get your city council to authorize a count of a certain area. Then study taxes and rentals on both sides of the street and see how you come out.

2. If you plan to remodel or open a new store, find out if you are on the side of the street where you can make the most money.

3. If you are on the poor side of a street and can't get on the better

side, pay lots of attention to making your window displays attractive, so you can get the attention of more people. In that way maybe you can get more live prospects to come across the street to your store.

SELLING SOUND

(Continued from page 15)

the whole force on the run and it was smothered out before it really

got a chance to ruin things.

Wrecks are a horror of railroads. One of the K.L.A. boys discovered that railroad heads are always wondering whether their gate watchmen are asleep at the switch. Today the Pere Marquette has seven miles of track sound equipped. The tower man at Delray announces trains to the 20 watchmen with a roar that roots them out of their little shanties in time to lower the crossing

Storekeepers, eager for Christmas atmosphere, are willing renters of equipment which will give their places of business Christmas chimes or carols. It peps up the holiday shoppers to hear music of this sort.

When C.I.O. agitation was hottest last year K.L.A. did a good business supplying public address systems. Their equipment reached the immense crowds addressed in Detroit last year by strike leaders.

Whenever children speak pieces, there is a good market for sound equipment as youngsters' voices are

weak and carry poorly.

Possibly churches are 5 per cent saturated with sound equipment now although rural churches, with a penchant for putting a loud speaker outside the entrance, are opening up the avenues of repeat business. This outside speaker is for the benefit of the buggy trade.

Saturation of lodges is possibly 20 per cent, but intercommunication systems in Detroit have less than 5 per cent saturation in stores and offices. The big jobs have not been sold, as economy has been the watchword during Detroit's recent tough times.



(Below) The "SIXER DELUXE" 6 tube superheterodyne, including short wave reception. 5 inch speaker, 5 push button and knobtuning.
Sliced walnut cabinet. \$2295*



(Above) The "SIXER" an achievement in design and performance—6 tubes. superheterodyne including short wave reception, 5 push buttons, the Crosley simple mechanical Prestotune, and knob tuning. Slide rule dial—exquisite brown plastic case. In ivory or red finish at slight additional cost.

(At top) The Super Sextette, beauty prize winner for looks. 6 tubes (including ballast) with beam power output. Superheterodyne AC-DC with 6 tuned circuits. Brown and black mottled plastic cabinet—4 push buttons and knobtuning. In ivory or red finish at slight additional cost.

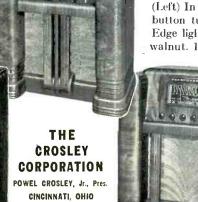
SRESEEY

CONSOLE

efficiency reaches new heights in 1939 cabinet design. PUSH BUTTON RADIO-PHONO-GRAPH COMBINATION—Six tube superheterodyne receiver, tuned with push buttons and

knob—Beam power output for extra power and sensitivity. Self starting phonograph motor. Lovely stump walnut cabinet completes combination as matchless value. Satisfactory volume and tonal quality for all music lovers.

\$59⁹⁵*



rices West and South Slightly Higher,

PERFECTION

(Left) In 8 tube, 3 band superheterodyne—8 push button tune selected stations plus knob tuning. Edge lighted radio log dial. Massive cabinet of walnut. 10 inch speaker.

(Left) 11 tube 3 band superheterodyne completely automatic electric push button tuning permits selection of 8 stations. Radio-log dial designates 103 station call letters including foreign stations. 12 inch speaker. Adaptable to remote control.

\$9950

G-E RADIO WINDS UP ITS GREATEST YEAR

Greatest in number of G-E Radios produced! Greatest in number of G-E Radios sold! Greatest in all-around achievement—in features, styling, tone and performance.

tone and performance. General Electric was first with the features the public wants.

First with the Beam-a-scope
First with Keyboard Touch Tuning
First with Time Tuning

And this is only the beginning. Watch G-E Radio in 1939. G-E Radio is on the march.



G-E LEADS WITH THESE GREAT FEATURES:

• THE G-E BEAM-A-SCOPE

No aerial! No ground wires! Reduces local static inderference.

• KEYBOARD TOUCH TUNING

Basy: Accurate. Lightning F st! Your program at the touch of a key.

• G-E TIME TUNING

Pick your programs on five different stations for 24 hours ahead—the G-E Automatic Program Pre-selector does the rest. No re-tuning! No re-dialing!



GENERAL & ELECTRIC