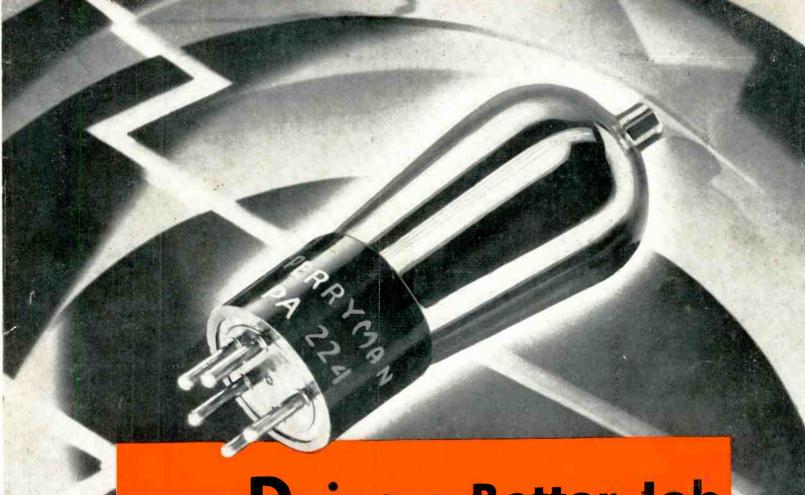
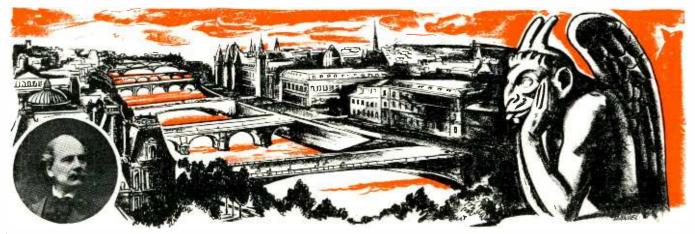
RADIO RETAILING



Doing a Better Job for the Dealer... Giving a Better "Rep" to the Set



PERRYMAN PRADIO TUBES



Massenet's opera "Le Jongleur de Notre Dame" was inspired by the great medieval church of Notre Dame whose famous gargoyles still look out over Paris. Brunswick Record 50082

LOOKING TOWARDS THE FAR HORIZON

A successful business must be conducted with a thought not only for tomorrow, but for the years to come. Retail dealers who are building for permanence will naturally be attracted to a manufacturer who has this end in view.

What better way is there to judge a company than by the way it has acted in past situations? If its course has always been honorable, its choice of conduct upright; it is reasonable to assume that its future actions will always be worthy of the good reputation it has already established.

Brunswick has been in business for many years; it has been building musical reproducing instruments since long before the first radio broadcast started a new industry.

In all its long career Brunswick dealers have never once suffered because of short-sighted merchandising policies. There has never been any compromise when the good name of the company was at stake. Dealers have never been left to hold the bag for mistakes which were not of their causing.

As a result, dealers who are now seeking a stable line of radio and record-playing instruments which they can carry through the years, know that they can look confidently to the future with Brunswick!

Inquiries from such dealers are invited.

Brunswick Radio Corporation

MANUFACTURERS OF RADIO, PANATROPE & RECORDS

Makers of the World-Famous Brunswick Records

NEW YORK—CHICAGO—TORONTO

SUBSIDIARY OF WARNER BROS. PICTURES, INC.



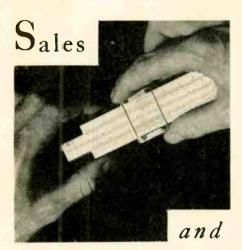
BRUNSWICK LOWBOY

Armored chassis with 4 screen-grid tubes and two 45's in parallel. Uni-Selector and Illuminated Horizontal Tuning Scale. Tone Control. Cabinet of seasoned and selected butt-walnut with carved front panels. \$139⁵⁰

Other models \$170 up. (less tubes)

BRUNSWICK MADIO FUTURA SERIES FOR 1931

Radio Retailing. December, 1930. Vol. 12, No. 6. Published monthly. McGraw-Hill Publishing Company, Inc., Tenth Avenue at Thirty-sixth Street, New York, N. Y. \$2 per year. 25 cents per copy. Entered as second-class matter, April 19 1925, at the Post Office at New York, N. Y., under the Act of March 3, 1878. Printed in U. S. A.



Statistics

CTATISTICS pertaining to the production, distribution and sale of American radio sets, tubes and accessories in 1930 will be presented in our March number.

OSTPONEMENT of this statistical issue—usually published in January or February—will permit greater accuracy; many manufacturers cannot supply exact figures concerning business transacted in the last quarter prior to February.

RADIO RETAILING'S March number, headlining the figures and facts of 1930 business, will be another valuable addition to its recorded history of radio's commercial progress. With previous statistical issues it will present an accurate picture of our past and will also serve as an excellent guide to the future.

O. H. CALDWELL, Editor RAY V. SUTLIFFE, Managing Editor

W. W. MACDONALD, Technical Editor

T. H. PURINTON, Assistant Editor

M. E. HERRING, Publishing Director

Vol. 12 No. 6

HARRY PHILLIPS, Art Director

C. GRUNSKY, San Francisco

P. WOOTON, Washington

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McGRAW-HILL PUBLISHING COMPANY, INC., Tenth Ave. at 36th St., New York, N. Y.

Cable Address: "Machinist, N. Y."

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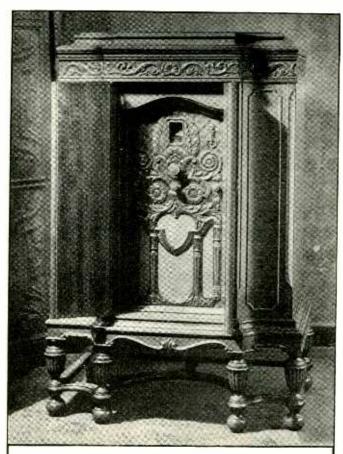
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Member A.B.PI

Member A.B.C.

Printed in U.S.A.



No. 14 Multi-Record Radio. 10 tubes. Plays a dozen 10 or 12-inch records one after the other, changing them automatically by means of an almost human mechanism. Automatic Volume Control with Silent Visual Tuning. Provision for future connection of Electrical Remote Control. Genuine walnut cabinet, scarcely larger than a radio alone. Price, less tubes, East of Rockies \$645

What You Get In A Stromberg-Carlson

- 1. Genuine Walnut Cabinets.
- 2. Massively Heavy Chassis.
- 3. Superb Tone From All Stations.
- 4. Full Dial Efficiency.
- 5. Lifetime Durability.
- 6. Maintained Re-Sale Value.
- 7. Pride of Ownership.
- 8. Satisfaction without Servicing.
- 9. Direct-to-Factory Responsibility.
- 10. Exclusive Models.

"There is nothing finer than a Stromberg-Carlson"

That is there in radio so salable as a Stromberg-Carlson?

WHEN you, as a dealer, select a line of Receivers you owe it to the success of your business to ask yourself these questions.

What other lines of radio have a convertible console like the No. 11, or an automatic combination like the No. 14?

What others have genuine walnut cabinets... a 76 to 86 pound chassis...tone which is beyond criticism... full dial efficiency... lifetime durability? What others have never been dumped... have never made it practically impossible for the dealer to collect final installments? What others can claim 90% of owners using their original sets... owners who have been so well satisfied for so long, their dealers, and their dealers' service men, have forgotten where they live? And what other radio manufacturer is backed by years of telephone experience—the parent science of radio?

What other dealers—have as close factory cooperation... have really as much to offer the public—as have Stromberg-Carlson dealers?

Stromberg-Carlson unsurpassed quality Receivers range in price from \$155 to \$369. The Multi-Record Radio, \$645. (Prices, less tubes, East of the Rockies).

The Stromberg-Carlson Hour Monday Evenings in a Coast-to-Coast Broadcast over the N. B. C. Blue Network and Associated Stations.

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



Stromberg-Carlson



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





What are 1931 Tubes?

IT'S easy to identify 1931 tubes among the general run of tubes. Meters and performance rather than labels and claims soon separate the sheep from the goats. Briefly, and for your guidance, the 1931 radio tube features are:

Positive Characteristics because of the doubling of the diameter of some support wires and better bracing, together with tightened tolerances.

Improved Tone Quality resulting from greater rigidity and therefore minimum microphonic effects, together with suppression of distortion arising from undesirable regeneration.

Quiet Background brought about by DeForest research into causes of hum and crackle, resulting in one-fiftieth the noise level heretofore considered standard practice, together with lower gas content made possible by unique DeForest exhaust units now in use.

Longer Service Life brought about by important improvements in filaments,

cathode insulators and emitters, insuring a full thousand hours of peak efficiency.

Greater Volume through the increase of the mutual conductance in power tubes, yet maintaining full interchangeability with usual tubes of lower output.

Quick Heating averaging about 10 seconds, due to patented DeForest notched cathode insulator, without sacrificing life, reliability or quiet operation.

Higher R.F. Amplification with screen-grid tubes, or 60 instead of usual 30 per stage, while decreased grid-plate capacity permits of maximum stability or minimum regeneration for the highest gain with least distortion.

The foregoing 1931 radio tube features are not to be found in tubes produced six months ago, much less those a year or two old, taken from large inventories. DeForest research and engineering, rapidly translated into everyday terms by a production geared to the demand, brings these features to you in fresh De Forest Audions.



BOSTON · NEW YORK · PHILADELPHIA · ATLANTA
PITTSBURGH · ST. LOUIS · LOS ANGELES · SEATTLE
CHICAGO · MINNEAPOLIS · DETROIT · DALLAS
CLEVELAND · KANSAS CITY · DENVER

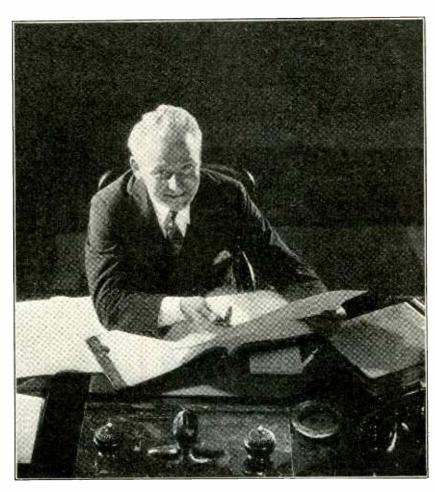
De FOREST RADIO CO. PASSAIC, NEW JERSEY

"Less service = more profit"



OR the consumer, uninterrupted radio enjoyment; for the Grebe dealer, a substantial saving—an important contribution to his net earnings. He explains it with a simple equation: "Less service = more profit." And the figures prove it: less than one-half of one per cent of the Grebe receivers, sold last year and this year, have required any service but tube replacements—a percentage so small that it is negligible.

Another increase in the Grebe dealer's earnings is a logical development. Instead of parting with a large portion of his profits to cure ailing sets, he is enabled to use this money to expand his business. Because the precision



with which Grebe radio is manufactured anticipates the dealer's service problems—prevents a continuous drain on his profits.

Both the SK4, the Grebe prestige set, and its companion line, the moderate-priced AH1, are constructed with the same scientific exactness. Both are engineered for the protection of the dealer as well as the pleasure of the consumer. And this primary principle of profits is another reason why the demand for the Grebe franchise constantly grows.



Grebe 160 . . . AH1 Chassis walnut lowboy, with maple panel; one of the new moderate-priced models; list *\$160, without tubes.

Grebe radio

A. H. GREBE & COMPANY, Inc., Richmond Hill, New York Western Branch, 443 So. San Pedro Street, Los Angeles, California

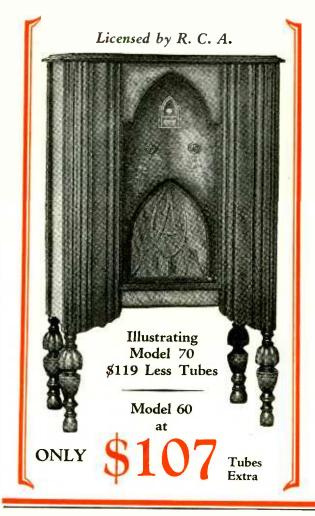
* Slightly higher on Pacific Coast

Here's the Answer!!! the New Screen Grid

AUDIOLA SUPERHETERODYNE

Just Think

9 Tubes
10 Tuned Circuits
Pre-Selector Stage



The new Audiola Superheterodyne represents the most advanced development in Radio! Not to be confused with the old type superheterodynes employing only three gang condensers—the new Audiola is a four gang condenser screen grid with the latest type of dual pre-selector stage.

Adjacent to high powered metropolitan stations, the Audiola Superheterodyne gives 10 kilocycle separation—absolutely no "cross talk." The sensitivity is better than three microvolt per meter.



AUDIOLA JUNIOR

Triple Screen Grid—Tone Control. Built like large receivers. Remarkably selective. Has a dynamic speaker. \$49.50 Less tubes, only

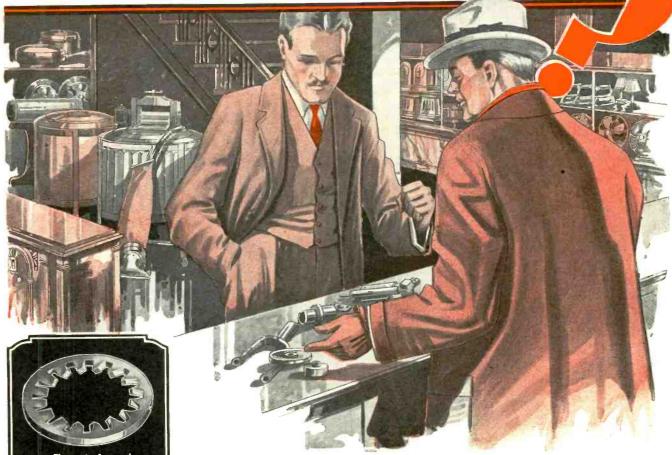
9 Years Building Fine Radio Receivers

AUDIOLA RADIO CO.

430 Green St.

Chicago, Illinois





ANOTHER dissatisfied customer—another service job that will mean time and money wasted. No wonder it's so hard for a dealer to show a decent profit these days.

*But—who's to blame? The manufacturer, of course, should never build a product that will not stand up. However, the dealer should never handle a product that will not give his customer complete satisfaction. Too often, the cause of such discouraging experiences is due to faulty connections—screws and nuts working loose—and when this happens trouble is sure to start.

Protect yourself by handling only those products that are Shake-proof equipped. Shakeproof Lock Washers and Shakeproof Locking Terminals assure you of absolutely tight connections. Their twisted teeth cannot shake loose for the greater the vibration, the tighter they lock. Test Shakeproof on your next service job and see for yourself how perfectly they function. Free samples will be furnished on request—send for a supply today!

U. S. Patents 1,419,564 1,604,122 1,697,954 Other patents pending, Foreign patents.

SHAKEPROOF Lock Washer Company

(Division of Illinois Tool Works)
2531 North Keeler Avenue, Chicago, Illinois

Tress a Dutton... and make a Sale!

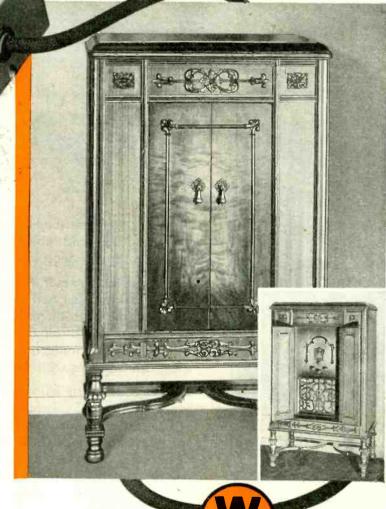
Westinghouse Remote Control captures the Imagination . . . and the Profits!

REMOTE CONTROL... the final touch of luxury and convenience. A set at the far end of a room. The controls right beside the armchair... even in another room. Press a button for any one of six favorite stations. On or off. Louder or softer!

It's just one of the many Westinghouse Radio features that are bringing in the business for Westinghouse dealers. Available on two models ... WR-6 and WR-7.

Don't let any prospect leave your store before you have demonstrated Westinghouse Remote Control, Press a button...and make another sale.

WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY
Radio Dept....150 Broadway, New York City



Westinghouse

PIONEER RADIO IN THE HOME

Radio



Jewell Pattern 209
Tube Checker has six
tube sockels. It checks all
types of tubes including
screen grid, rectifier and
the new two-volt D. C.
type. No batteries are
needed. List price \$30.
Dealer's price \$22.50

Jewell Pattern 210
Tube Checker gives direct reading on all tubes from UX-199 to UX-250—no mental arithmetic necessary—operates from A. C. Lines and compensates for variations between 100 and 130 volts. List price \$65.
Dealer's price \$48.75



This is the keynote of big advertising campaigns now run by tube manufacturers in newspapers everywhere. Radio set owners are urged to go to you for frequent tube tests.

Are you equipped to give prompt and intelligent service to your customers? Can you convince them that they should buy new tubes?

Reap the profits of these newspaper cooperative campaigns by getting a Jewell Tube Checker at once. Radio tube replacements, like spark plugs, are made every day of the year. Good tube checking equipment quickly pays for itself. The Jewell Easy Payment Plan will bring your tube checker with a small down payment. Mail the coupon for descriptive bulletin.

30 YEARS MAKING GOOD INSTRUMENTS

Investigate the



Easy Payment Plan

Don't delay equipping yourself for prefitable radio service until you can pay cash. Take advantage of the Jewell Easy Payment Plan extended to servicemen who are alive to the profit making possibilities of Jewell Service Instruments and who want to pay for them out of service profits. Mail the coupon.

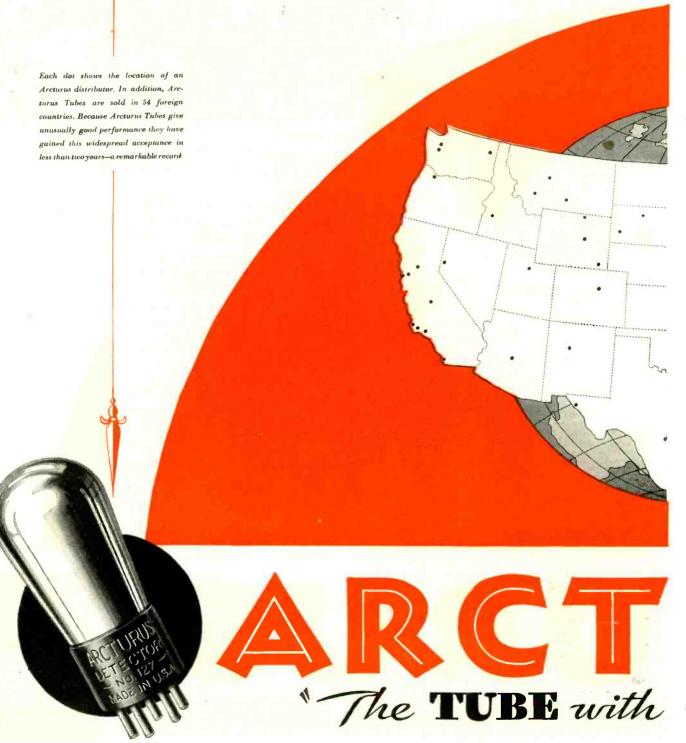
THE WALLET I	ELECTRICAL	INSTRUMENT	COMDANY
ER. W. C. L.	P. I. P.A. I DIEL AL.		A TABLE AND A TABLE

1642-A Walnut Street, Chicago, Illinois
Please send illustrated literature on Jewell Tube Checkers and
Set Analyzers. Also explain the Jewell Easy Payment Plan.

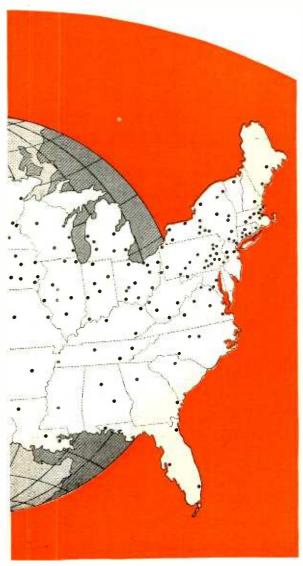
Name	.,	 	



NATIONAL is based on OUT



ACCEPTANCE STANDING QUALITY



WHEREVER radio sets are used, Arcturus Tubes have built a reputation for exceptional quality.

Radio jobbers, radio dealers, and the radio listening public know that they can depend on these *Blue* tubes for every essential feature. In quickness of action, clarity of tone, and length of life, Arcturus Tubes meet every demand.

This proved performance under all conditions has gained world-wide distribution and universal acceptance for Arcturus Tubes in a remarkably short time. In every state in the union, as well as in 54 foreign countries, Arcturus Tubes enjoy steadily increasing sales. Today, Arcturus ranks as the leading unallied manufacturer from the standpoint of volume sales, acceptance and performance of product.

You can safely invest your capital and your time in tubes of such widely accepted quality. Stock and sell Arcturus Blue Tubes and you are sure to satisfy your most critical customers. Get the details from your jobber.

ARCTURUS RADIO TUBE COMPANY Newark, N. J.





EVERYONE

who enters your store is a possible customer for a PHONOVOX

Today a majority of the popular radio sets are equipped with jacks to use with phonograph pick-ups. Practically every customer you have probably owns a phonograph. Many of them don't know that they can connect their phonograph with a radio and have any music they wish at any time without any possibility of static. That's what you have to sell them. Offer to install a Pacent Phonovox without charge. It will only take a few minutes. Let your service man also carry along a few new records. The chances are that he will sell them before he leaves your customer.

As a live-wire radio Dealer, you should sell a phonograph pick-up with every sale of a radio set. This is an opportunity not only to make a profit on the New Pacent Master Phonovox but to create a constant demand for records

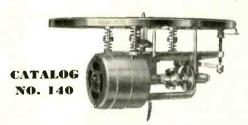
The line of Pacent Phonovoxes are the unquestioned leaders in their field. Three types are offered.



THE NEW OIL-DAMPED PHONOVOX

The 108B Oil-Damped Phonovox was the first instrument designed that could be used satisfactorily for talking movies and broadcasting station work. The 108B Oil-Damped Phonovox provides the finest reproduction available. Adjustable needle pressure. Absolutely no rubber bearings. Freezing is impossible.

List Price-\$25.00



PACENT ELECTRIC PHONOGRAPH MOTOR

Rugged, sturdy, quiet, extremely economical in operation, the Pacent Electric Phonograph Motor meets every requirement of radio-phonograph use.

Designed for 100 volt, 50 or 60 cycle operation. Power consumption only 25 watts. Operates ten hours for 11/2 . \$25.00

CATALOG NO. 43

PACENT ELECTRIC PICK-UP BOOSTER

(Illustrated below)

A compact, inexpensive unit for use with radio sets having a power detector, and one stage of audio. Gives tremendous volume without distortion.

No. 43 — \$10.00 less tube. Especially recommended for BOSCH
—SPARTON—PHILCO—MAJESTIC
—RADIOLA



All prices slightly higher West of the Rockies and in Canada

PACENT ELECTRIC CO., INC., 91 SEVENTH AVE., NEW YORK, N. Y.

Pioneers in Radio and Electric Reproduction for over 20 Years. Licensee for Canada: White Radio, Ltd., Hamilton, Ont

PACENT



Profitable Tube Market

is already established for you. Hundreds of set owners in your locality are operating radios that were designed for, and originally equipped with Kellogg 401 A.C. tubes! Do not overlook this vast consumer market—it is worth over two and one-half millions of dollars annually!

Kellogg 401 A.C. tubes are the only tubes you can sell to this profitable replacement market. Your customers *must* buy these tubes to maintain the good performance of their sets.

Get your share of this business—stock and display Kellogg tubes. Write to Department 47 for name and address of your nearest Kellogg tube jobber.



Every owner of every set listed here is a customer for Kellog 401 Tubes!

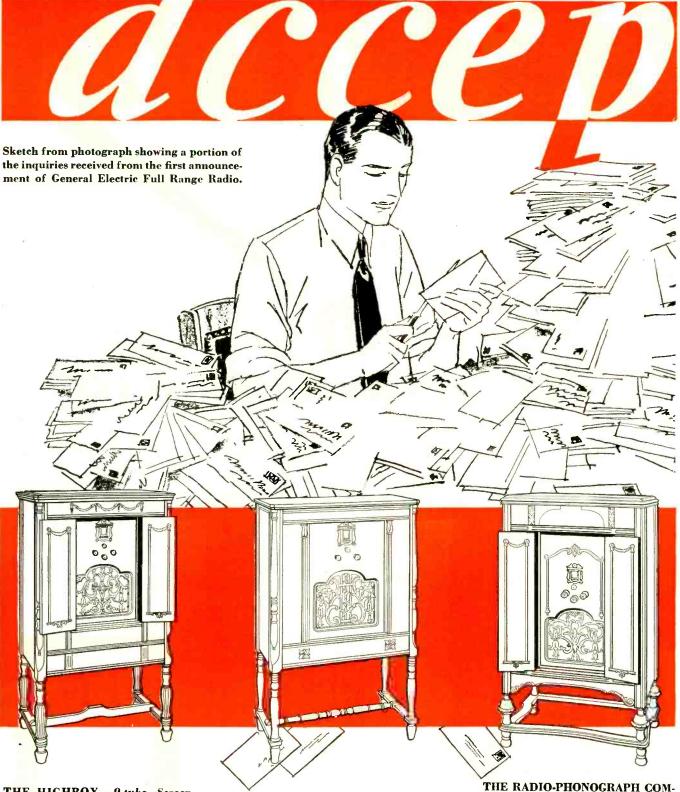
KELLOGG sets—510, 511, 512, 514, 515, 516, 517, 518, 519, 520, 521. McMILLAN sets—26, 26PT. MOHAWK sets. SPARTON sets—62, 63, A-C 7. DAY FAN sets—5143, 5144, 5145, 5148, 5158. MARTI sets—TA2, TA10, DC2, DC10, CS2, CS10, 1928 Table, 1928 Console. CLEARTONE sets—110. And the first A.C. models of the following: Bell, Walbert, Wurlitzer, Pathe, Shamrock, Bush & Lane, Minerva, Crusader, Liberty, Metro, Supervox, and Case.

KELLOGG SWITCHBOARD COMPANY

1066 WEST ADAMS STREET

CHICAGO





THE HIGHBOY—9-tube, Screen-Grid Super-Heterodyne, fitted with local-distant switch and tone control. Remote control available at additional cost. Brown walnut cabinet with French doors. List Price \$179.50, less tubes.

THE LOWBOY—9-tube, Screen-Grid Super-Heterodyne. Fitted with local-distant switch. Brown walnut cabinet, satin finished. Early American design. List Price \$142.50, less tubes. Tone control \$5 extra. THE RADIO-PHONOGRAPH COM-BINATION—9-tube, Screen-Grid Super-Heterodyne, local-distant switch, tone control and home recording equipment including microphone, 4 blank records and 2 special needles. Brown walnut cabinet, satin finish. List Price \$285, less tubes. Remote control available at additional cost.

MERCHANDISE DEPARTMENT . GENERAL ELECTRIC

tance.

Both trade and public are loud and unstinted in their praise of

GENERAL ELECTRIC FULL BANGE BADIO

THE first rumor that the name General Electric was to appear on a radio set brought a flood of inquiries—and even definite requests for dealer appointments, and actual orders for sets. From that moment public interest has grown apace. With the appearance of the actual sets, a wave of enthusiasm burst over the trade. That enthusiasm grows daily greater. The performance of General Electric Full Range Radio, the ample advertising support, and the apparently endless interest and acceptance of the public assure a profitable season for General Electric Radio dealers. A year that marks a new era of stability, permanence, and successful business.

The following extracts from the General Electric Radio mail-bag tell what the trade thinks of the General Electric Radio:

"This set far surpasses anything we have heard."

"Are more than pleased with the public acceptance and feel more than sure of the best radio season we have had since we have been in the business."

"I, and all that have been in my shop to hear the LOWBOY I have on my floor think it is wonderful, and I may add that it is the envy of other radio franchise holders."

"It's just what I have been looking for, for the last seven years."

"It is the first time any radio set I have had has more than lived up to what was claimed for it."

"I must admit, however, that it is really beyond my expectations and my dreams."

"I am thoroughly convinced that this is the best radio that I have ever listened to."



THE STUDIO LOWBOY -7tube, Screen-Grid Receiver, 4 tuned circuits, Power Screen-Grid detector, push-pull audio, new type dynamic reproducer -compact in size. Handsome curved front cabinet. List Price \$112.50. less tubes.

COMPANY - BRIDGEPORT, CONNECTICUT

A NEW IDEA IN TUBE SELLING that's worth thousands of dollars to you!

CYLVANIA has a new merchandising plan for you. A new idea that never before has been applied to the tube replacement business.

A reliable sales booster that not only increases your tube turnover but also multiplies your prospects for the sale of other radio merchandise and electrical appliances.

Here is a profitable Merchandising Plan for jobber and dealer alike.

Through this unusual business-building Plan your prospects in your community are sold on you—your business—your good reputation—your experience—and your service reliability. They are educated to think of your store as the only place from which to buy their radio and electrical necessities. And the buying of these articles is made easy for them.

Sylvania offers to a limited number of dealers the first sound, flexible, intensive Plan for sales cultivation that the radio tube business has known.

Clip the Coupon that Brings You the Details

Licensed Under RCA Patents

IT'S THE TUBE THAT MAKES THE RADIO

SYLVANIA PRODUCTS CO. Emporium, Pennsylvania I'd like to have more details about your new

Address

City State.....

December, 1930

RADIO RETAILING

O. H. CALDWELL,

Editor

A McGraw-Hill Publication.

ESTABLISHED 1925.



No Need to Worry

This Christmas

OME radio dealers are worrying about the Christmas market. Worrying won't help. What we need is a little straight thinking and some intelligently planned work.

Christmas isn't just a market. It isn't a matter of economics or of this year's good or bad business. Christmas is a matter of emotion, sentiment, tradition. It centers in the heart, not in the pocket. It is a blessed season of generosity when all the world gives presents to those they love. This month the men and women of America will celebrate Christmas just as they have every year of their lives. And that's just about the surest thing we know.

Well, what's wrong then? Just that it's a bad year—business depression—people out of work—cautious spending? All right, let's take a look:

They say business is bad. How bad? Well, about 15 per cent off. That means that we are doing in this country this year 85 per cent of last year's volume—which is actually more than we ever did in a normal year of good business up to a few years ago. It is a tremendous volume of sales and profits—that 85 per cent—lespite a disappointing comparison with last year's.

They say people haven't any money to spend this year. But in June there was \$267,000,000 more in deposits in the savings banks than there was last year at the same time. Also, the banks all over the country are again paying out \$600,000,000 to Christmas Club depositors this season—in cash. October dividend payments were \$13,000,000 more than last year. Doesn't this look like money enough to make a Christmas?

They say the employment situation will hurt the holidays. Suppose there are a million and a half more people out of work than normally in this country at this season. Don't forget that there are 122,000,000 people in the U.S.A. and that the rest of the bread winners have jobs and that there are more members of the family gainfully employed today than ever before.

NO CHRISTMAS this year? Applesauce! Are we going to buy presents for our families? We are! And how about the people you know? The same!

What are we going to buy for gifts? Everything. Who'll sell them? All the live merchants who sold Christmas goods last year and the year before—and especially the up and coming radio dealer.

There is one thing certain and that's this: Human nature isn't going to change this year just because we've had a bump in business. From the days of Pharoah people have been advancing steadily in their standards of living. One by one they have gained new comforts, new luxuries, new enjoyments, new opportunities. They have never given up any of the good things of life. once they have acquired them. Read your history! And they will not stop buying radio this year!

Radio has become a vital element in our lives—part of our very social system. No one will relinquish this precious thing. And Christmas is the time when we justify expenditures for a luxury like this because it brings joy to those we love. It has always been so. It will still be true.

There is only one thing for the radio dealer to worry about this season—Will his competitors outsmart him? On that alone will depend how good this Christmas will be to him.



HE smaller independent radio retailer is meeting-in the activities of the larger outlets, in the featuring of cut-price orphans of uncertain vintage and performance and the popularity of present models in the \$50-\$80 classcompetition which is seriously retarding the sale of the latest and best in consoles. Yet the small dealer—the backbone of our industry must move a sizable percentage of modern receivers, selling in the vicinity of \$150, if he is to continue in business. It is further a reasonable assumption that the small dealer is not in a position to meet the above mentioned competition on its own ground. He cannot, for example, buy distress merchandise on a quantity price basis nor can he utilize the machinery of mass selling for its disposal.

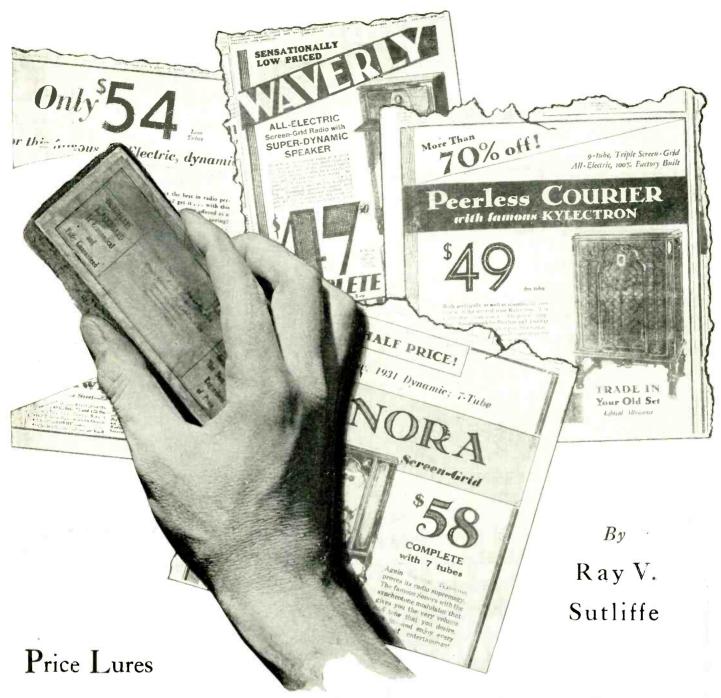
What, then, is the solution of this problem—so uppermost in the mind of the heretofore successful small outlet operator? Obviously he must justify, in *convincing* manner, his prices and products—generalities will not suffice. Each argument must be based on specific comparisons or illustrations.

Radio Retailing recognizes there is an economic reason for the offering for sale of distress merchandise or of new models at extremely low prices. It contends, however, that the higher priced products can and must be sold.

To help the dealer perform this very necessary selling operation, of illustrating the real superiorities of the modern console we submit the following suggestions:

QUALITY CONSOLE VS. THE ORPHAN

Before the prospect will be in the frame of mind to review with you, point by point, the constructional, tonal and eye value differences of the two types of sets under



consideration, you must first sell him on the idea that the design of today's radio receiver is now so nearly perfect that any first class set purchased this year will give complete satisfaction for many years to come. Rapid obsolescence no longer exists. Point out emphatically that this, however, was not true fifteen months ago and that a set which is more than a year old before it leaves the dealer's floor is definitely a part of the experimental era of the past. In other words, radio is now a long time investment. Therefore, it will pay to buy the best.

Develop this theme further by citing the automobile situation. While people buy used cars they would not think of buying a last year's model which, although it had never been run, was the product of a manufacturer now defunct.

Maintenance, service, replacement of parts and the reputation of the manufacturer are all a part of this picture and can be used most effectively by the dealer who works out his arguments in advance.

After registering these thoughts you are ready for

your "point by point" comparison. Perhaps the most effective of these is the fact that most modern sets use the latest type of tube, the 245, in the audio amplifier. This comparatively recent improvement has vastly benefited tone quality.

Up to twelve months ago radio engineers were kept busy keeping pace with rapidly changing technical developments but during the past twelve months no radical inventions have occurred. This has meant that these engineers have had the time to concentrate on improving and refining constructional and circuit details. Much of their time during the past year has been devoted to obtaining better tone—that is why there is such a marked improvement in the tone of the 1930-31 receivers.

Compare, therefore, the tonal values of your set and of a set manufactured twelve months ago. The difference in quality is usually so markedly in favor of the 1930-31 receiver that even the untrained ear can readily appreciate it.

Next point out the latest improvements and accessories

now available, such as tone control. This feature alone has been known to swing the decision favorably. The writer recently witnessed a sale where the prospect, of his own accord, changed from a \$150 to a \$180 outfit on the strength of this one argument.

QUALITY CONSOLE VS. MODERN LOW PRICED SET

The second type of serious competition facing the small dealer with his superior console comes from modern sets of limited dimensions which list between \$45 and \$80.

Many of the arguments which have just been suggested for competing with the orphans will apply as effectively with this more recent situation. Tonal values are even more marked inasmuch as it is a very difficult matter to secure the same power and richness from a small dynamic or cone type speaker with a very limited baffle board area as from the larger dynamic, rigidly installed and with a large baffle board of substantial thickness. Be sure to actually demonstrate this point.

Then you will find a great many constructional differences, in the wood work as well as in the chassis. In addition to the differences in thickness, size and rigidity of the paneling, check the way in which the cabinet is reinforced, the character of the woods and ornamentation used.

Another argument which should be particularly effective is that of the pride of ownership.

The point that radio is now a long time investment and that the initial outlay, therefore, is not as important as continuous satisfaction should not be overlooked.

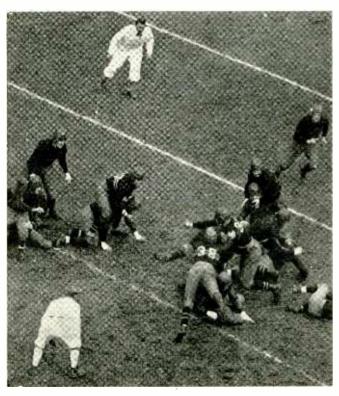
As a rule the combination instrument comes only in the higher priced and higher quality line. Therefore, talk the merits of the combination instrument and thus sidetrack the competition of the lower priced line.

In conclusion Radio Retailing recognizes that there is a proper place for the large operator and for price appeal and that there is a proper place for the orphan set as well as for the present miniature model whose price corresponds to its size. But we must not lose track of the fact that in the final analysis the establishment of the radio industry on a stable basis and the permanent success of the radio dealer can only be brought about by registering a high standard of quality, of appearance, and of permanence in radio receivers on the public consciousness.

And it is largely through the courageous effort of the small independent dealer that this objective will be attained. Today he needs help—immediately. He is entitled to every assistance and encouragement available.

Today, buyers of carload lots are corralling the bulk of the radio business—by featuring price—while small dealers, unable to compete on this basis, are going hungry. These suggestions for selling high quality merchandise against the competition of cheaper sets should be re-read.

The Season's Biggest Game—Your Opportunity



"Hold 'em Army!"

ARMY plays the Navy! Proceeds to help the unemployed. Millions will listen in over gigantic chain hookup. There will be a hurry-up demand for radio equipment.

Here's the story in a nutshell. Not since 1927 have West Point and Annapolis been able to reconcile their differences. And now, for sweet charity's sake, it has happened. Saturday, December the thirteenth, is the time and the Yankee Stadium, New York City, the place. A "gate" of almost a million dollars, the largest receipts from a sporting event ever recorded in the history of the world, is expected.

The time's short but not too short to run display ads; put in a special Army and Navy window and work on that live prospect list night and day until the thirteenth.

And the Radio Manufacturers Association is tying in with special publicity releases, according to Bond Geddes, its executive vice-president. RMA predicts that not less than \$150,000,000 in the sale of radio equipment will be diverted into business channels within the next 30 days—no small part of which should come from a greatly increased pre-holiday sale of radio sets due to unusual program events such as this game.

So here's our word to the wise—There is an intense public interest in this unprecedented event. Your publicity efforts will do the rest.

\$5

First!

E. D. Cameron, Allentown, Pa., has worked out a "canned sales talk" that converts demonstration requests into sure sales

IN THE Old West, back in frontier days, gun-toting citizens learned to face an emergency by shooting first and arguing later. Rough as this code might seem, it saved the skin of many a pioneer. For unpleasant things rarely happened to the man who was quick on the draw.

E. Duncan Cameron, Allentown, Pa., piano, furniture and radio dealer, applies the same psychology to the radio business. When a customer requests a home demonstration he obtains a portion of the down-payment first and demonstrates later. By reversing the usual order of demonstration and sale he thus makes certain that every bona-fide customer who secures a home demonstration from the store will eventually buy there.

A convincing "canned sales talk" does the trick.

The instant a home trial is requested he agrees to install a set and then, matter-of-fact, asks for the entire

down-payment, pointing out that this sum will be refunded if the set proves unsatisfactory. The average customer, as may well be imagined, instantly balks and contends that it is possible to obtain a *free* demonstration elsewhere. Cameron, prepared for the inevitable, replys:

"Well, Mr. Jones, I naturally assume that you entered my store because you have confidence in us. You must know that we are reputable people or you would not have bothered to come in, would you?"

The average customer answers this question in the affirmative, so Cameron continues—"If you feel sure that we will give you a square deal it is merely a matter of selecting a set which will satisfy you, then?" And at this point he maneuvers the customer

to a position on the floor from which the entire set display may be seen at once and points to one receiver after the other. "We have the Brunswick, over there on the left, the General Electric, Philco, Victor, Bosch and Atwater Kent, all nationally known sets. Surely one of these receivers will satisfy you."

Here again the customer will usually agree, unless he is shopping for rock-bottom price or does not intend to buy immediately. And Cameron springs his closing

"If you are sure that one of these sets will satisfy and if you are equally certain that the Cameron Piano Company gives satisfactory service I'll tell you what we'll do. Pay me \$5 to be applied against the down-payment on any set in the store and select the one which appeals to

you most. I will install it at once. If, at the end of a 30-day trial, you like it, pay the balance of the down-payment or the entire cash price. If you are not satisfied, pay the remainder of the down payment and I will bring the other sets to your home, one at a time, until you are satisfied. You run absolutely no risk at all."

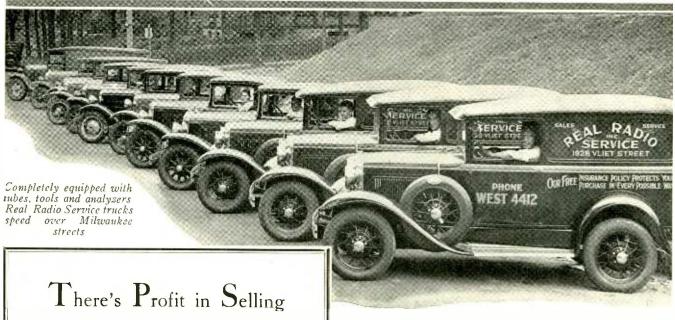
Most of Cameron's sets are sold this way. (Correspond with him for verification.) "Do you have to take the first set out and demonstrate others very often?" we asked him, thinking of the expense involved if the plan went haywire. "No," he replied, "we rarely ever find it necessary to pull the first set and in no instance have we demonstrated more than three. I suppose it is the same old sales logic known to most specialty salesmen. Get the merchandise into the customer's hands, persuade him to give it a fair trial and the sale sticks."

The path of least resistance is not always the best road for the salesman to follow for it is well known that people rarely place a high value on merchandise obtained for nothing. By facing sales problems squarely when they first crop up much expense and needless inconvenience is avoided by the dealer at the very outset.



He Demonstrates Later

Radio Retailing, December, 1930



Through Service

Sales \$68,576.50

Merchandise, January 1... \$11,794 20 Purchases, less credits.... 35,778.70

\$47,572.90

Merchandise, July 1..... 8,129.25

Total merchandise..... \$39,443.65 \$39,443.65

Operating

Advertising	\$1,621.91
Automobiles and repairing	1,795.13
Commissions	5,304.10
Executive salaries	3,440.00
General expense	695.88
Interest paid	105.00
Light, heat and power	338.71
Payroll	5,829.87
(includes selling and service)	
Office salaries	1,040.00
Rent	975 . 95
Office supplies and expenses	295.97
Telephone and telegraph	253.97
Insurance	533.63
Association dues	70.00
Taxes	622.66
Depreciation	296.22

\$23,259.00 \$23,259.00

Total.....\$62,702.65 Bad debts....

Net gain..... \$5,535.98

Financial Statement, Real Radio Service, Inc., First Six Months, 1930

The

Serviceman

Should

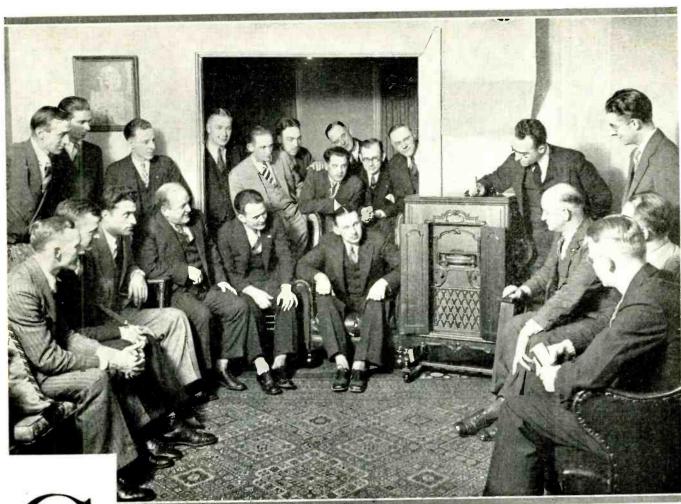
Bv

Tom F. Blackburn

EGEND has it that in ancient Greece, if you were a good boy and laid proper votive offerings before the oracle at Delphi, you would hear some Good Advice. Wisps of smoke curled up from this cleft in the rocks, and occasionally came a rumbling bass voice from below. The oracle spoke! You knew just what

It is human nature to ask an oracle what to do. Who then, in radio, is a better one than the flesh and blood wizard, kneeling on the parlor rug and making the old radio go? He has proved his qualifications as an expert; he is a welcomed caller.

That this is fact, not fancy, is convincingly attested by the successful experience of one of the most outstanding radio service-sales operations in the country. The Real Radio Service, Inc., Milwaukee, Wis., operates a round dozen sales and service automobiles. This firm did a business of \$68,576.50 during the first six months of 1930, compared to \$63,064.19 during the same period in



ELL

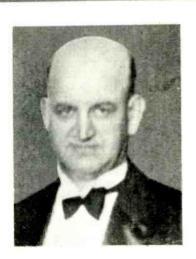
piping, prosperous 1929. Tubes and other materials sold

by the serviceman accounted for a fifth of this volume.

"The serviceman should sell," states W. F. Seemuth,
president of this aggressive outfit. "He's the connecting link with the future market. Wisconsin is 90 per cent saturated with radio of one kind or another. Fully half the sets are battery operated. The serviceman is first to learn of growing dissatisfaction with obsolete receivers. By his work in giving satisfaction, he has the owner's regard. He is in a logical position to advise on the matter of a new radio, and to bring the prospect to the store. Again I say: the serviceman should sell."

Account for 20 Per Cent of Sales

From the start seven years ago when A. E. Lovdal, vice-president, operated the store, this firm has inclined to the service angle. Today it services five times as much repair work as the company's own sales require. Anywhere in Milwaukee you will see Real Radio Service



He's a 20% Sales Factor, says SEEMUTH

trucks go flitting by with "sales-servicers" at the wheel. Twenty per cent of all sales originate with the servicemen. And half of these come through pleased purchasers who have liked the service they have received. Speaking of old customers, it might be well to mention here that each customer is given a satisfaction insurance policy. Also the Real Radio Service is one of the few houses that will slip a new radio in the truck as a "loaner" if the

old set has to be pulled for repairs. If the bill is going to run 10 to 15 per cent of the price of a new receiver the serviceman mentions that this amount, plus the trade-in value, warrants a new set. Frequently he completes the deal. He receives 4½ per cent commission on all set business he is instrumental in closing. Seemuth's "Class A" servicemen receive a salary of \$33 per week and a bonus of \$2 a week payable annually on Dec. 2 of each year.

Real Radio Service, Inc., services sets for everybody. Taking full advantage of the opportunity for broadening the clientele of their firm these fellows dig up enough sales leads to keep four salesmen busy-on a split commission basis.

Located on Vliet Street, in a minor Milwaukee business neighborhood, Real Radio Service gets its calls through telephone responses to advertising. Servicemen handle orders in rotation, keeping a record of time and materials. In a day's time, each man will accomplish this average:

- 1. Make ten calls.
- 2. Sell an average repair bill of \$1.20 to each house visited.
- 3. Sell five tubes a day.
- 4. Will dig up one good lead a day (and 90 per cent of sales made from serviceman's leads stick).
- 5. Occasionally originates and closes a set sale himself.

Every Man Is Needed!

Should servicemen sell? Sentiment has always been about equally divided on this question. Some dealers insist that sales work lessens the efficiency of their servicemen and results in greater ultimate cost while others believe that these men can sell without jeopardizing their repair work and, furthermore that they are in a strategic position to do so most effectively.

In normal times there is much to be said for both sides but today, with sales off and business facing a crisis, Radio Retailing believes that every man who can sell, regardless of his position, should be geared to this task.



The importance of the personal appearance of service-salesmen is stressed

In an organization which deals with many scattered

With common

sense and tact, the service-

man simply learns to guide

an obvious situation into

action. No Real Radio man

would ever blunder as did

the lad who was asked his

opinion of the family's

radio. He blurted out:

"Well, I don't know-I've

fixed 75 of them this month

already." And that con-

cerning a set purchased

The Telephone's a Major

Sales Tool

from his boss.

questions.

customers who never see the store, adequate telephone service is necessary. Batteries of telephones on both Mr. Seemuth's and Mr. Lovdal's desks insure that the customer always deals with a principal who can talk to the point. Both men are experts and can intelligently advise customers over the telephone.

The house has a flat rule of offering no trade-in and accepting no trade-in on a sale of less than \$100. On higher amounts the commission arrangement does not apply on the allowance, with the result that salesmen and service - salesmen fight to allow as little as possible. Principals must approve all trades.

Should the serviceman "During times like these, by all means," declared Seemuth. "But they must be trained and have the ability to know where service, which must come first, leaves off and selling begins."

It is the policy of the service-salesmen to invite customers to call at the store, where a comprehensive display is maintained-made the more attractive by well placed vases filled with freshly cut flowers. No particular brand is featured, dependence being placed on the national advertising and word of mouth of friends to register a preference. Six makes were on the floor (Majestic, Atwater Kent, Victor, Philco, Spartan, Kellogg). One refrigerator is sold (Majestic). Two brands of tubes are carried (Cunningham and Radiotrons).

Even on blue Monday the service telephones keep tinkling constantly. Mr. Seemuth tossed down the figures and said:

"We know we are on the right track. yourself."

Picking Them for Their Personality

To get servicemen who will sell, declares Mr. Seemuth, you not only have to pick men who can do repair work, but choose individuals who have personality. A bright eyed look, a balanced mind, sound servicing experience and—an agreeable personality. All of the Real Servicemen are high school graduates and hold service certificates for training. No kids are used. The men look spruce and trim. One cannot tell them from salesmen

Strangely enough, it is hard for the serviceman to realize that there is as much art in using one's tongue as in the dextrously handling of tools. They are taught, therefore, that high pressure work is not necessary in service selling. The family gathers around and asks

Simple and Usable Inventory

N INVENTORY may be merely a hit and miss listing of stock, or, if planned with an appreciation of its place in the financial statement picture, it can be so taken as to be of actual use in many worthwhile ways. The suggested form and accompanying explanation is designed to help the dealer inventory accurately and obtain usable data.

It is essential that we appraise each item conservatively. Over-valuation is, in effect, the inclusion of profit that has not been earned. Note that the form below provides for grouping the various outstanding classifications of stock and provides a column for present market value.

A simple inventory form, prepared in advance, and classified for ready reference is the first essential of any workmanlike job of inventory taking.

Classifications and the sub-items such as model number should be listed in advance of the actual inventory taking. We are then ready for a quick and accurate job when the day arrives. The procedure should be as follows:

INVENTORY—To assure accuracy, wherever possible have two persons make independent records. Compare these immediately after the job is finished so that differences can be investigated and errors corrected.

EXTENSIONS—The first column is of course reserved for the quantity count. In the second column record the cost of the merchandise to you at its unit price and in the third column, the total cost. Where two or more similar articles have been purchased at different prices figure the average unit cost.

MARKET VALUE—It is very important that the present market value also is listed as in some instances this is the figure used in computing the total value of stock. In these inventories there is frequently a wide difference between original cost and present market value. Conservatism demands that we take into account any fall in value since the purchase date and on the other hand disregard any increase. In the second pair of money columns we put down, therefore, what we would pay for the articles if purchased now.

DEPRECIATION—The sixth column carries our "reserve for depreciation of stock." It is used only in instances where the present market value of an article is lower than its original cost. In such instances it is the difference between column three and column five.

AFTER the pricing has been done and all extensions made, the schedule should be footed and summarized as in figure 2. We have developed the actual cost of the stock on hand—\$2,635; the shrinkage in value resulting from decreases in price—\$213, and our actual inventory as it should go into our statements, at the market or the cost price, whichever is the lower.

The completed record before being tucked away should be gone over thoroughly with the idea of bringing to view slow moving stock that might well be disposed of at a low price, thereby preventing further loss and releasing capital for more profitable employment.

To insure a correct picture of one's business the inventory detail must include a careful observance of the following:

- (a) Determine that all merchandise received, sold and inventoried has been charged to purchases and that all defective stock returned for credit has been recorded.
- (b) Include only merchandise that has been purchased for resale. Consigned stock on hand must be omitted as title is retained by the consignor.
- (c) Be sure that all sales have been recorded up to the time of taking stock.
- (d) Include on inventory all merchandise out on trial for which sale has not been completed.
- (e) Do not record merchandise taken in trade with the new stock. Prepare a special record to supplement the regular inventory.
- (f) When counting tubes do not overlook those in the display sets on the floor.
- (g) Develop your final total of the *lower of cost* price or present market price by setting up this reserve against actual cost.

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On What Terms

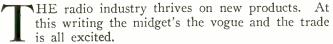
Shall WE

Sell It?

A Banker Discusses Midget Financing Policies . . . Vogue Due to Present Economic Cycle

By E. Carlisle Hunter

Manager of New Business
Bankers-Commercial Security Company, Inc.



Remember way back in 1927 when the table set with its detached speaker was a popular seller? Why did it go out of style? Granted that technical improvements and the unit assembly gave the console the "edge," nevertheless a big contributing factor was—Prosperity.

But prosperity died a sudden death last fall and, by the same token, it was inevitable that radio prices would take a sharp drop. This, together with technical improvements which made practicable a receiver of compact dimensions, account for the phenomena of the midget.

And, because the above principles of human behaviorism are quite fixed, I venture the suggestion that the return of better times likewise will see a wider market for the quality console.

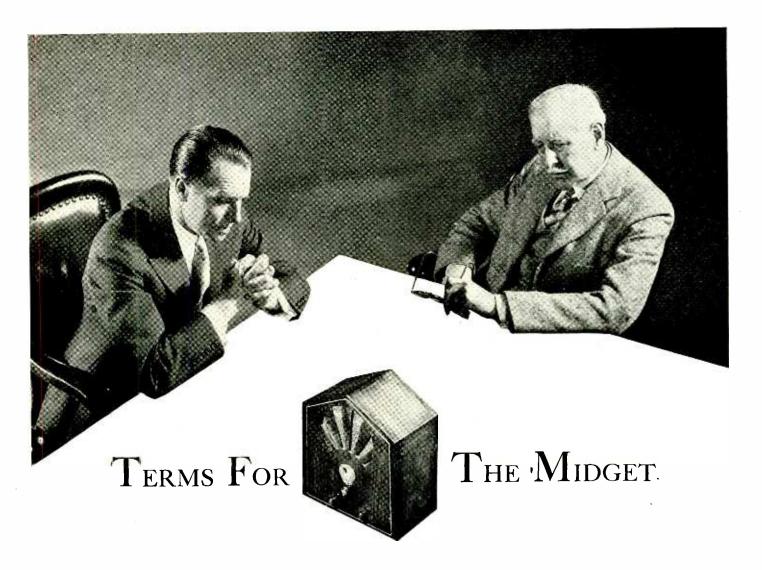
BUT our concern is with the present. Specifically, radio dealers, jobbers and financing houses are asking themselves these questions about the new selling policies which the advent of the mantel set has precipitated: Can it be handled in such a manner that, at the end of the fiscal year, dollar profits in the bank will equal the profits



of the prior twelve month period? On what terms should it be sold? What of the bankers' attitude toward the acceptance of my time purchase contracts on midgets?

Because our time paper from the purchasers of these smaller sets is but a few months old it has not been possible to compile, as yet, statistics comparing the percentage of losses or conversions from this type of business with that of the larger, cabinet model receiver. To date, however, nothing has happened to cause us to reject this type of contract or to radically stiffen the conditions under which we will accept it. This does not mean that we favor the midget being sold on the same terms as the console. Dealers certainly should see to it that not less than 35 per cent of their total midget sales are for cash and that all time sales on sets retailing for less than \$100 are written according to the "dead line" terms in the accompanying box.

Credit responsibility also should be very carefully investigated. Particular attention should be given to the stability of the character and the permanence of the occupation of the customer. The midget set tucks under the arm too readily to afford reliable security on a chattel mortgage. That is the reason for recommending this 15-30 per cent down payment.



Not less than 35 per cent of all sales of sets listing for \$100 or under should be made on a full cash basis. Time sales should be held to the following:

I note that the affiliated	1
distribution houses of a	N
very large electrical manu-	_
facturer of radio sets ad-	N
vises their dealers in the	
following admirable lan-	V
guage concerning the mer-	• •
chandising of smaller sets:	

"It is our opinion that the sale of midgets to the consumer should be on very strict terms. Remember you are seeking profit rather than volume. These sets should be sold for cash or very nearly so whenever possible. Free service should not be for over 90 days. If sold on time, terms should be 50 per cent cash and the balance in 90 days, plus interest. Harsh terms? Granted, but if the prospect for a \$70 radio cannot meet these terms he will certainly need considerable watching."

VIEWING this problem through the eyes of a banker and in the light of the many merchandising and economic cycles which I have witnessed, I do not see cause for great alarm. The public is not "going midget" en toto by any means. There is no need to upset the apple cart especially in view of the fact that the

Minimum carrying charge.....\$6
Minimum cash payment.....\$15
Minimum monthly payment.....\$10
Maximum timesix months

engineering experts on radio receivers are rapidly stabilizing the industry. This must mean that the merchandising of radio is bound to follow. With the elimination of radical improvements will come a

corresponding elimination of quick obsolescence—with its attendant demoralization of price values.

The midget set is filling a definite need right now. Granted there is less profit out of midgets than from the floor types, nevertheless a profit can and should be made by careful management. There are at least half a dozen ways of cutting costs and increasing profit on midgets.

As against these favorable factors it should be borne in mind that two midgets must be sold for each one floor model to give the same gross profit; that advertising space rates are the same; that salesmen's expenses are no lower and that the cost of checking credits and of collecting the payments do not vary.

Each of these pro and con factors must be carefully weighed. Otherwise midget sales will result in loss rather than a profit. Know your costs!

L'elevision

Equipment is in an advanced experimental stage but is not ready for general public on basis comparable with radio. Televisors will probably supplement, rather than replace, present receivers



Shortwave and Television Lab.

Western Television's Job



The

The Jenkins Radiovisor

Three
Typical
Televisors

All three models receive picture-forming impulses via shortwave tuners with specially designed audio amplifiers. A separate set must be used in each case for the reception of the sound portion of television transmissions

OME DAY—possibly two, perhaps five years from now—television will undoubtedly supplement radio in many American homes. No one can predict with accuracy just when it will "arrive" commercially, but one thing appears certain: television, despite its amazing progress and its present fascination for the home experimenter, is not yet ready for general adoption by the public. Imperfections exist which militate against the lasting entertainment value of present equipment.

Consider, if you will, television as we have it today and some of its problems:

Headphone Results, Console Prices

Televisors of the mechanical type alone are available. The user of such a device views a modulated light source through the "scanning" holes of a whirling disc. To our knowledge, no assembly of this kind suitable for home use produces a basic picture over $1\frac{1}{2}$ inches square. A magnifying lens then enlarges this image to a maximum of 8 inches overall, a size which would be satisfactory for ordinary use were it not for the fact that the magnified picture so obtained must be viewed from a critical focal point about five feet away, near center. An audience, even of three persons, must thus "put their heads together."

Horizontal scanning lines, corresponding in number to the disc holes, are plainly visible in all pictures and while these do not materially obscure the image they are too pronounced for comfort. "Flicker," a function of the number of pictures formed per second and image brilliancy, is not noticeably bad. Image brilliancy, on the other hand, leaves much to be desired even when the televisor is operated in a darkened room and a pronounced color-tint, due to the use of gaseous tubes as a modulated light source, does not help matters any.

Despite these imperfections picture detail is usually good enough to permit easy recognition of a familiar face; sufficiently so as to convince us that the mechanical scanning system of transmission is basically sound and susceptible of further development even though it may not be satisfactory for entertainment purposes at this time. Co-ordination of the televised picture with sound produces a pleasing illusion of realism which partially compensates for the lack of minute detail.

As We See It

By W. W. MacDonald

Image size can be materially increased where unlimited signal amplification is practicable—in an experimental laboratory, for example. By using 50-watt tubes or better in a high-gain amplifier and a jumbo scanning disc, pictures can be enlarged considerably. Many public demonstrations of television which have attracted widespread attention owe no little of their success to the use of amplifiers which would be quite impracticable for home use due to the necessity for dangerously high-voltages and prohibitively expensive equipment.

Pictures have even been projected upon a screen by using a sensitive light valve and a powerful modulated arc where tremendous amplification was available and colored transmission over land wires was accomplished years ago with the aid of expensive and complicated equipdemonstrations, ment. Such though helpful in the development of the art, do not offer a satisfactory solution for home television apparatus problems.

Even if it were possible to obtain the high-amplification necessary to increase image size materially in small space, and cheaply, by-product difficulties would still be present. With any increase in picture brilliancy "flicker" becomes more noticeable. It would probably be necessary to increase the number of transmitted "frames," or pictures, per second.

Receivers, Transmitter Synchronized

Television involves the synchronization of the receiver's scanning disc speed with that of of the transmitter disc and this problem alone is a difficult one. Where both transmitter and receiver operate on a.c. supplied by a common power system, synchronous motors, similar to those used in some electric clocks, offer a possible solution and keep the respective discs fairly well in step. It is, however, not enough that transmitter and receiver be operated on a.c. having the same frequency. They

The Image....

No televisor designed for home use, to our knowledge, produces an original picture over 1) inches square

Magnifying lenses are provided in most commercial jobs which increase the image size to a maximum of 6 inches square

Such lenses, with their narrow (seal angle, prohibit the comfortable viewing of the image by more than three persons at one time and even this number must be carefully grouped.

Horizontal lines corresponding to the number of holes employed in the stanning disc are plainly visible in all transmissions, though these do not materially obscure the image

"Flicker" is not objectionable

Images have a pronounced color tint due us the use of gaseous lamps a sources of illumination but despite this coloring the detail is good enough to permit easy recognition of a familiar face

Co-ordination of the televised picture with sound produces a pleasing illusion of realism which partially compensates for lack of minute detail

All home televisors which have appeared to date must be operated in a completely darkened room if satisfactory picture brilliancy is to be obtained

"Framing," or the centering of pictures in the relevisor viewing aperture, is easily accomplished though at times all pictures "creep" and waver

Static and electrical disturbances are more noticeable in televised pictures than its sound reception

must be on the same or on synchronized distribution lines.

This system of synchronization is employed by existing television stations. In the East, Manhattan Island, Westchester County and western Long Island, comprising the thickly populated areas of New York City, are supplied by a common a.c. distribution system. New Jersey, eastern Pennsylvania and portions of New York State adjacent are served by one power system. Lower New England obtains its power from a common supply source. Chicago and considerable of the surrounding territory is on synchronized lines. And many larger areas in the Middle West and Far West are similarly situated, lending themselves to local television transmission and synchronized reception.

Several automatic synchronizing systems have also been devised to permit the use of 60-cycle televisors on power lines remote from the transmitter's current supply. The only one of these now in commercial use is a "phonic

motor" operating on the 720 cycle component inherent in 48 line. 15 frame transmission. This device applies a braking action or an accelerating action to the main synchronous motor used to drive the receiving disc in accordance with transmitted impulses and thus keeps the receiving disc in step. Another system proposed involves the transmission of a separate synchronizing signal on a separate wave length.

The synchronizing methods described are fairly satisfactory and as a result "framing," or centering of the pictures in the televisor viewing aperture, can be accomplished without great difficulty. All television pictures "creep" occasionally due to imperfect synchronization, nevertheless, and there is room for improvement in this direction.

Transmission Standards Lacking

Televisors designed for 48 line scanning will work only when synchronized with transmissions having the same characteristics and cannot receive 45 line or 60 line broadcasts, and vice versa. This introduces another handicap, as may be readily seen upon examination of the following table. Stations listed now transmit television signals for several hours each weekday in the licensed 2000-2950 Kc. band.

WIXAV	Boston	48 line, 15 frame	Sound, WEEI
W2XBS	New York	60 line, 20 frame	No sound
W2XR W2XCR W3XK	New York Jersey City Wheaton, Md.	48 line, 15 frame 48 line, 15 frame 48 line, 15 frame 48 line, 15 frame	Sound, W2XAR Sound, W2XCD No sound
$egin{array}{c} W9XAP \ W9XAO \end{array}$	Chicago	45 line, 15 frame	Sound, WMAQ
	Chicago	45 line, 15 frame	Sound, WIBO

Standardization of scanning lines has been suggested and this procedure would no doubt stimulate the immediate sale of television apparatus and give "lookers-in" better service temporarily. It is our belief, however, that the universal adoption of any scanning frequency now in use as a standard would seriously handicap experimental development and hold back television's eventual perfection. Perhaps 60 line, 72 line or some entirely new scanning division will eventually prove most efficient.

In addition to the stations listed some 20 others have been licensed but these are either temporarily off the air or are transmitting purely experimental programs at odd hours. Applications for others are pending in Washington but no information is available concerning the character of transmission proposed.

The transmission problem is further complicated by the channel requirements of television stations. sound stations can operate with 10 kc. separation present television transmitters require at least 100 kc. band width in order to broadcast halftones with satisfactory detail. The Federal Radio Commission is already embarrassed by requests for wave lengths due to the narrowness of available bands. Television stations now operate just above broadcast channels. Marine and other important commercial services are just below the broadcast band, and the frequencies still lower are also occupied. High frequencies, the short waves, are not particularly suitable for television due to the tendency of receivers operating at such frequencies to cut off necessary sidebands and the difficulty of securing essential radio-frequency amplification. Where shall we put new television stations?

The assignment of wave lengths for the new service seems destined to be a "sticker" of no mean proportions, especially when we know that television broadcasts will achieve "dx" and that interference is even more annoying in picture reception than it ever has been in sound.

Electrical Scanning Progresses

So far, we have discussed only mechanical scanning, or motor and disc television, as this method is in commercial use. At least two laboratories have developed electrical scanning systems which do away with moving parts entirely and employ "oscillograph" tubes or other similar electronic devices in their stead. Should the electrical method of scanning be destined to replace the mechanical and there is a bare possibility that it may, the general introduction of television to the American home would probably come no sooner. For the tubes used in such receivers have been produced only for laboratory use, at tremendous expense, and are by no means commercial. Electronic scanning, no matter what its future, is even more definitely in the laboratory stage than mechanical scanning at this time.

Motor and disc scanning, now appreciably in the lead. may be the first to achieve perfection. After all, mechanical television apparatus would not be objectionable for home use if properly designed, and may eventually prove the cheaper and least troublesome of the two methods. Many of our household appliances use motors.

We may possibly see a merging of mechanical and electrical systems before the curtain finally rings down on laboratory development. Perhaps televisors of both types will some day be offered for the reception of universal transmissions. Or one method may so far outstrip the other as to command an unobstructed field. No one knows. Electrical scanning offers much, theoretically, but to date has shown us no better images. Here, as in other directions, there is much uncertainty which must be cleared up before home television can be safely launched.

Now an Experimenter's Market

Today, television apparatus is suitable for use by dyed-in-the-wool experimenters and the results obtained are sufficiently good to fascinate this type of buyer. If wave lengths change the experimenter will not balk at unwinding a few turns of wire from the tuning coils of his television receiver. If the number of scanning lines change he will cheerfully invest in a new scanning disc. It does not seem, however, that television experimenters can be created as easily as radio "fans" in the early days, for in addition to the uncertain status of wave lengths the scanning systems introduce another variable. Also, the initial investment is considerably higher.

Kits comprising the essentials of a televisor are available at the present time for about \$100 and it is possible for experimenters to assemble their own for even less money. But in addition to the scanning mechanism a television receiver must be obtained and inasmuch as these use several stages of radio-frequency and employ special resistance-coupled audio amplifiers having an especially wide frequency range the total "entrance fee" is high. To receive co-ordinated sound still another receiver is required.

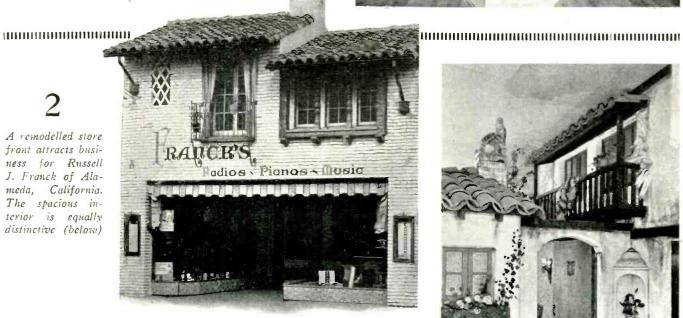
Early scanning equipment sales will be largely in kit form and with the demand for such knockdown apparatus a market for television receiver parts, particularly resistance coupling components, will probably spring up. Experimenters with more money to spend, and with greater faith in the permanency of existing transmission systems, will purchase completely assembled cabinet type televisors similar to those already offered with specially

(Please turn to page 53)

Unusual STORES

Lyn 1 D. Smith's log-cabin store in Albion, Nebraska, is without duplicate. Simplicity is its decorative keynote

A remodelled store front attracts business for Russell J. Franck of Alameda, California. The spacious interior is equally distinctive (below)





Radio Retailing, December, 1930



Quarg's Music Company of San Francisco has a Spanish street interior. This is just one corner of the salesroom (above)

They're

One JUMP

Sales Ideas Devised by Go-GETTERS To Keep Them "Out in Front"



Test Your Own Tubes

Santa Claus

BE YOUR OWN
Santa Claus

"Bring your tubes to us, we test them free"—a new twist and is pushing replacements over his counter at a great rate. Attached to a ledge outside the show window is a small panel on which two sockets are

the show window is a small panel on which two sockets are mounted, one for heater type tubes and the other for the four-prong variety. These sockets are wired directly to a large test meter placed inside the window and visible from the sockets. Over the meter a sign reads:

"It may not be burned out! Don't throw away your old tubes until you have tested them here. It's free."

By actual count, seven out of ten who test tubes at the sockets come in for replacements. People who would hesitate to bring tubes into the shop for fear a salesman would "sell" them something apparently do not hesitate to help themselves to service, cafeteria style. The meter is hooked up to give a filament test only but ingenious servicemen could hook-up a practically fool-proof circuit to test plate current and other constants as well.

Makes "Merry Xmas" Records

AN UP and at 'em idea introduced in Portland, Ore., by the J. K. Gill Company is booming Christmas combination business. Gill demonstrates new recording phono-radio combinations at club meetings and similar social gatherings and sells personal recordings to be mailed as Christmas greetings for 50 cents a record. The club members step up to the microphone, say "hello" to distant friends and mail the record instead of a commonplace greeting card. The idea has not only been a means of obtaining a phono-radio prospect list but has been self-supporting.

Gill started booming home recording instruments in November by demonstrating in the store and offering in the company newspaper advertisements 100 recordings free.

Howard's "Chinee New Year"

FROM time immemorial man has had a desire to start the slate clean with the new year," R. W. Howard of Howard's Music Shoppe, Alameda, Calif., writes us. "In the Orient this phrase applies to the physical things of life as well as to the spiritual. Chinamen try to clear off debts when the new year is at hand just as we, of the

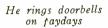


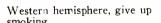
This 15-foot wooden scale reproduction, visible several blocks away on Wichita, Kansas' main street, sells for the Innes Music Company. A stock receiver and power-amplifier make it "perk"



A ten-day demonstration, staged from 8 to 10:30 each evening in the lobby of the Belmont Theater, Chicago, by H. M. Michel of Tri-Par Radio, unearthed 200 prospects to whom 30 sets have already been sold. People waiting for seats were permitted to cut records and outside salesmen followed up the leads

Ahead





smoking.
"This idea suggested collection letter and I have since found it to be particularly effective if used in December. Here's the form: Dear Customer:

It has been a Chinese custom from time immemorial

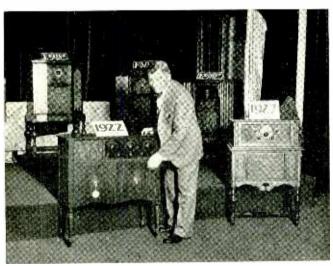
to hold festival celebrations on New Year's Eve. But New Year's means something more to the Chinese. They invariably make an attempt to pay all outstanding bills in order to start the year with a clean slate.

We can think of no better example for Americans than this "old Chinese custom". Won't you please fill out a check and mail it to us so that you too, may start the year with a clean slate?

Yours very truly,

HOWARD'S RADIO SHOPPE'

In California this collection letter instantly "clicks" due, no doubt, to the large oriental population and comparative familiarity with oriental custom. It should however, be of value in other sections of the country.



In Chicago, Louis J. Solar shows 'em by actual comparison that the new radios have something on the older models still in use at home. How's this for a store "clincher"?



Jack Ward of Omaha, Nebraska, caters to mill workers. So he canvasses on pay-day. "Tuck a few bills in your pocket and sandwich collections in with sales," he advises

Now, the "Grown-up" Midget

FULLY 95 per cent of all midgets sold by the Sachs Stores in the Harlem section of New York City, and that means plenty, go out in console cabinets, Sidney Joffee tells us. By discarding the original cabinets and installing midget chassis in more impressive ones the price

of the receiver may be jacked up, so that the margin is better, without requiring a list which is too close to the larger models to permit the "grown-up" midgets to be sold.

Julius Mukasie of 108 East 170th St., also in New York City,

Majestic

goes Joffee one better and installs midget chassis in occasional pieces, desks, wine cabinets, or whatever articles of furniture his customers may have. The midget chassis is certainly a flexible piece of merchandise and money is to be made by selling original ideas of this kind. What have you?

"License Plate Publicity"

IN ERIE, PA., a moving picture theater is co-operating with four Brunswick radio dealers to secure widespread publicity. The Winter Piano Company. Campbell and Parker, Epp Furniture Company and Stanley Brothers select several license plate numbers each day from cars seen in and around the shopping district. The plate numbers are listed in advertising placed with the Erie Times by these dealers and the owner of the car listed is offered two tickets to the Columbia Theater. It is necessary to call at the store advertising the plate number to secure these passes, however. vertising the plate number to secure these passes, however.

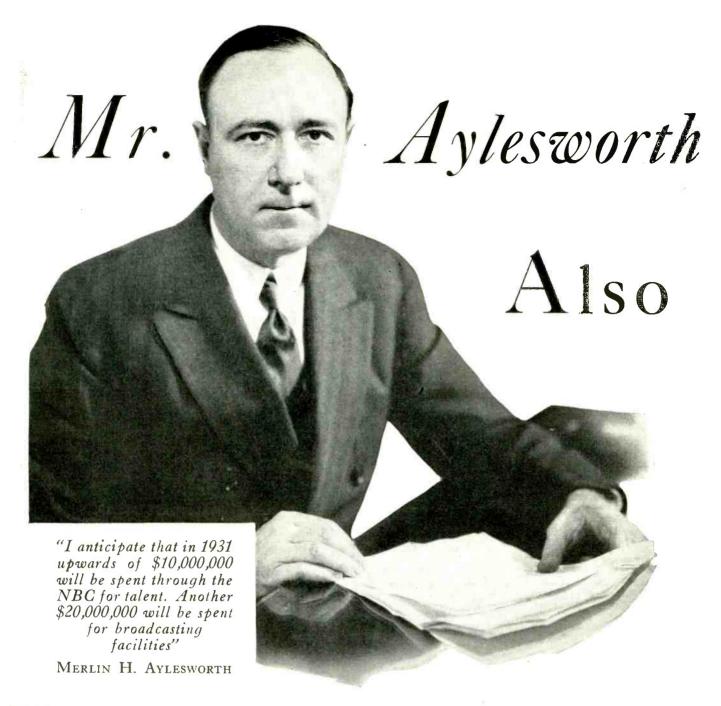
Frank Brown, theater manager, has permitted a display of sets to be arranged in the Columbia lobby. The stunt was advertised in the *Times* for several weeks prior to its inauguration. The dealers naturally mention the prize-set-display in the Columbia in their advertising so it pays Brown to co-operate.

Service Man Calls Back for Money

A MIDWEST dealer found that service calls of less than \$10 were exceedingly difficult to And yet, to strictly enforce the rule that all service calls

collect. And yet, to strictly enforce the rule that all service calls must be C.O.D. would antagonize many valuable customers who did not have the money available when the service was rendered. To ease out of the predicament profitably, this dealer made the ruling that his service men must call back within twenty-four hours to make the collection whenever the customer did not pay immediately. The call was left open on the service report until the collection was made.

Radio Retailing, December, 1930



HAVE been much interested in reading an article, which appeared in a recent issue of *Radio Retailing*, constituting a challenge to the radio dealer.

I agree quite thoroughly with the spirit of this article, which pretty nearly parallels my experience, so far as I have had any, with the attitude of the salesman whose job it is to sell radio receiving sets to the public.

To the average salesman a receiving set is simply a mechanism, about which he knows practically nothing, enclosed in a variety of cabinets or consoles designed to harmonize with well known periods of furniture. This salesman knows that if he turns a dial to a certain number he will in all probability get a certain well known station. This information he passes along to the prospective purchaser with, perhaps, a little trade jargon and some passing remark about "a swell piece of furniture." I do not think I stretch the truth in making the statement that there could be more intelligent selling employed in the marketing of radio receiving sets.

The chances are that the prospective purchaser knows as much about radio receiving sets as the sales-

man, and this together with the phenomenal demand for sets of all kinds is one reason why this industry has progressed so rapidly and the sale of radio equipment been so large. Very few customers to date have had to be sold on "radio." They were sold on broadcasting before they came to the dealer. The problem was the one of the selection of a proper receiver.

As the art of broadcasting advances, however, the manufacture and sale of radio receiving sets will come more nearly on a plane with other forms of merchandising. By the same token, when the first novelty and magic of broadcasting begins to wear off, then it is that the weakness in radio selling will manifest itself and special measures will then be needed if the industry is to be kept on an even keel. Shortly dealers will have to know more about the program end of their business—and how to merchandise them.

Already, the radio public shows marked discrimination as to length and quality of programs. Speaking in national terms, and based on a coverage of thirteen million families owning radio receiving sets, the aver-

President of NBC claims dealers are neglecting sales opportunity by not emphasizing programs



Challenges!

age use is found to be two and one-half hours a day. No longer does someone in the family set the dial at a fixed point and let the radio run all day long. At the best, this method was more interesting than important and soon made of the radio a nuisance in the home rather than a source of enjoyment.

Programs are increasingly the result of careful selection and a great majority of families make up their evening program on the radio with the same care and discrimination that would attend the purchase of tickets to high-class theatrical performances. The art of programming is advancing so rapidly that, while by no means an exact science, yet so much in the way of variety is presented that each type of family can find its own peculiar sort of entertainment without going outside the boundaries of the networks.

I anticipate that in 1931 upwards of ten million dollars will be spent through the N.B.C. for talent. Another twenty million dollars will be spent for broadcasting facilities and in placing this talent on the air. This huge amount of money will be expended with the underlying purpose of furnishing the families of this country with the best programs, both sponsored and sustaining, that money and musical and dramatic knowledge—plus many other resources—can obtain.

The radio salesman of the immediate future will be a man who knows much about radio programs. He will have at least an academic knowledge of music—which is the great common denominator of broadcasting. He will be alive to the value of sporting events. He will not be unmindful of the place where education and religious inspiration fit into family life. He will size up his customer as he

approaches and sell a radio set based on the programs that it will bring to the family, as well as on the value of the cabinet and the merit of the chassis. Strange to say, all unknown to the average salesman, this "program hunger" is the real reason for much of today's set buying.

Take families located many miles from the city and where, because of distance or occupational pursuits, participation in the cultural and amusement offerings of our large centers is impossible. Such a family buys a radio receiving set solely and entirely for the programs that it brings into the home. One household, full of wide-awake boys and girls, may value the radio because of jazz and dance music. Another, across the street, treasures its radio because of the Philharmonic and the Symphonies and the Grand Operas that are made possible by its installation. Still another family refers to the Sunday programs and the fact that through the radio they are again allowed to participate in religious services long since denied them because of distance from any place of worship. And so on, multiplying instances as the interests, tastes and inclinations of the various homes vary.

THE program's the thing! Upon the skillful making of programs hangs the entire fabric of the radio

industry. This is why we of the National Broadcasting Company, Inc., scan so carefully programs that go out from our studios to the tune of thirty-two hours of diversified program periods every day. There must be variety; there must be taken into account different sections of the country, varying tastes of a heterogeneous group of people such as that included in our (Please turn to page 53)

"The radio salesman of the immediate future will be a man who knows much about radio programs. He will have at least an academic knowledge of music—which is the greatest common denominator of broadcasting. He will not be unmindful of the place where education and religious inspiration fit into the family life"

For You to Use

McGraw-Hill's copy department submits these suggestions for newspaper advertisements

They're IFFERENT and They'll



At a vaudeville show you must take what is offered . . .

Maybe one act out of six in terests you—the rest you just "sit through."

Own a Radio and pick your own program

There need be no dull moments-no tiresome acts—when you dial the programs that please you. Your radio is a stage on which every act is a headliner.

No regular stage performance ever of-fered such a wide variety. Whatever your mood, your radio will respond—music, drama, news, educational features, market reports, skits and sporting events are all awaiting your choice.

The money you now spend for dull hours of amusement will purchase a modern radio. Drop in at the Radio Shop and pick your own programs.

PAUL SMITH'S RADIO SHOP 482 NORTH AVE.

(To Dramatize Programs)

A COMPLETED "AD"

ET'S get away from the trite, from the old drum pounding tactics, in our local ads. Let's strike a few new notes—dramatize the "program appeal" idea or the practical uses of reception facilities, for example. Why not talk directly to the cold prospect. And then let's dress up these new dishes with original, attention-getting drawings.

Many are the ambitious radio dealers who, as they sit down to write "copy," have had these very same thoughts.

But how? There's the rub!

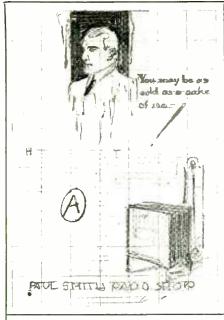
On these pages, Radio Retailing offers specific answers to these problems. To this end it has enlisted the extensive facilities of the McGraw-Hill advertising service department. Copy and layout experts, working in conjunction with Radio Retailing's editorial staff. have prepared four radio advertisements that are different from the hackneyed appeals which the busy and untrained dealer frequently must grind out.

To Use These Advertisements

Your local newspaper representative will be glad to make one or two column line cuts from the finished drawings on these pages; or you can take this issue to any engraver and he will do likewise. The type, of course, will be set by the newspaper according to the style and size you prefer-and to fit the space you are using. We reproduce, however, one complete advertisement as a further aid in this direction.

If you do not have the facilities for having these cuts made locally write to the editorial department of Radio Retailing, specifying the illustrations you are interested in, and we will arrange to give you further help in carrying out these suggestions.

If you wish to use an illustration of the set you are actually selling, your local engraver will tell you how he can strip in a half tone or drawing of your product.



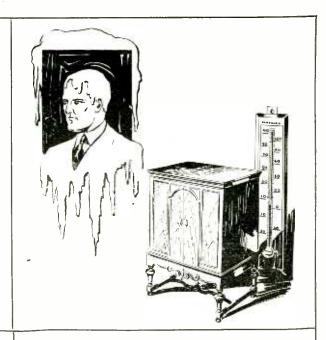
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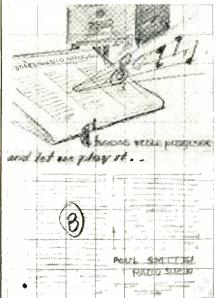
(To Capture the Cynic)

But whatever your prejudice is toward radio we respect it.

Nevertheless, in all fairness, isn't a modern set in the home really indispensable? Played quietly its capacities for entertainment are endless. A really good receiver is a musical instrument of the highest order. And it will place every variety of program at your finger tips.

Come now—thaw out just enough to drop in and let us show you how a radio should be operated. We'll guarantee that you will be amazed. As a sporting proposition, take us up. Give radio a break!



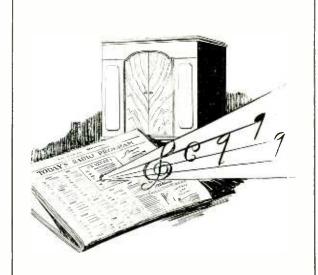


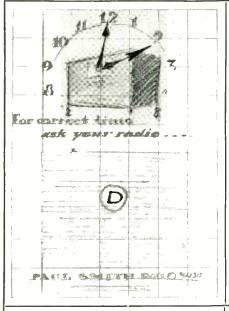
В

(To Bring Them To Your Store)

To Your Store)

That is, if you haven't a radio.
Choose the program you would like to hear—the time is always given—and then drop in at our store. We'll give you a comfortable "front seat" and turn on a set that will amaze you with its clarity.
Radio has made tremendous advances recently. Today's sets duplicate exactly what you would hear were you facing the artists themselves.
Tonight would be a good time to try it. Just pick the type of entertainment you best enjoy and let us recreate it for you. Of course there is no obligation.





D

(To Sell Radio's Practical Uses)

Thousands of set owners use their radio receivers as a master clock—an unfailing timepiece that keeps regular clocks and watches running right—accu. ate to the second.

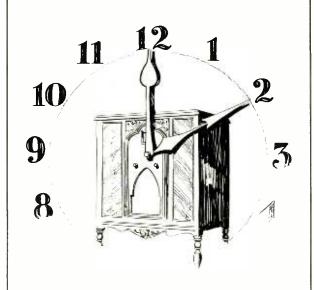
At regular intervals during the hours of reception, your radio announces the correct time. Never need your watch or your clocks be slow or fast.

And that's one of the many things a radio does, aside from its regular job as chief enjoyment d'spenser to the nation.

Pron in and set your

joyment a spenser to the nation.

Prop in and set your watch by one of our radios. Time announ ements are frequent. Or phone for a home demonstration.

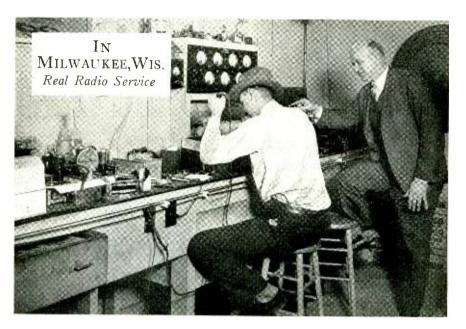


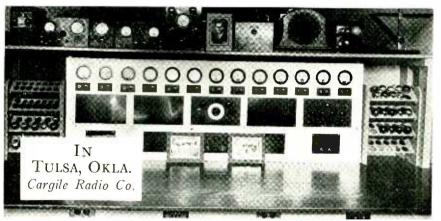
The Rough

The COPY

The Finished Drawing

Is Your Service Shop Underequipped?





LDTIMERS, those who were in the radio business in '23, will no doubt recall early testing equipment. At that time the average service shop boasted an electric soldering-iron (somewhat anæmic), a hydrometer (slightly leaky), a low-resistance voltmeter (responsible for the premature demise of many B-batteries), and the inevitable dry-cell and 'phones combination for "click" method continuity tests.

Today, with all-electric sets predominating, such half-baked instruments do not suffice. For the 110-line, transformers, rectifiers, filters and complex voltagedivider systems have taken the place of batteries and testing is a much more delicate matter. The efficiency of a service-

man no longer depends solely upon his knowledge of radio but hinges also upon the instruments with which he is equipped and his ability to diagnose accurately their telltale fluctuations.

Now, we might say, a good serviceman without equally good analytical instruments is about as deadly, potentially, as a Chicago gumman equipped with a pea-shooter!

118 Dealers Report

The average radio dealer now doing business has a well equipped repair shop, a survey just completed by Radio Retailing shows, though there is plenty of room for improvement. Reports were received from 118 dealers in almost every state, containing

Radio Retailing's Survey shows that average primary radio store has \$464 worth of testing instruments. Dealers own 80% of portable analyzers and 92% of all servicing equipment

much interesting information about service organizations and service instruments.

It was found, for instance, that the average number of servicemen employed full time, all year round, exclusively on radio, was:

Primary radio stores	1.7
Radio-electrical	1.5
Radio service excl	2.
Radio-music	. 2.4
Deb't and Furn	1 1

Basing our calculations upon these units and the total number of retail outlets in these classes, plus hardware, automotive and miscellaneous stores selling radio, it would appear that approximately 55,000 radio servicemen are now employed in the United States by retail stores alone. This figure is conservative. The unit figure for radio-music stores, which might at first seem abnormally high, is influenced by reports from several extremely large outlets of this type, employing 15 or more servicemen.

Shop Instruments, \$277

The average store investment, at wholesale prices, in instruments designed exclusively for shop use, such as complete testing panels, tube-checkers, miscellaneous meters, oscillators and similar equipment, exclusive of portable analyzers, was:

Primary radio store							
Radio-electrical	٠.						158
Radio service excl							554
Radio-music							310
Dep't. and Furn.							365

The exclusive radio service shops, nonselling organizations, appear to be excellently equipped, from the standpoint of instrument variety and modernity, which is to be expected. At first glance the same outstanding excellence might possibly be ascribed also to the department store, furniture and radio-music outlets by virtue of



the high instrument investment of these classes but close examination of the survey reports indicates that their heavy expenditure is due rather to the duplication of equipment so that more men may work simultaneously.

Omitting the exclusive radio servicing organizations, specialists at the game and equipped accordingly, there seems little to choose between the other outlets from the standpoint of servicing instrument merit. Well equipped shops are found in all four classes, and also poor ones.

70% Have Shop Panels

An analysis of reports indicates that 70 per cent of all service shops surveyed are equipped with one or more complete testing panels, or "stationary analyzers," which permit most of the tests required in modern receiver repair work to be performed in a most efficient and economical manner. Breaking this percentage down, we see

16% use manufactured shop test panels 46% use home-assembled panels 8% use remodeled, factory-made types

Apparently, many dealers have preferred to purchase meters separately in order to construct shop panels to their own specifications or have utilized miscellaneous instruments already on hand for this purpose. It seems clear that the trade in general recognizes the value of concentrating all instruments on one central board, so that testing may be accomplished with a minimum of confusion. The remodeled instruments encountered were principally old, manufactured types which have been recently changed over so that screen-grid tube and circuit tests may be made.

It is interesting to note that 30 per cent of all these dealers have no shop test panels and rely either upon portable analyzers or scattered individual instruments for shop

While good service can be rendered by service departments operating in

26% Lack S-G Tests

Fully 26 per cent of the shop test panels reported are not equipped to test either screen-grid circuits or tubes. This does not mean that the dealers so equipped cannot make screen-grid tests however for upon further examination we find that 70 per cent of those with obsolete shop panels have modern tube checkers or portable analyzers capable of making tetrode tests. does indicate, however, a need for modernization of shop test panels, or the purchase of new ones if efficient service is to be rendered, for the value of a panel is sacrificed if other supplemental instruments must be brought into play when routine tests are run.

About 7½ per cent of the dealers surveyed cannot make screen-grid circuit tests except by using makeshift methods though some of these can test the tubes. These dealers, with the exception of the few who buy their service from other organizations, are in a bad way as practically all modern receivers use the four element tube in some stage.

76% Own Oscillators

Radio-frequency oscillators, necessary for the proper aligning of gang tuning con-densers and useful for many other test purposes, are widely used in service shops. Seventy-six per cent of all dealers report the use of such oscillators and 42 per cent of these are of the grid-dip type, with a few using plate circuit resonance indication meters.

Very few dealers own oscillators which can be tuned both to the broadcast band and frequencies in the vicinity of 175 kc.,

this manner there is a definite trend toward the centralization of instruments.

Radio Retailing, December, 1930



which will be used as the intermediate frequency for most new superheterodyne I.F. Few superheterodynes have been sold in past years, hence the low saturation of such duo-purpose oscillators, but there is reason to believe that this situation will change rapidly within the next It is recommended that dealers consider such oscillators as it is practically impossible to align intermediate frequency amplifiers by ear. Some form of oscilla-tor is necessary for this purpose, and it should tune to the broadcast frequencies as well, as most new supers will use band-pass filters and tuned radio frequency stages employing gang tuning units to aid selectivity.

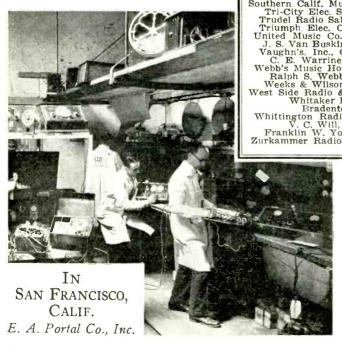
60% Use Ohmmeters

The direct-reading ohnmeter, one of the newest of radio servicing instruments. has

achieved wide popularity in a very short space of time. Our survey indicates that fully 60 per cent of all dealers have one or more meters of this kind for checking replacement resistance values and for mak ing more informative continuity tests. Eighteen per cent of the dealers reporting still check resistance values with direct-reading bridges, practically all home-assembled. The remainder, 22 per cent, either have no facilities for checking re-sistances or must employ a voltmeter and Ohm's Law voltage-drop calculations to arrive at the value.

Resistance values are becoming more and more critical in the new receivers and direct-reading instruments are a great convenience.

Direct-reading capacity meters, or "mi-crofaradmeters," are equally helpful but not as universally used. Only 25 per cent of the shops own such instruments despite





40

the fact that it is a difficult matter to calculate condenser values. No doubt there are a few dealers who use bridges or standard capacity systems for checking condenser values but who did not mention these instruments.

One dealer reported the use of a manufactured standard-signal generator valued

at \$750 retail.

Tube Checkers Modern

Though many dealers may be deficient in other directions this certainly is not true of their tube checking equipment. For 94 per cent have checking instruments which test screen-grid tubes and quite a few say that they are in a position to make pentode tests, if any are required. This does not mean that all these dealers can make analytical circuit tests for, as noted elsewhere, there are many who can test segubes but not the circuits in which they function. Only 6 per cent of all shops are unable to make complete tetrode tests.

Most of the tube checkers reported are used on sales counters. In some instances, however, duplicate checkers are mounted in the service shop itself to avoid loss of time.

Portable Analyzers, \$187

The average retail organization's investment in portable analyzers, at wholesale prices, is \$187—2 analyzers per store. Contrary to popular opinion, fully 80 per cent of all analyzers used by the organizations surveyed, representing both rural and metropolitan districts, are the property of the stores, and are not owned by service employees. Servicemen employed by retailers own only 20 per cent of the portable equipment used when the country as a whole is considered.

Practically all stores surveyed, 99 per cent, use one or more portable analyzers. Ninety-four per cent of these analyzers are factory-built, while the remaining 6

per cent are home-assembled.

13% S-G Shy

Portable analyzers have been in use for several years, much longer than has the average shop test panel and for this reason many more obsolete models are found among these instruments. Radio Retailing's survey indicates that 13 per cent of the portable analyzers in use will not test screengrid tubes and when it is considered that practically all modern sets use tubes of this type, this figure is high. Despite the fact that it is usually a difficult matter to change over portable outfits to make screen-grid tube and circuit tests, dealers who are still using such equipment are urged to change over the analyzers themselves, to return these to the factories for such alteration or to invest in new equipment. The continued use of analyzers which will not make acreen grid tests is noor economy.

make screen-grid tests is poor economy.

Many dealers have elaborate portable analyzers, a close check of the reports indicates. Fully 17 per cent of those now in use have built-in r.f. oscillators, and it is principally in the newer instruments that such oscillators are found. Another 8 per cent of the dealers questioned, who do not have analyzers so equipped, supply their servicemen with separate oscillators for use on outside calls. The majority of these oscillators are simple types and are homeassembled.

Only 5 Buy Service

The average total investment in testing equipment, both portable and for shop use,

at wholesale prices, may be broken down as follows:

Primary radio stores\$	464
Radio-electrical	345
Radio service excl	741
Radio-music	497
Deb't and Furn	552

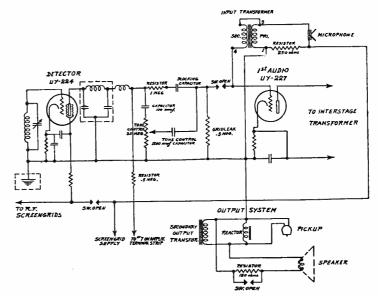
It will be seen, upon examination of the foregoing data, that 92 per cent of all testing equipment owned by the 118 dealers

surveyed, is store owned. Only 5 dealers of the entire number questioned buy their service from specializing organizations and do not own testing equipment other than counter tube checkers.

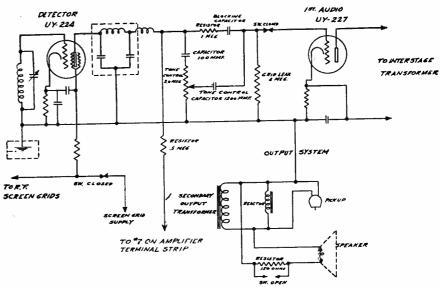
Is your service shop underequipped? Compare your investment and testing equipment with the national averages shown in this article.

Typical Home Recording Circuit

The home-recording and radio-recording feature has been adopted by many manufacturers this year and in order to service such instruments in the field servicemen must be familiar with the systems usually employed. The accompanying diagrams show the switching arrangement in the new RCA Victor RE-57, a typical recording type. Monitor reproduction at a comparatively low volume is obtained in the speaker during recording



Schematic connections between detector and first audio tubes with transfer switch in home-recording position



Schematic connections between detector and first audio tubes with transfer switch in radio-recording position

Radio Retailing, December, 1930

Sales-Service

¶ Areminder

that gives the

customer the

benefit of doubt. ... \ Delicately

suggests prompt payment "nex! time"... . Per-

mits equitable adjustment if

conditions are un-

usal... Retains the debtor's good

will ... Please mail check!"

THE RADIO SHOP

140 Main Street

"Everything in Radio"

November 4, 1930

Mr. John S. Wells 367 mest Avenue Kokano, Ind.

Dear Mr. Wells:

Whomever one of our customers does not promptly remit his first payment under our contract with him his account is automatically referred to me. Your account has now run behind for more than a week. Often, in handling accounts called to my attention, I find that customers have misunderstood or been somewhat confused as to how payments are to be made. Perhaps you have done so.

while as a reminder only we send out our statements shortly before payments are due, you need not wait for these as by chance they may be delayed or fail to reach you. So send in your payments when due and you will receive prompt credit and acknowledgement.

I would like also to ask your co-operation in regard to your payments—that is, that you write me if at any time it is impossible for you to make them on the date on which we agreed. This will prevent the possibility of any misun-dorstanding.

We presume your set has been working satisfactorily as you have not reported trouble. Your free service period has not yet expired and we want to remind you that our sorvice department is always ready to serve you and to keep your radio in good working order.

Will you put your remittance in the enclosed envelope and mail it today?

Yours very truly,

The Radio Shop

Fred R. Marse

lease

How to write effective collection letters

Bv

*Fred R. Morse

November 22, 1930

pvember 17, 1930 ur. John S. Wells 367 West Ave. Kokamo, Ind. You have disappointed me. I expected a reply to my seemt letter regarding payment on your account but none as come. Dear Mr. Wells: It is now almost three weeks since payment was due-your next payment matures in a few days, and I am sure you wint to keep your account in good standing. wint to keep your movement in good begins of credit, broken he have granted you a long period of credit, fact that into monthly payments, because we appreciated the fact that this would make it esser for you to do business and because this would make it esser for you under such conditions, we were confident that, especially under their credit. Fill you not send us your check while this letter is still fresh in your mind? Or at least write to me that I still fresh in your mind? This you have a correct understanding of the situation. This way have a correct understanding of the situation. This may have a correct understanding of the situation. THE RADIO SHOP Fred R. Morse

A stronger reminder. Puts customer on defensive Touches debtor's pride . . . ¶ Appeals to his sense of fair play
¶ "The money or an explanation, please"

*Mr. Morse, now employed in a manufacturer's credit department but experienced in retail collection methods, will gladly answer questions concerning the handling of delinquent accounts. Address him care of *Radio Retailing*.

THE RADIO SHOP 140 Main Street

"Everything in Radio"

Mr. John S. Wells 367 west Ave. Kokamo, Inc.

Sales-Service

Dear Mr. wells:

Are you iil? Have you been absent from home? das some unfortunate circumstance overtaken you?

Ferhaps there is some unusual condition which has prevented you from answering my letters or making your payments.

I am rather of the opinion, however, that you have had the matter fully in mind, but have simply neglected it from a day to day, intending to forward your payment, but never quite getting around to it.

At any rate, I would appreciate it greatly if you would give this account your prompt attention Non. Then you, too,

Yours truly.

THE RADIO SHOP

Fred R. Marie

¶ Distinguishes between a customer in trouble and "poor pay" . . . \P Another reminder that account in bad condition ... I Lets the debtor Thom easy" ... I A firm ending yet not one which arouses resentment

Mail CHECK!

THE sales letter writer has the relatively pleasant task of presenting a radio in such an alluring way that the reader is willing to part with his money to own it. The writer of collection letters, on the other hand, must persuade the man to give up his money for an article from which he has already, in part at least, derived his enjoyment. He has in other words, the proverbially difficult job of inducing a man to "pay for a dead horse."

The successful collection letter writer must bring into play a wide knowledge of human nature and an adaptTHE RADIO SHOP 140 Main Street "Everything in Radio"

Sales-Service

Sales-Service

THE RADIO SHOP

140 Main Street

"Everything in Radio"

ovember 28, 1930

567 west Ave.

Have you any cause for complaint as to the handling at your account since becoming one of our customers? If will you write at once.

I have tried to handle your account in a manner fair 3 you and to this company. I seem to have failed. At lea ou pay no attention to my letters and are letting your account become seriously delinquent.

it is not fair to either of us to compel me to write again and again.

The spirit of the golden rule is strong within us all, however, and I believe you will use the enclosed envelope to mail either your check for the two payments now due or a frank letter explaining why you have not paid.

THE HADIU SHOP

Fred R. More

¶ Assures customer that company is still willing to be "shown" ... ¶ A definite re-proach... ¶ Repeated appeal for cooperation . . . ¶Insistence on payment

ability that enables him to use the wise argument in the right place and at the right time. The common division of debtors into three classes-good, slow and bad pay-is true enough as far as it goes but the problem is not quite so simple. Between the two extremes of good and bad there are a thousand grada-

ember 2, 1930 🖣 A last chance 🞁 explain delinquency... Intimates legation but does not take

tions representing men of different character and in widely different circumstances each of whom presents an individual problem.

the fival jump

Try Personal Letters

Recognizing this, collection managers are coming more and more to the view that there is an element of danger in a too strict adherence to the use of form letters. In the handling of a great many accounts, of course, they are an economic necessity but if any particular account is not fully covered by forms, the wise collection man will not hesitate to discard them entirely and to write special personal letters instead. The man who is worth selling, and whose trade is worth retaining, is certainly worth the trouble required by such proce-

Whatever the kind of letter used, the form or the individual letter, the writer's first care is to give it the right "tone"-dignified and firm, yet considerate and friendly. Getting the right tone into a letter is

(Please turn to page 57)

Monkey Business

Many men of many minds confuse the prospect

By A. Byer

at the Tube Counter

R. SCHLAGENHAUER'S gutteral reminders over WCFL that it is time to go to work are a great help to me as I lie trilling in my bathtub. Imagine my surprise one morning, two months after I had bought my new radio, when I discovered that his stentorian tones had died away to a whisper. Try as I might, I could not get any volume at all.

Surely it would not do to fool with the set. Hadn't the man who installed it taken great care to inform me that I could not harm anything as long as I kept the back of the set to the wall? So I called up the firm that sold me and informed them that some dingus had gone bad.

"It's the tubes," cried the clerk over the telephone. "Bring 'em in and we will test them. Turn your radio around, take them out. You can't harm anything."

First monkey business—The store that sold me was crossed by its own radio man!

I, too, would like to know what's going on.

I finally got the tubes out of the radio and took them downtown—carrying them like so many eggs. The clerk took each one, turned his back, did something I could not see and handed them back.

"They're all right," he grunted.

Second monkeyshine—Hadn't the salesman told me over the telephone that the lack of volume was due to bad tubes?

At Store No. 2

I hadn't seen how they were tested and anyway it didn't sound any too convincing. So bundling up my tubes I trotted on to a chain store that offered free tests. Surely, thought I, a big store like this will give me the correct low-down.

"I'll test them for you," exclaimed a clerk. Back we went to the rear of the store and one by one he plugged them into a dial-faced jigger on the counter before me. Not a needle moved.

"All dead!" exclaimed the salesman. "They must be pretty old."

"Two months," I replied, gathering in my "eggs" and starting on my way.

Store No. 3

The next firm to test my tubes was a large music

"One tube dead, the rest okeh," was the brief pronouncement. This firm had its testing board on the counter in front of me and I could watch the little dials jiggle around. No explanation of what a tube ought to show was forthcoming.

The Last Store

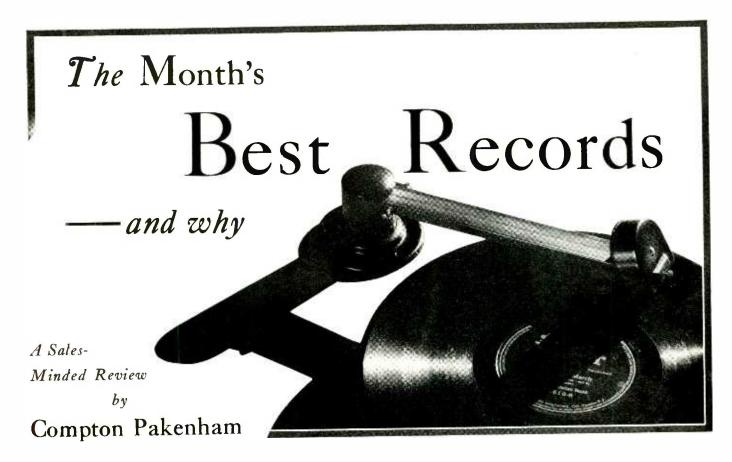
"They're badly shot," volunteered the next salesman, after testing the first three. "I would suggest that you try this new brand. They stand up better in the kind of radio vou own."

Four stores—and in each the monkeys were playing. At least that was the impression which these conflicting opinions were creating within me.

Then, the Serviceman

All this was quite befuddling. So I decided to wait for the serviceman. My two-months-old receiver was guaranteed for 90 days, so, after a week of lonesome mornings and evenings (Gosh, I didn't know one could get so attached to a piece of furniture) I threw open the

(Please turn to page 57)



To meet the festival mood of the holiday shopper, the following outstanding records have been especially chosen. The talking points of three discs with completed recordings and three other sure-fire popular hits—as well as the more impressive "albums"—are covered in the following criticisms:

Three Albums

SYMPHONY IN G MINOR. (Mozart.) By Richard Strauss and the Berlin State Opera Orchestra. (Brunswick Album No. 22.)

It should be unnecessary to explain the reason for Mozart—one of the most melodious of composers as well as one of the most prolific. Also in favor in this set is the fact that the G minor symphony (No. 40) has not been recorded before. Strauss' conducting is well known and the fact that he is in charge of the orchestra should be mentioned in suggesting the set. It covers seven sides, the odd face carrying Schubert's Overture, "The Twin Brothers," by the Charlottenberg-Berlin Opera Orchestra under Alois Melichar. Start with the first side of the symphony for purposes of demonstration.

SPANISH ALBUM. (Columbia Masterworks 146.) Regardless of personal preferences, customers will always give Spanish music a hearing. The present set is a novelty in that it is not entirely from the works of one composer. A representative selection from the works of four Spanish moderns is played, with the exception of one record, by the Madrid Symphony Orchestra under Enrique Fernandez Arbos—the foremost interpreter of music of his own country. For the purpose of interesting buyers it might be better to offer a choice.

SIEGFRIED. (Richard Wagner.) Excerpts by Famous Wagnerian Singers. (Victor Album M-83.)

Record buyers who are interested in the music of Wagner are probably the most incurable. It would be difficult to find anything more to their taste than this

album. The lightest section of the "Ring" cycle, ending in a magnificent tenor-soprano duet, will need little pushing to go over successfully. The principals are not strangers to American audiences. Lauritz Melchior and Rudolf Laubenthal have both sung the role at the Metropolitan, and will again, whilst Frida Lieder is one of the stars in the Chicago Opera Company's extraordinarily strong German contingent. Side 14 is recommended for demonstration. During this, Siegfried, who has broken the spear of the Wanderer, proceeds through the fire in search of the sleeping Brunhilde.

Single Selections From the Classics

DANCE OF THE SEVEN VEILS, from "Salome." (Richard Strauss.) By Bruno Walter and the Berlin Philharmonic Orchestra. (Columbia 67814-D.)

An exquisitely played rendition of the high spot in (Please turn to page 53)

About the Popular Records

YOU WILL REMEMBER VIENNA (Waltz) and I BRING A LOVE SONG (Fox Trot) from "Viennese Nights." By Leo Reisman and his Orchestra. (Victor 22512) Romberg melody and Reisman Conducting. A combination no one will be able to resist.

IT'S A GREAT LIFE (Fox Trot) and YOU'RE SIMPLY DELISH (Fox Trot). By the Six Jumping Jacks, with vocal chorus. From "The Playboy of Paris" and "Those Three French Girls" respectively. If you've heard the same organization in "Don't Send My Boy to Prison" you will understand why these should be in demand. (Brunswick 4948)

LOVING YOU THE WAY I DO and YOU'RE LUCKY TO ME. Fox Trots. By the Charleston Chasers. (Columbia 2309-D) One of Columbia's best dance orchestra in two numbers which fit them exactly. The first is from "Hot Rhythm" and justifies the title and the latter was taken from "The Blackbirds of 1930."





A whale of a Newspaper Campaign Thousands of dollars' worth of magazine advertising window displays that say "come on in"... streamers ... leaflets ... folders! Four sensational instruments ... four prices from \$112.50 to \$285 ... all the new features ... home-recording ... remote control ... automatic tuning ... tone color control ... EVERYTHING for a money-making Christmas season!

For Your Own Benefit, Send in Sales Reports Every Friday
By getting a sales report from every dealer every week, RCA Radiola's ultramodern factory can regulate its production with a degree of accuracy the
industry has never known before... not too little... not too much. For your
own protection and profit, mail Radiola sales reports REGULARLY!

RADIOLA DIVISION

RCA Victor Company, Inc., Camden, N. J. Subsidiary of Radio Corporation of America





WHOLESALERS,

Other Comment

THE annual convention of the National Federation of Radio Associations and of the Radio Wholesalers' Association will be held in Indianapolis, Feb. 16-17, 1931. In preparation for this important event a campaign for members is now being waged by RWA. This is a timely move and should be well received. There is probably no organization within the radio industry which has been of greater service to its members than the Radio Wholesalers' Association. To refrain from joining, at this time, because of the expense is to be "penny wise and pound foolish."

RWA functions for the benefit of the entire radio industry. It safeguards the best interests of the manufacturer and of the dealer as well as of the jobber. Its present membership represents a majority of the radio distributing pur-

chasing power of the country.

Further details may be obtained from H. G. Erstrom, the executive vice-president of the national wholesalers' body located at 32 West Randolph Street, Chicago.

The Wheat and the Chaff

ANY student of broadcasting who has dug into station personalities is impressed with the sharp separation into two classes which the broadcasters set for themselves by their character and behavior.

In the first class are those broadcasting stations which are diligently putting out real programs of interest and

The second class represents the parasites and weak sisters of the industry, which merely "sell time" and give little care or attention as to whether they have any actual audience or not. In numbers this latter class make up a distressing proportion of the industry and its members, though without listener influence, are always most vociferous in public hearings and political discussion.

Such separation of the broadcasters into the sheep and the goats is by no means a matter of station power, either. Some of the medium-sized and little stations are doing an earnest and valuable job for radio and the listeners. In small towns and rural communities small stations often render a real and thorough public service. On the other hand, some of the "big" stations are mere racketeers

in purpose and performance, and worthy of little from the hands of the rest of the radio family

It is time that the radio industry and the listening public should learn to discriminate between those broadcasters which are really building up this great art and business, and those which are "riding" an easy graft of selling advertising when there are few ears to listen.

But radio dealers, jobbers and manufacturers should not be misled as to which group it is that is creating listener good-will and entertainment value for radio, and so stabilizing the business for all factors.

An \$85,000,000 Editorial

A MOST interesting development in radio today, from the retailer's viewpoint, is the extraordinary vitality of the record-playing instrument—the "combination," as we have come to call it. It seems paradoxical that radio, which a good many have thought would supplant the phonograph, has actually brought about its return to popularity.

Radio, by the very bulk, by the very ubiquity and the general level of its entertainment, has revived the demand for recorded music. It has acquainted millions of people with good music; it has developed a sense of discrimination and it has emphasized, sometimes none too pleasantly, the need for the music you want when you want it.

Result: Nearly every important radio maker today is featuring the combination instrument. Why? Because it has been proved that the demand is there. Yet a year ago very few concerns saw this demand—a market which, in 1929, accounted for \$85,000,000 in sales of records and record-playing instruments for one leading concern.

Live dealers will appreciate the necessity for building up this business. Cash and quick turnover are acute necessities in the radio business. Record sales mean both. The combination itself means a larger unit sale—and the easy, logical next step is the sale of at least \$25 worth of records with it. When so many combinations are being sold, is there any conceivable reason why a skillfully chosen unit of records should not be sold with it, at the same time and in the same way?

People do not buy records as they once did, nor for the same reason—because they have better reasons for buying them now! These reasons are better records, better reproduction, better music available, better instruments for playing it—and, finally, the active need for exercising the new-born power of selection which radio has helped develop. Consequently, the sale of a combination without its complement of records, at a time when resistance to records is at zero, is sheer stupidity.

Join the RWA

by the Editors

For Cleaner Advertising

QUESTIONABLE and fraudulent advertising practices have led the Boston Better Business Bureau to ask the co-operation of all Boston advertisers to the end that these methods be eliminated. The following five chief offenses, listed by the bureau, deserve national consideration. We must not destroy that public confidence which it has taken years to build, by permitting questionable promoters to take advantage of any present unsettlement in the radio trade for their own selfish advantage.

Radio Retailing advocates that all manufacturers, jobbers and dealers check their advertising claims against

this list:

1. The use by a wholesaler or distributor of a manufacturer's list price to describe an assembled set not of the manufacturer's design and construction, and not the same set to which the manufacturer's list price was intended to apply.

2. Devising fictitious list prices, never in effect at retail, for the purpose of sales promotion by giving a false impression as to value or former selling price of

cabinets or assembled sets.

3. Using false or misleading description of radio sets

as to yearly model or as to time of production.

4. Describing a set or making statements in such a way as to lead people to believe that the manufacturer is still in business, or otherwise in a position to carry out warranties, whereas the set is a discontinued model or distress stock, and the manufacturer no longer in business.

5. Claiming that radio sets carry the guarantee of the manufacturer, whereas they are discontinued or distress

merchandise not guaranteed by the maker.

Weighty Endorsement for Local Show

THERE is food for thought in the following news from out of the West that the worthwhileness of holding the 1930 Los Angeles radio show has been sincerely endorsed by practically everyone connected with it.

The Long Beach Radio Dealers' Association went on record by resolution expressing approval of this exposition and declaring that the publicity accruing from the show had a most stimulating effect on the radio business in Long Beach.

Closely following this article was similar official action taken by the radio retail division of the entire Western California Association—who further recommended that

the local show be continued.

And then H. E. Sherman, Jr., president of the Radio and Music Trades Association of Southern California, extolled the benefits of the show in open meeting not only for its sale value but because of the handsome net profit which it earned for the association.

Boo!

SEVERAL anonymous articles about superheterodynes have appeared in the daily papers. In these articles it is intimated that new sets employing this circuit may radiate and so cause widespread interference. Several trade groups, we are asked to believe, have established vigilance committees to investigate.

We can predict the result of such investigations, if any, in advance. It will be found that properly constructed, and completely shielded, superheterodynes will

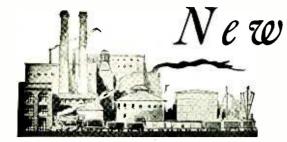
not radiate.

In modern superhet circuits a tuned radio-frequency stage, usually screen-grid, is incorporated between the heterodyne oscillator and the antenna circuit. This "buffer" stage effectively prevents the oscillator from radiating into the antenna and furthermore the complete shielding of such receivers makes the possibility even more remote.

Of course, if the t.r.f. stage of a super is permitted to oscillate it may radiate but there is no earthly reason why this should cause propaganda to be directed against the circuit as exactly the same thing might happen if the first stage of a t.r.f. receiver "spilled over." Improperly designed sets of both types may radiate.



If ever there was a time when each should subordinate selfish interests for the common good of all it is right now!



Products for

This editorial section is prepared purely as a news service, to keep readers of "Radio Retailing" informed of new products.



Home Talkies, Home Movies, Phonograph and Radio

THE last word in home entertainment instruments is the combination home-talkie, homemovie, radio and phonograph instrument called the "Filmophone-Radio" just announced by the Bell & Howell Co., 1801 Larchmont Ave., Chicago, Ill., for December 15 delivery.

A "Filmo" projector, utilizing regular 16 mm. home movie size film, is used for the pictures, and a Howard radio chassis is the basis of the radio feature. A phonograph motor is so arranged that the turntable can be operated at either the standard speed for ordinary phonograph records or at 33½ r.p.m. when the records for sound pictures are played. Either talkies or movies without sound can be projected, and pictures may be shown with radio or phonograph accompaniments,



not synchronized with the film. It is said by the manufacturer that the problem of balancing the other units with the movie projector has been successfully solved with this instrument.

Neither the finish of the cabinet nor the price is available at this time.—Radio Retailing, December, 1930.

Sparks Ensemble 101

FIFTEEN records is the casemble Model 101, just announced by the Cardon-Phonocraft Corp., Jackson, Mich. Eleven seconds are required for the automatic change from one

record to the next. Both 10and 12-inch records, with either
an eccentric or spiral shut-off
groove, may be used.

The record reproducer utilizes
a magnetic type of pick-up, with
electrical audio amplification.
The power amplifier consists of
three stages of audio, two of
which are push-pull. Volume
from one speaker is said to be
sufficient for an auditorium
seating 2,500 to 3,000 people.
The radio side is a 12-tube
Sparton set.

The walnut cabinet is of
French design, with carved
molds. This instrument is
adaptable to coin-slot attachment. \$845, complete.—Radio
Retailing. December, 1930.

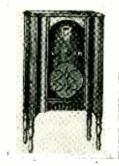


Steinite Midget and Consolette

STEINITE Mfg. Co., Fort a new midget set and a consolette, each with the same chassis and speaker. Features of these sets are tone control, local-distance switch, phonograph connection, two 245's in push-pull, and electrolytic filter condenser.

The midget, called the "Steinite Jr." lists at \$49.50, less tubes, and at \$65 complete. The tubes used are three 224's, two 245's and a 280. "Consolette" is \$64.50 less tubes, and \$80 complete.

is \$64.50 less tubes, and \$80 complete.
The dimensions are: Midget, 18½ in. high, 15½ in. wide, by 8½ in. deep. This set is much the same shape as the previous model, but is not quite so high and the speaker grille is slightly different. The Consolette is 33 in. high by 19 in. wide by 11½ in. deep.—Radio Retailing, December, 1930.





Presto Home Recording Device

EASY to attach and simple to use, the home recording device of the Presto Machine Products Co., 70 Washington St., Brooklyn, N. Y., can be attached to any radio receiver and electrically driven phonograph turntable.

This device consists of a feed mechanism that is applied to the turntable, and a recording head which is connected by leads to the voice coil of the speaker and the jack or terminals of the plek-up input. The feed of the recording head is accomplished by an ingenious V-way construction of extreme simplicity. To change from radio recording to personal recording, or for phonograph play-back, a switch is provided and instant changeover is possible.

The record is especially de-

and instant changeover is possible.

The record is especially designed, and is a metal disc produced and furnished under the Emerson-Wadsworth basic patent. The list price of the complete recording attachment, including hand microphone, is \$39.50.—Radio Retailing, December, 1930.



Victor "Animatophone"

R ADICALLY new in design, the turntable of the Model 5 projector and "Animatophone", a development of the Victor Animatograph Corp., Davenport, Iowa, is mounted vertically instead of horizontally, making a compact installation. The turntable is an integral part of the projection mechanism, and is

not of the usual "hook-up" type, which employs an auxiliary, shaft-connected turntable and a silent projector.

An automatic air governor maintains uniformity of speed for both 33½ r.p.m. and 78 r.p.m. records. The action of the governor is induced by a forced current of air impinging against a small vane which makes and breaks the contact in such a way that it is impossible for the motor to speed up or slow down. This feature has made it possible to use the regular projector motor and thus eliminate the large synchronous type motor. Due to scientific counter-balancing of the tone-arm, a normal pressure keeps the needle in the central position in the groove, lessening wear on the record, the maker states.

Model 5 projector may be operated on the a.c. or d.c. with or without Victor lamp rheostat. Two models of amplifier speakers are offered, compactly assembled in a carrying case.

The "Animatophone" sound apparatus complete is \$335. The small speaker is \$85 and the larger model is \$125. It is understood that any Victor projector model 3 or 3B may be converted into a Model 5 for use with the "Animatophone" at a labor cost of \$75.—Radio Retailing, December, 1930.



Remote Control on Radiola Superhets

SIX pre-selected stations can be tuned in by remote control on Radiolas \$2 and \$6 as the Radiola Division of the RCA-Victor Co. Inc., Camden, N. J., is now making deliveries on these models so equipped if desired at a small extra cost. The instrument is a small bronze finished tablet with a set of six buttons with the call letters over each; two buttons for "on" and "off" and two buttons for volume. A jewelled pilot lamp lights when the set is in operation and indicates by its varying brilliance whether the set is tuned in correctly. Twenty-five feet of flat cabletage is provided.—Radio Retailing, December, 1930.

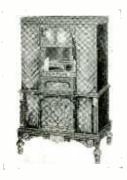


Radio Retailing, December, 1930

Dealers to

All announcements appearing on these pages are published without advertising considerations of any kind whatsoever.





Creatone Coin-Operated Phonograph

Operated Phonograph

ONE of the features of the Model-29 "Creatone" coinoperated automatic phonograph of the Deca-Disc Phonograph Co., Waynesboro, Pa., is a lighting device of ten letters, placed in front center of the cabinet. On the rotating of the turntable, each one of these letters lights up in consecutive order, and this operation continues throughout the playing of the record. At the end of the record, the light stops on one of the letters, keeping attention on the instrument, as the average person likes to speculate as to what number will be shown.

This company has been making automatic phonographs for sometime, but has just entered the coin-operated field, introducing three models. They are: Model 15-C, 45 in. high by 24½ in. wide; Model 29 with its new automatic lighting device is \$349 net, and Model 175 is 48½ in. high and 39 in. wide.—Radio Retailing. December, 1930.



Gulbransen "Minuet"

AN ARMCHAIR style radio receiver, to be known as the "Minuet," is now a part of the line of the Gulbransen Co., 3232 W. Chicago Ave., Chicago, Ill. It is 23 in. high by 14 in. wide, by 22½ in. deep, and comes in an attractive cabinet with the controls inlaid in the top, but leaving plenty of space for a lamp or other decoration.

The tubes required are three 224's, a 227, two 245's, and a 280. The intended retail price is \$81.75.—Radio Retailing, December, 1930.

Audiola, Jr. and Consolette

"AUDIOLA, JUNIOR," and mew sets just added to the line of the Audiola Radio Co., 430 S. Green St., Chicago, Ill.

Junior is a midget set, 18 in, high by 15 in, wide by 9 in, deep, in an attractive cabinet of Gothic design. This set has a tone control, and lists at \$49.50, less tubes.

Consolette is the same receiver, built on a table, so that it stands 41 in, high and 17 in, wide, \$57.—Radio Retailing, December, 1930.



Sun Glow "Melody Chest"

"LITTLE General of the Air" is the name given to the "Melody Chest" radio set of the Sun Glow Industries, Inc., Mansfield, Ohio. The chassis in the set is manufactured by one of Sun Glow's affiliated companies, the Hartman Electrical Mfg. Co., which company has, in the past, made the r.f. tuners used in Arborphone and Sonora sets. The cabinet is small in size, standing only 28 in, high by 14 in, wide by 13 in, deep and the scale is located on the beveled top edge so it can be easily read from any position. The Loftin-White direct coupled amplifier is used in this set, which has five tubes. The speaker is an electro-dynamic and is mounted on a slanting baffle board. The intended retail price is \$69.50, complete.—Radio Retailing. December, 1930.





New Crosley Sets

"C LASSMATE" and "Administrator" are the two newest models to be added to the line of the Crosley Radio Corp., Cincinnati, Ohio.

"Classmate" comes in a seminighboy cabinet with front of Repwood, which is molded to duplicate wood carvings. Its speaker is of the electro-dynamic moving coil power type, and the tubes required are three 224's, a 245 and a 280. This cabinet is 35 in. high by 208 in, wide by 124 in. deep. \$85.50 complete.

"Administrator" is a lowboy with top and sides of mahogany veneer, and a front of Repwood. This set has automatic volume control, and the chassis uses three 224's, a 227, two 245's and a 280. It stands 364 in. high by 23½ in. wide, by 13½ in. deep. \$112.50, less tubes. (Shown below.)

A second midget set has been

\$112.50, less tubes. (Shown below.)

A second midget set has been brought out to be known as the "Buddy Boy." It is housed in a cabinet radically different from the first model, as it is designed along Gothic lines. Three 224 tubes are used, a 245 and a 280, \$59.50, complete. (Shown at top). Just as we go to press, a 4-tube midget, the "Elf," to retail at \$37.50, complete, is announced. It has two 224's, a 245 and a 280. The cabinet has front panel of Repwood.—

Radio Retailing. December, 1930.



"Victory" Antenna

A SELF-CONTAINED antenna has been placed on the market by Victory Speakers, Inc., 7131 E. 14th St., Oakland, Calif. The device is assembled in a metal container and three leads are used. \$3.75.—Radio Retailing, December, 1930.

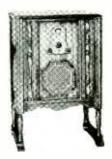
Balkeit Midget and Consolette

SIX tubes (3-224's, 1-227, 1-245 and 1-280) make up the tube equipment of the mantel model and small console receivers brought out by the Balkeit Radio Co., 205 W. Wacker Drive, Chicago, III. Each has a tone control, and is equipped with a Utah or Jensen dynamic reproducer, with 7 in. diaphrasm.

reproducer, with 7 in. diaphragm.

The walnut cabinet of the midget is 17 in. high by 12½ in. wide by 7¾ in. deep. \$54.50 less tubes.

The consolette stands 29 in. high by 15½ in. wide, and is also made of walnut, with ornamental carving across the top and down the sides. \$64.50, less tubes.—Radio Retailing, December, 1930.



Stewart-Warner Small Console

THE electrical equipment in offered by the Stewart-Warner Corp., 1826 Diversey Blvd., Chicago, III. is the same standard stube chassis featured in the larger Stewart-Warner models. This set is only 34 in. high by 23 in. wide by 15 in. deep, and is made of American walnut with decorated front panel of Oriental walnut.

It is made in models to operate on 25 or 60 cycle a.c. or d.c., and lists at \$94.75, complete.—Radio Retailing. December, 1930.

Mills' Multiple Coin Device

THE new multiple coin slot now placed on all new "Troubadour" automatic phonographs of the Mills Novelty Co., 1400 Fullerton Ave., Chicago, will take either nickels, dimes or quarters. A nickel dropped in the slot plays one musical selection; a dime, two; and so on.

on.

The multiple slot is good sales psychology as a patron will drop a dime or a quarter in the slot if he has no nickels.—Radio Retailing, December, 1930.



Butler Tables for Midgets

STANDARD in size, the tables built by the Butler Specialty Co., 1121 N. Wood St., Chicago, Ill., will fit the average midget perfectly. They are made of selected gumwood, with walnut finish

selected gumwood, with walnut finish.

There are two styles. Model 10-P without shelf is \$5, and Model 10-Ps with shelf is \$6. Each is packed in a single carton, protected by pads and tray lock, ready for re-shipping if necessary. The size is 25 in, high by 163 in, wide by 103 in, deep.—Radio Retailing. December, 1930.



"Electrovox" Turntable and Pickup

circuit for radio reception and a volume control forms part of the unit.

The intended retail price is \$75. It may be purchased without the cabinet for \$50. The motor and turntable are available, without the pickun or cabinet, for \$25.—Radio Retailing, December, 1930.

Go-sil-co Coil Aerial

Go-sil-co Coil Aerial

FOR installation in limited
space, the Gosilco Radio
Products Co., Huntington Park,
Calif., offers a coil aerial composed of a coil of 30 ft. and
lead-in of 20 ft. of "Gosilco"
aerial wire, No. 12 gauge. The
frame is adjustable to 6 ft., and
is finished in white Duco. The
coil can be attached vertically
to a short mast, on the outside
wall of the house, or in the attic.

—Radio Retailing. December,
1930.

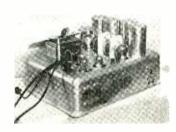
Brunswick Air-Cell and 2-Volt Tube Battery Set

UTILIZING the new 2-volt tubes and an Eveready aircell battery, Bounswick Radio Corp., 120 West 42nd St., New York City, has made available a new battery set in a lowboy cabinet, with room for the batteries

cabinet, with room to teries.

This set makes use of four screen-grid tubes, two of the new '31 power tubes, and one '30 tube. An inductor dynamic speaker which has been especially designed to operate from this type of tube, is built in \$139.50 less tubes and batteries.

Radio Retailing. December, 1930



New Zaney-Gill Midget

PHONOJACK, long and short aerial control, connection for home broadcasting, television amplification, are some of the high points of the new "Music Box" midget brought out by the Zaney-Gill Corp., 1727 W. 22nd St., Chicago, Ill. The "Dreadnaught" chassis has removable head and uses three 224's, a 227, one 245 and a 280. The speaker is a 9-inch electro-dynamic. This set has a tone control and comes in a figured walnut veneer case on Gothic lines. The intended retail price is \$49.50, less tubes.—Radio Retailing, December, 1930.

Radiodyne "Groun-Tenna"

BASED on the principle that signals obtained from the ground are clearer and stronger than those taken from the air the "Radiodyne Groun-Tenna" has been placed on the market by the Western Coil & Electrical Co., Racine, Wis.

The Groun-Tenna is placed in the cabinet by suspending it from the lug at the top and connecting the three wires according to directions. A copper plate 12 in, square or a 6 ft, galvanized rod buried in damp earth is recommended as a ground although a radiator or water pipe may suffice. \$6.—Radio Retailing. December, 1930.





Maish Padded Covers

Maish Padded Covers
WEATHER-PROOF, made of
padded with a thick layer of
felted cotton substantially
quited, the Universal padded
covers offered by the Clifford W.
Maish Redding Co., 1501 Freeman Ave., Cincinnati, O., may
be had in a number of sizes.
The straps go all the way
around, and the flaps may be
folded over, so that these
covers can be made to fit practically every cabinet.
No. 15 is adaptable to all sets
and combinations not over 50
in, high and 32 in, wide. This
includes practically the entire
radio field. \$6.
No. 12 fits cabinets not over
31 in, high and 32 in, wide.
This size is made with one strap
only and takes care of the
small consoles. \$5.
There are two sizes for electric refrigerators—No. 1 for
cabinets not over 60 in, high
and 32 in, wide, and No. 2 for
cabinets not over 68 in, high
and 48 in, wide.

A new model for the midget
set is now ready at \$2.50.—
Radio Retailing, December,

Antenna Eliminator

Antenna Eliminator

ATTACHED in a short time around the four sides of the back of the radio cabinet, the "Wireless" antenna eliminator offered by the James H. Blinn Co., 1800 Blake St., Denver Colo., is completely out of sight. This antenna eliminator is made of pure copper, and can be installed on the set before delivery, only a ground to a radiator being necessary. It also permits the set to be easily moved from room to room, The list price is \$1.25,—Radio Retailing, December, 1930.



Janette Rotary Converter

JANETTE Mfg. Co., 556 W. Monroe St., Chicago, Ill., announces a new type CA-20-F rotary converter. This unit has a capacity of 110 watts, and is a quiet, dynamically-balanced unit. It is available for 32, 115 or 230 volts d.c.

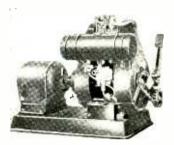
The intended retail price, complete with filter, cord, plug and d.c. receptacle, is \$49.50. For 230 volts d.c. the price is \$51.50.—Radio Retailing, December, 1930.

Flewelling Short Wave Adapter

Wave Adapter

RADICALLY different from previous types, the short wave adapter developed by E. T. Flewelling for the Van Horne Tube Co., Franklin, Ohio, is a single-dial adapter with no other connection to the set than the sharing of the ground and antenna wire coil. The adapter plugs into the 110-volt light circuit, carries its own tubes and power supply, and operates with any t.r.f. or superheterodyne receiver.

any t.r.f. or superneterodyne receiver. This adapter uses one stage of screen-grid amplification, and this, plus the amplification of the receiver itself, gives sufficient sensitivity. No change of any kind is needed in the radio receiver itself, and changing from short to long-wave or vice versa, is done by throwing a switch, and the adapter may be left connected at all times. This short wave adapter will be ready for the market in a short time.—Radio Retailing, December, 1930.



Onan Electric Lighting Plant

Lighting Plant
Light weight and portable 110
volt electric lighting plants, in a.c. and d.c. nodels, are made by D. W. Onan & Son, 51 Royalston Ave., Minneapolis, Minn. The plants are made in several sizes (350 to 2,000 watts), and list at from \$139 up. They can be used for portable sound amplification on trucks as well as for supplying electric light where current is not otherwise available.

The 4-cycle, air-cooled engine uses two blowers and operates at a constant speed of 1725 r.p.m. The pump and splash oiling system is used, and the engine is directly connected to the generator through a flexible coupling to take care of any variation in alignment.

The manually-operated models range in price from \$139 to \$395, and the self-starting models run from \$187 to \$465.—Radio Retailing. December, 1930.

Miles "Talkie" **Systems**

Systems

Combination "AA" special talkie system for theaters seating up to 2,500 people consists of two synchronizers, No. 76; two exciters, No. 102; two Giant exponential horns, No. 10; one monitor, No. 75; one fader; two dynamic Giant units, No. 100; two output transformers, No. 103; two pick-ups, No. 408; and one double-channel rack amplifier, No. 77. The list price is \$2,000.

Combination "BB" is the same as above, but uses two M-75 speakers instead of the M-10 combination horn. \$1,575.

Combination "CC" consists of two each of Nos. 76, 408, and 75; and one each of Nos. 81, 75 monitor and 78 fader. \$1,200.

These systems, may be ordered from the Miles Reproducer Co., 45 W. 17th St., New York City.—Radio Retailing, December, 1930.

Radio Retailing, December, 1930

Mr. Aylesworth Also Challenges

(Continued from page 35)

one hundred and twenty million population it must be taken into consideration that a program liked by one group may be disliked for no good reason by another, with the result that throughout the thousands of hours of programs put on the air every year there must always be enough variety, both in subject matter and treatment, to please all classes and conditions of people.

Already we are at a point where radio is no longer a novelty. It is not looked upon with awe as a mystery box or a miracle. The radio is now ranging along with other time-honored instruments that produce music and entertainment. Its future is still in the making. Its present indicates a continued and increasing national interest in this modern method of distributing programs. To retain and still further develop this interest is the task that the radio industry sets out to ac-The radio dealer and his salesman have complish. much to do in the successful realization of this objective. There must be more intelligent selling based on programs and their adaptability to the individual home for, in the final analysis, as I have often said "The listener rules broadcasting.

Television As We See It

(Continued from page 30)

designed television band receivers listed between \$300 and \$500.

The programs now broadcast will probably satisfy the experimenter who is primarily interested in testing his apparatus and not in entertainment. One station now on the air regularly transmits only black and white silhouettes having little amusement value. Others broadcast rather simple moving picture films. And still others mix films and direct camera presentations of regular broadcast studio features. Direct camera scanning is still in its infancy, it is felt, as it is proving very difficult to transmit full figures, let alone groups of entertainers. The novelty value of such broadcasts which have been attempted is considerably greater than their entertainment value.

Will Supplement Radio Sales

When will television be ready for use by the public on a basis comparable with radio? "When it can produce a clear picture—8 inches or more square—visible over an angle of 60 degrees in an ordinary illuminated room—without employing in its receiving system voltages which are materially higher than those present in today's radios—at a cost not exceeding \$300," a prominent engineer now transmitting television programs from his own station believes.

Perhaps this view is a little too conservative. But certainly the time for its introduction is not yet. When it does come the radio industry will welcome it with open arms. For in addition to a demand for the television equipment itself it seems probable that the sale of existing sound receivers will be stimulated. The most aggressive television broadcasters are now transmitting co-ordinated sound on broadcast wave lengths by special arrangement with popular local stations. In order to make televised pictures talk our broadcast receivers must be used simultaneously with the special television sets!

Allied Lines Carried by Wholesalers

Radio II holesalers Association's survey discloses comparative popularity of 15 supplementary products handled by its members.

THAT radio distributors are interested in allied lines is disclosed by a survey recently conducted by the Radio Wholesalers Association. The following, in the order of their popularity, is a listing of the fifteen allied products which have found favor with the members of RWA:

Product	No. of Wholesalers
	Handling
Electric clocks	11
Outboard motors and boats	10
Electric refrigerators	8
Electric fans	6
Lamps	4
Athletic goods	
Phonograph pick-ups	_
Washing machines	
Tube testers and testing equipment	
Toys	1
Coin slot machines	
Golf clubs	1
Oil burners	1
Speedometers	1
Neon signs	

It will be seen that electric clocks are nearest to the hearts of the wholesalers following their first love, radio. Outboard motors and boats are a close second, with electric refrigerators third on the list.

The Best Records of the Month

(Continued from page 45)

Strauss' sensational one-act opera, from the play of Oscar Wilde. Try this against the recent Stokowski version, form your own opinion and act accordingly. Record buyers are always interested in making comparisons.

SENTA'S BALLAD, from "The Flying Dutchman." (Wagner.) By Elizabeth Rethburg. (Victor 1477.)

WAHN MONOLOGUE, from "Die Meistersinger."
(Wagner.) By Friederich Schorr. (Victor 7319.)

Two exceptionally fine Wagnerian passages sung by Metropolitan stars. Schorr's name is always a guarantee of excellence and the recent revival of "The Flying Dutchman" should make the ballad particularly welcome.

THE MOLDAU (Smetana) and SLAV DANCE Op. 46, No. 1. (Dvorak.) By Erich Kleiber and Berlin State Opera Orchestra. (Brunswick 90086-7.)

The increasing interest in the work of Smetana combined with the reputation Kleiber has built up during his first engagement with the New York Philharmonic-Symphony Orchestra should help these considerably. The Moldau is part of Smetana's symphonic poem, "Ma Vlast" (My Country), in which he made a series of Czech tone pictures.

RMA Directors Vote

December, 1930

Other News Events as

PROPERTY RIGHTS VS. "PUBLIC GOOD"

WCRW Basic Case Before Supreme Court This Month

Who owns the ether? Will the ancient law of priority of property rights prevail against an unprecedented legal situation created by inflexible engineering limitations in the field of radio transmission and reception? These questions, vital to every-one in the radio industry, will come up this month before the Supreme Court of the United States in the case of station WCRW of Chicago and the United States attorney or, more specifically speaking, in the case of C. R. White and the Federal Radio Commission.

If Mr. White prevails in his contention that priority and property rights entitle him to run a station on the power and wave length he originally enjoyed it is more than probable that this decision will not only invalidate the radio act of 1927 but will throttle the Federal Radio Commission at every turn. Detector does not see how the commissioners can enforce reguhow the commissioners can enforce regulations for "public interest, convenience or necessity" if their actions are not sustained by the Supreme Court.

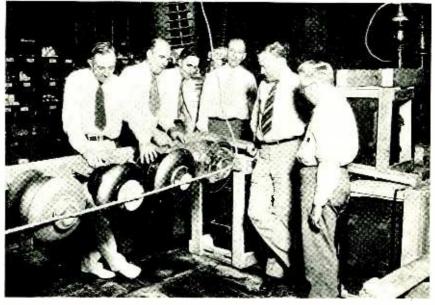
The case of WMBB-WOK, also of Chicago, a 5,000-watt station which was

ordered off the air altogether in one of the earliest decisions of the commission, has been combined with the WCRW case, inasmuch as many of the same issues are involved. Besides the deprivation of property issue, however, the WMBB-WOK case raises the point that radio is not interstate commerce and attacks the validity of the Davis amendment equalizing broad-casting facilities among the zones and

Is there such a thing as a vested right in a wave length? Are wave lengths similar to navigable streams, over which the Government has complete regulation, or may they be likened to non-navigable streams—where priority of appropriation controls?

Imported Cabinets Added to Sparton Line

Custom-built radio sets encased in imported, hand carved cabinets adapted from authentic period designs have been au-nounced by the Sparks-Withington Com-pany, Jackson, Mich. These cabinets are the work of a guild of wood carvers in Brussels, Belgium. The sets are engi-neered into the cabinets at the Sparton factory. A limited number of standard cabinets of the more conduct a wind cabinets of the more popular period designs will be carred for delivery from the factory. It is anticipated, however, that the bulk of the business will be on custommade cabinets which will be made according to individual specifications.



Form California Interference Association

Here are some of the charter members of the recently organized California Radio Interference Association. This action followed a two-day conference of radio engineers and trouble men held in Fresno. The association will appoint committees to investigate and to solve radio interference problems. Flirting with death and disaster in the transformer department of the San Joaquin Light & Power Corporation are (left to right) G. R. Walters, Los Angeles, president of the CRIA; F. W. Thomas, Pasadena; Fred B. Doolittle, Los Angeles; H. N. Kalb, San Joaquin; R. B. Ashbrook, Los Angeles and M. P. Kerner, Los Angeles.

Radio Interference Film Available

"Radio Interference"-a one thousand foot moving picture, both silent and in sound, has just been produced by the Radio Interference Committee of California Interference Committee of California through the courtesy of the Tobe Deutschmann Corporation of Canton, Mass., Filterette Division.

Radio clubs, service organizations, cities and towns may obtain the use of this picture by writing to Radio Retailing and in some cases it will be possible also to obtain the services of a qualified inter-ference engineer to discuss problems when the film is shown.

Heifetz Plays on the 21st

Jascha Heifetz, reputed to be the world's most celebrated violinist, makes his initial appearance before the microphone Dec. 21. Heretofore he has declined to broadcast his superb art for the benefit of the masses.

Dealers, cash in on this event by starting, the Monday following the Army-Navy game, promotional tactics for Heifetz.

PHILCO PUTS BIG GAME ON THE AIR

Through the initiative of the Philadelphia Storage Battery Company the thrill-ing moments of the Army and Navy football contest will be made available for practically every radio listener in the United

At a total expenditure of not less than \$150,000 Philco has purchased the combined broadcasting coverage of all the stations on the Columbia System and also on the

red, blue and orange networks of the National Broadcasting Company.

In addition to this timely and fitting gesture Philco is distributing sets to Salvation Army units in most of the principal vation Ariny thits in host of the philipal cities and towns in the United States to be auctioned off—the entire proceeds from which will apply to the Salvation Army fund for the unemployed.

It is heartening to note that, on the occasion of our latest stupendous sporting event, a member of the radio industry has seen to it that it will be broadcast instead of waiting for the chance and last minute action of a cigarette or soap manufacturer.

Capital City Auto Company, New Orleans, will handle the Edison radio in all

of Louisiana and parts of Alabama,
Texas and Mississippi.

Pacific Wholesale Radio, Inc., San
Francisco, is now distributor of the

Howard radio receiver.

for '31 Trade Show

Viewed by Detector

New York, N. Y.

EXTRA!

Who Killed Damon Fenwicke

"A knife, hurled by the hand of an unknown assailant, last night created the wildest confusion in Judge Robert F. Wagwhitest court of Special Sessions, on the New Amsterdam Roof, where a radio jury is listening to the trial of Vivienne Ware. Miss Ware is charged with the murder of Damon Fenwicke, wealthy architect, on Oct. 6, 1928," quoting from the New York American, Nov. 26 issue.

Another novel treat for radio fans. Another hit scored for broadcasting as entertainment. Another chance for radio Another in scored for broadcasting as entertainment. Another chance for radio dealers to eurhuse prospects who "don't know what it is all about."

For WJZ, co-operating with the New York American, staged a radio murder trial

which ran from 10:30 to 11 o'clock for six successive nights recently and in which the radio audience was the jury. Celebrated counsel and an actual judge took the leading parts. From the tons of radio fan mail received this innovation was an outstanding success.

More new methods of using radio to entertain and instruct are rapidly taking shape and will be reported by Detector as

W. R. G. Baker in Charge of Manufacturing for Victor

Announcement is made by the RCA-Victor Company that W. R. G. Baker, formerly with the General Electric Company, at Schenectady, N. Y., has assumed charge of production scheduling and of the manufacturing activities for Mr. Baker, who becomes a vice-president of this concern, succeeds Alfred Weiland, who was in charge of manufacturing for the old Victor Taking Machine Company and who continued in this capacity when it was absorbed by the Radio Corporation of America. of America.

An Air Line View



Henry Tenny (right), president of the Rola Corporation, is now obtaining closer synchronization of the affairs of his plants in Cleveland, Ohio, and Oak-land, Callf., by means of his recently purchased Stinson plane. To his left are vice-president B. A. Engholm and sales manager Leon Golder.

TO BE HELD FIRST PART OF JUNE IN MID-WEST—"BUSINESS WITHOUT BALLYHOO," TO BE SLOGAN



 ${\bf B}^{\scriptscriptstyle {
m Y}}$ AN overwhelming majority, the directors of the Radio Manufacturers Association, meeting at Cleveland, Nov. 18, voted to hold another trade show and convention during the first or second week of June, 1931. The decision as to the place in which the industry will gather will not be made until next February but Detector understands that one of the following four cities will most certainly

capture this choice plum: St. Louis, Pittsburgh, Chicago or Detroit. St. Louis has made a particularly favorable presentation of its many merits and of the logic of holding next year's affair in this southwestern focal point.

GRUBBS NEW RCA SALES MANAGER

Heads Radiola and Victor -Joseph L. Ray Resigns

The appointment of H. C. Grubbs as vice-president in charge of all of the selling activities of the RCA Victor Company, Inc., was announced December 1st by E. E. Shumaker, president of Radio Corp.

Mr. Grubbs' new responsibilities include the executive control of the merchandising activities of Radiola, Victor and the En-gineering Products Divisions, as well as all combined and allied operations, includ-ing the Export Divisions, coming directly under the RCA Victor corporate wing.

Many of these functions were formerly administered by Joseph L. Ray, whose resignation from the vice-presidency and the sales management of the affairs of the sales management of the analis RCA Victor also was announced Dec. 1.

Mr. Grubbs came to the Victor company as Commercial Vice-President in the early part of 1928, after a highly successful career as vice-president of the Dalton Adding Machine Company and sales manager the Remington Rand Business Service.

"Business Without Ballyhoo," will be the keynote of our next gathering. This affair will be held under one roof along simplified, economical lines and with a minimum expense for exhibitors and visi-

Detector is pleased to report that the RMA board also passed a rule requiring that every exhibitor display his new and current radio merchandise—this to prevent re-occurrence of an unfortunate exhibition condition present in two or three instances at Atlantic City. Concerns manufacturing associated products, such as electric clocks or "first cousin" devices, will be permitted to have demonstration rooms

in the convention hotel.

At Cleveland the RMA directors also voted that the Radio Manufacturers Association's merchandising committee recognize existing conditions by co-operating closely with the Radio Wholesalers' Association and with radio dealers in an effort to improve merchandising methods and retail management so that certain present negative tendencies may be checkmated and the entire industry be placed on the road to greater profits.

Two new directors were unanimously elected: Eugene Farny, of All-American Mohawk Corporation, and A. S. Wells of the Gulbransen Company. These gentlemen will fill the vacancies caused by the resignation of Lester E. Noble and John C.

Tully.

The board then approved the recommendation of H. B. Richmond, chairman of the RMA engineering division, to enlist the co-operation of radio manufacturers and distributors for the purpose of eliminating local interference causes.

It is of further interest that the Radio Manufacturers Association is closely with the National Association of Broadcasters for the passage of a fair copyright bill which will place less of hurden upon the industry.

New Zenith Service Manager

F. E. Smolek, who has been associated with the Zenith Radio Corporation as assistant service manager for many years, is now manager of the service department to succeed Dr. F. A. Rafferty. Mr. Smolek's work in the field has well fitted him to handle the problems of this new post.

Utility to Retail Radios

The New England retail trade has expressed considerable interest in a recent announced that the Edison Electric Illumination Company, Boston's large electric light utility, will retail radio sets. This corporation operates 32 district stores, known as the "Edison Shops," located throughout Boston and its environs.

Dann Heads Broadcasters

Meeting in Cleveland at the same time were 250 business and broadcast station managers, members of the National Association of Broadcasters. President Bill Hedges presided in his customary gracious

The Real Mr. Russell

Through a slip in the composing room, last month's issue, under the caption, "George Russeil, Erla Sales Mgr.," carried a portrait of another equally estimable gentleman.

We apologize, and want our readers to meet "the real Mr. Russell."





Otto May San Francisco new president PRTA (Left)



Lyle Tatro invents 32-volt set (Right)



Sullivan Popular with Lyric Distributors

Louis H. Sullivan is now manager of distributors' relations for the All-American Mohawk Corporation. Formerly he was the manager of the furniture division of the Atwater Kent Manufacturing Company. Mr. Sullivan is well-known as a lecturer on industrial relations and is well qualified to attend to the distribution affairs of Lyric receivers.

1931 Radio World's Fair

The 8th annual Radio World's Fair will be held in Madison Square Garden, New York City, during September, 1931, it was recently announced by U. J. Herrmann and G. Clayton Irwin, Jr., codirectors of the exposition directors of the exposition.

Walter W. Boes has been promoted to the position of general sales manager of the Radio Products Co., Dayton, Ohio. Mr. Boes has been associated with radio sales work for the past six years. Previously he was connected with two communication companies and during the war was an officer in the U. S. Signal Corps.

Indianapolis Primed for NFRA Convention

Radio dealers and jobbers of Indianapolis, Ind., have already started their series of special meetings in preparation for the forthcoming February, 1931, convention of the National Federation of Radio Associations. The Indianapolis Electric League, in fact the entire electrical industry of the Hoosier city, is actively co-operating.

The general show chairman is C. C. Mathews of the Capitol Electric Company. Those who will serve on Mr. Mathews committee are Henry Davis, C. H. Dom-hoff and George W. Stalker.

Those in charge of other key committees, responsible for the success of the radio dealers' and jobbers' very own conclave are: William C. Griffith, president of Griffith Victor Distributing Corporation, finance; S. C. Kahn of Capitol Paper Company, arrangements; Adolf Wagner, of Wagner Radio Company, entertainment and Roy Brown, manager of the West-inghouse Electric Supply Corporation.

Personals

B. K. Sweeney Electrical Company, enver, is wholesale distributor of Denver, is wholesale distributed.

Bosch radio for the states of Colorado,
Wyoming and New Mexico.

The Detroit, Mich.,

E. A. Bowman, Inc., Detroit, Mich., now distributing Stewart-Warner radios in eastern Michigan.

David Sonkin, formerly in the production engineering department of Fada, is now engineer in charge of shortwave receiver production for Jenkins Television

Corp., Jersey City, N. J.

Martin J. Polikoff, manufacturers' representative in Philadelphia, has moved to new headquarters in the Victory Building, 1001 Chestnut St. Mr. Polikoff represents the Gulbransen Company in eastern Pennsylvania and south to Norfolk, Va. He contemplates the addition of several wellknown but non-conflicting lines in the very near future.

Dann, President NAB

(Continued from page 55)

manner. It was by far the most successful and constructive meeting this associa-It was by far the most success-

tion has ever held.

Walter J. Dann, manager of station WTNJ, Milwaukee, was elected president for the coming year. It was voted to move the headquarters of this organiza-tion from New York City to Washington, D. C. Philip G. Loucks was appointed managing director.

Demands of educators that the federal government assign fifteen per cent of the available radio facilities for school purposes was opposed by NAB in a resolution unanimously passed. Another resolution commended the Federal Radio Commission for its "rapidly improving administration."

Of particular interest to radio dealers was action taken against the excessive and improper use of the broadcasting medium for tiresome advertising talks. lem is having the serious and intelligent consideration of the broadcasters but dealers should realize that there certainly are two sides to this subject and that the proper control of advertising phraseology and the interjection of more interest value in the advertising presentations is the real solution of this problem.

PAST and PRESENT 3 Chicago Radio Celebrities



H. L. STORY

Who founded the house of Story & Clark 73 years ago.

Today a third generation of Storys are active in the affairs of this concern—which held its fall conference Nov. 24, in Chicago.



W. A. BANNON

Now advertising manager for the Gulbransen Company.

A veteran of six years' experience in radio is Bannon—who also served -who also served with Brunswick and Capehart.



REICHMANN'S CHROMATROPE

Equipped with two "complementary" speakers—the Chroma, not Frank reproduces the complete range of audibility "better 'n ever" 'tis claimed.

Please Mail Check!

(Continued from page 43)

largely a matter of viewpoint, perspective and familiarity with the individual account. Keeping the customer's goodwill requires the selection of effective arguments and the proper wording of them. It does not require a weak-kneed collection policy or an apologetic attitude. The writer trys, rather, to make the customer see the fairness of his company's position and its readiness to give due consideration to his difficulties.

Collection letters offer many opportunities for the use of little personal touches which give them a tone of friendly interest. If the writer of such letters can get this thought across, if he can make his letters convey the impression that he is interested in the customer's welfare in addition to that of his company, he can insist upon payment without creating resentment. Friendliness gets "next" to a man where formality more often irritates and antagonizes him.

A Follow-up Series

With these objectives in mind, let us consider the elements which compose successful collection letters. This is best done by studying the samples which appear with this article. These five letters, arranged as a follow-up series, are not necessarily intended for verbatim use but are to be used rather as a guide. Arguments which have "brought home the bacon" are sprinkled throughout the series at the discretion of the writer in what appears to him to be the most effective order. Neither is it necessary that dealers use a five letter series. It is well to keep in mind, though, that any great reduction in the number of letters forming a collection series tends to "sharpen" the sum effect, no matter how good the individual letters may be.

Upon examination it will be seen that the first letter contains a notification of the standing of the account and plainly indicates the company's belief that nonpayment is due to a misunderstanding of the plan of payment arranged. It goes on to explain the dealer's collection policy and asks the customer's co-operation in carrying it out. It also assures him that if for any unforeseen reason it becomes difficult to pay on the specified dates the collection department will gladly arrange for some other equitable method of settlement if the condition is fully explained. Since the letter assumes that the failure to pay is the result merely of misunderstanding, none of the formal appeals for payment are used. The letter, as is usually the case with the initial piece of a series, is intended chiefly to serve as a reminder that payment is past due. In addition it will be noted that it has sales value by virtue of the reference to service.

The second letter opens with a stronger statement of the standing of the account, appeals to the customer's sense of fair play and pride, but still does not condemn him for slipping up on the payment. It reminds him that the company has made liberal terms in order to make payment easier and flatters him by assuming that he is one of a class of responsible people who are careful about maintaining their credit. The closing paragraph courteously asks for immediate payment, or at least an explanation of why the account remains unpaid. This request is general in character and could not possibly be interpreted as "pressuring."

The third letter of the series opens with two specific

questions intended to determine whether unusual conditions prevent payment, such as unemployment or sickness, or if the customer intends to duck his responsibility. It gives the debtor an opportunity to explain, without any great embarrassment, why he has not paid.

In the fourth letter, with the account dangerously overdue and the necessity for quick action, the tone adopted is shorter but still "sweet." The collection man first asks if the customer has any cause for complaint in the handling of his account, emphasizing a question already asked in not so blunt a fashion in previous letters. The remaining paragraphs appeal strongly to the customer's sense of fair play, in fact this thought is the basis of the letter, which is more insistent and peremptory than those preceding it.

The fifth and last letter prepares the way for legal action, leaving the way open for prompt settlement This final attempt is a concise statement of the present status of the account, sums up the results of the company's efforts to collect the money and points out that every effort has been made to settle it in a normal way. The customer, it points out, has paid no attention whatever to letters. What can the company think about him now? He has one more chance to show that his intentions are right before legal action is taken, and this is intimated but not directly threatened. Short, crisp sentences are used to give this letter a note of finality; of patience almost exhausted.

If, after receiving this five letter series, the customer does not respond, little remains but to threaten legal action directly. The customer's persistent ignoring of correspondence has left the company no alternative; action is forced upon it by his own negligence. After receiving such letters a man can scarcely fail to be impressed with the company's fairness and willingness to help him. He would be unreasonable indeed if he felt any ill-will.

Usually, if anything short of legal action can pry the checkbook out of a delinquent's pocket a carefully planned follow-up series of this kind will do it.

Monkey Business at the Tube Counter

(Continued from page 44)

door and welcomed a short, chubby radio man, who came puffing up the stairs.

"What seems to be the matter?" he asked, dumping his tools on the floor.

"It just whispers at me," I replied. "I have to sit close on the floor even to hear Amos 'n' Andy. I don't know what to tell you about the tubes; nobody seems to agree about them."

"Well, it looks as if you had blown a transformer, if the tubes are all right," ventured the serviceman, tinkering away. "By the way, do you ever play the phonograph end of it?"

"Yes," I replied. "But I haven't for a week."

And there, dear readers, was where the trouble lay. The switch between the radio and the phonograph had not been moved clear across and made, therefore, but slight contact. The result was that one could hear the radio and yet get no volume. On the other hand, the record would not run. Within half an hour Wendell Hall was bellowing lustily and God was in his heaven once again.

FOUR-PILLAR TUBES . . . OR TWO?

WHEN THE RADIO-PUBLIC HEARS THE DIFFERENCE AND SEES THE REASON, THE **VOTE IS OVERWHELMING FOR FOUR**

WHAT'S under the glass? There is the vital difference in tubes. Eveready Raytheon Tubes have FOUR pillars supporting the fragile elements within the glass . . . FOUR points of support, instead of two. The stability of 4-legged Eiffel Tower, let us say, compared to the wobbly structure of the 2-legged goal-posts on a football field.

It all comes down to this: There are 4-Pillar tubes (Eveready Raytheons) and . . . all the others. Eveready Raytheons demonstrate their structural and SOUND advantages in the set in the owner's home. National Carbon Company tells you that Eveready Raytheon is here to stay — and grow and grow and grow. It is giving Eveready Raytheon

dealers the same strong support that four pillars give the tube itself.

Talk "four pillars." It's the new and modern thing in tubes, and a winner on every count.

Eveready Raytheons come in all types, and fit the sockets of every standard A. C. and batteryoperated radio in present use. Ask your jobber, or write us for names of jobbers near you.

Information and sales-helps, designed for service-men's use, will gladly be sent to you free. Among them is a blue-print, giving engineering data on Eveready Raytheon 4-Pillar Tubes. Thousands of service-men are using this material to advantage. Write our nearest branch.

The Eveready Hour, radio's oldest commercial feature, is broadcast every Tuesday evening at nine (Eastern standard time) from WEAF over a nation-wide N. B. C. network of 27 stations.

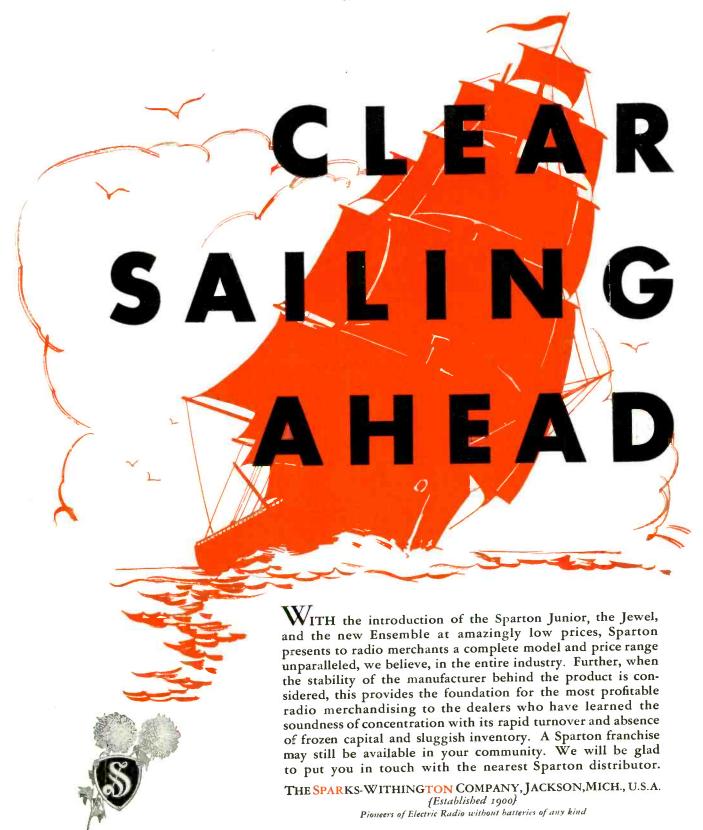
NATIONAL CARBON CO., INC. General Offices: New York, N. Y.

Branches: Chicago Kansas City New York San Francisco









Only SPARTON has the MUSICAL BEAUTY of

"Radio's Richest Voice"



COPELAND HAS BLAZED THE WAY-can help you sell electric refrigeration PROFITABLY!

Pioneer in promoting electric refrigeration sales through radio outlets, Copeland has blazed the way —pointed out to radio dealers how they could secure additional lucrative business—shown them how to get maximum profits out of their territories.

With four years of experience in the radio dealer field Copeland knows its business! And by following Copeland's expert advice hundreds of dealers

DEC JAN FEB MAR APPRIL WAY JENE JULY ALG. MER

INSCRIPTION

INSCRIPTION

INSCRIPTION

Copeland sales climb when radio sales decline

have successfully combined radio and electric refrigeration sales.

Copeland now stands ready to help you make

a success of selling electric refrigeration. Your set-up is right as it stands—and you already know the fundamental principles of specialty selling, home installation and service which are involved. Copeland will teach you the rest.

The new Copeland line covers every requirement in household, apartment and commercial fields it is complete in every respect. And you are assured of continued active support in your merchandising program.

Why not decide now to tie up with the electric refrigeration firm that has a successful record among radio dealers—Copeland? Clip and fill out the coupon below and we will gladly send you complete information.



COPELAND SALES COMPANY, 342 CASS AVENUE, MOUNT CLEMENS, MICHIGAN

Gentlemen: Please send me complete details on the Copeland Sales franchise.

Name	_Address
City	-State

Our Customers respond to the new CeCo Selling Plan our CeCo tube sales are the greatest in history."

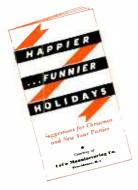
ALEXANDER WELLINGTON, Sec'y, Harvard Tube Testing Station, New York City

"'Remind 'em to buy!'-That's the slogan to stimulate Christmas sales



of CeCoTubes. This streamer on your windows

provides a new buying idea . . . It resells your trade ... it brings new customers. CeCo's high reputation and liberal franchise coupled with this novel plan offer wonderful opportunities. Send in your order for streamers and leaflets today.

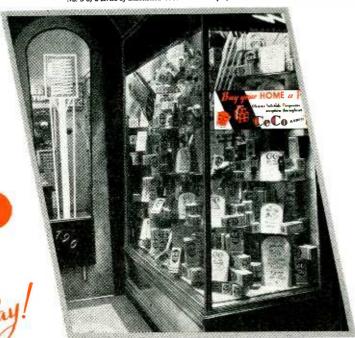


The most interesting and timely folder ever placed in dealers' hands. Contains diagrams and instructions for playing five very pepular parlor games. Every customer will want these leaflets. Free to trade.



Licensed under Radio Corp of America Patents

They're Better Pay!
or You Don't Pay!



A chain of seven radio tube stores in Metropolitan New York are operated by the Harvard Tube Testing Stations. All Harvard outlets feature Ceco line. Above photo of Newark store.

FROM 70¹¹ TO 4 TH PLACE IN CURRENT PRODUCTION

IN 5 MONTHS THINK IT OVER!

Every "Big-Radio" **Feature**

TONE CONTROL

Screen-grid circuit Push-pull 245's Full dynamic speaker All-steel chassis Illuminated dial



Clarion Jr. Pictured above is CLANION Condition (all-electric Model 60) leading the modern trend toward small radios.

There must be a reason for this phenomenal record. There is . . . simply that CLARION JUNIOR is the "greatest radio value at any price"... backed by a sound merchandising plan ... and a loyal, enthusiastic dealer organization - who are

Keep your eyes open for a still bigger and better

TCA money-making program for 1931.

making money selling the CLARION line.

TRANSFORMER CORPORATION OF AMERICA Keeler and Ogden Avenues, CHICAGO, U.S. A.

Larion Radio

THE GREATEST RADIO VALUE AT ANY PRICE

COMPLETE WITH TUBES

CLARION DISTRIBUTORS Bihl Bros., 339 Genesee St., Buffalo
Blackman Distributing Co., Inc.,
28 W. 23rd St., New York
Carolina Luggage Co.,
134 E. Washington St., Greensboro
F. B. Conneily Co., Billings
Cumings Bros.,
199 Vinewood Ave., Detroit
Cumings Bros.,
199 Vinewood Ave., Detroit
Cumings Bros.
219 Ottawa St., N. W., Grand Rapids
Dake Electric Supply Co.,
23 B. Electric Supply Co.,
33 S. Front St., Memphis
Domestic Electric Appliance,
1610 Eighth Ave., Seattle
Duda Myers Co.,
3rd and Burlington Sts., Hastings
Branches: 7th and Norfolk St., Norfolk
Front near Jeffers, North Platte
Electric Lamp & Supply Co.,
1113 S. Pine St., St. Louis
Fischer Bros. Paper Co.,
118 W. Columbia St., Fort Wayne
R. F. & W. R. Fitch,
113 N. First St., Oskaloosa
Goldmn Blag, Fort Smith
Front Co., 1117 Main St., Wheeling
J. Edmunds Galloway,
17 N. Sharp St., Baltimore
Greenville Textile Supply Co.,
504 Rhett St., Greenville
H. T. Hackney Co., Knoxville
W. J. Holliday & Co.,
553 W. McCarthy St., Indianapolis
Herbert H. Horn, Inc.,
1629 S. Hill St., Los Angeles
Inland Radio Co.,
22 W. 1st St., Spokane
W. E. Shirth S. Jackson Inc.,
25 Ninth S. Jackson Inc.,
25 Ninth S. Jackson Inc.,
25 Ninth S. Jackson Inc.,
27 W. 1st St., Spokane
W. E. Shirth S. Jackson Inc.,
28 Ninth S. Jackson Inc.,
29 W. 1st St., Spokane
W. E. Shirth S. Jackson Inc.,
21 S. Franklin St., Tampa
Mathews Refrigerating Co.,
1047 W. Genesse St., Syracuse
Lightning Fixtures, Inc.,
111 S. Franklin St., Tampa
Mathews Refrigerating Co.,
104 W. Genesse St., Syracuse
Lightning Fixtures, Inc.,
112 S. Franklin St., Tampa
Mathews Refrigerating Co.,
104 W. Genesse St., Syracuse
Lightning Fixtures, Inc.,
121 S. Franklin St., Teen Bay
Branch: 1628 Fond du Lac Ave.,
Milwaukee
McLendon Hdwc. Co.,
37 dand Mary St., Waco
McLendon Hdwc. Co.,
37 dand Mary St., Waco
McLendon Hdwc. Co.,
38 Face Rev. Atlanta
Radio Supply Co.,
170 Farnam St., Omnaha
Thos. J. Northway, Inc.,
180 Eschange St., Rochester
Northwest Radio Supply Co.,
170 Park Ave. West. Waterloo
Roberts Auto and Radio Supply Co.,
170 Park Ave. West. W

· in mour own - back ward. THEONLY AMERICAN MADE TUBE - PASSED BY THE CROYDON TEST)

of the series of national newspaper advertising featuring & & & & &

TUBES

DONT YOU KNOW THAT YOU TOO

can safely sell

CROYDON RadioTubes

because, WE OFFER YOU

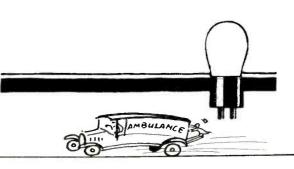




Like high test gas in your car,

CROYDON Radio Tubes

get more out of your set than you believed These Dealers it had in it!



DIVISION

CROYDON GOLD SEAL ELECTRICAL (a)

250 PARK AVE NEW YORK



WHAT THIS APPROVAL MEANS TO RADIO DEALERS . . .



R. E. M.— Dr. Ralph E. Myers, a recognized authority on Vacuum tubes, scientist, and pioneer in radio tube production, now Vice-President in charge of engineering and production for National Union Radio Corp. Dr. Myers was formerly associated with Westinghouse Lamp Company for 21 years, where he was Chief Engineer.

JUST three little initials... But to those who know what they mean in radio, "OK—R. E. M." carries a vast significance. These three letters are the final stamp of approval which National Union radio tubes must bear before they leave the factory.

To Engineers who know Dr. Ralph E. Myers and are familiar with his accomplishments in radio, this stamp of approval stands for unerring accuracy and uncompromising insistence on *uniform* precision in production.

To you, as a retailer, these three initials signify *uniform* satisfaction in handling a tube line that receives step-by-step supervisión from raw material to express truck.

To leading Set Manufacturers these three initials have meant unvarying precision. That's why National Union tubes have been endorsed by more Set Makers than any other independent tube.

You need not accept the testimony which leading retailers, set manufacturers and testing laboratories have willingly given to National Union tubes—try a tone test, a life test, or any other comparative test you care to devise in your own store to prove to yourself that "OK—R. E. M." means *uniformly* good tubes.

NATIONAL UNION RADIO CORPORATION 400 MADISON AVENUE . NEW YORK CITY, N. Y.

ATWATER KENT RADIO

with the GOLDEN VOICE

And *after* Christmas, too, this will still be true!

As your business climbs to the Christmas peak
—with the greatest salesman in the world,
old Santa Claus himself, turning in his golden
prospect list—remember this:

- ... for controlled production
- ... for clean inventories
- ... for sound merchandising policies
- ... for quick turnover
- ... for NET PROFITS, year after year

it's ALWAYS Atwater Kent Radio—the radio that protects your good will, your prestige, your prosperity.

ATWATER KENT MANUFACTURING CO. · A. Atwater Kent, Pres. · 4710 Wissahickon Ave., Philadelphia, Pa.

In This Ever-Widening Market There is a Profitable Field for Organizations to Sell, Install, and Service Modern Sound Distribution Systems

Schools — Colleges — Academies — Institutes — Hotels — Convention Halls

Amusement Parks . . . Railroad Depots . . . Swimming Pools

Apartment Buildings . . . Riding Academies . . . Airports

Stadiums . . . Sanitariums . . . Hospitals . . . Factories

Sporting Arenas
Play Grounds
Civic Centers
Race Tracks
Ball Parks

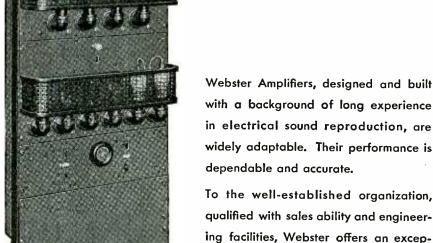
Assembly Halls
Skating Rinks
Public Parks
Gymnasiums
Yacht Clubs

tional opportunity for further develop-

ment of business. We solicit inquiries.

This is just a partial list of the opportunities available to men and organizations capable of selling, installing and servicing Webster Sound Distribution Systems.

The field is new, and offers unusual possibilities for profitable development. Wherever people gather — wherever sound must fill great spaces — wherever words and music must be amplified naturally and brilliantly, you will find a prospective market for Webster Equipment.



Webster Electric

Power Amplifiers

WEBSTER ELECTRIC COMPANY, (Established 1909) Racine, Wisconsin

The Pick-up in Public Demand is the Pick-up You Should Sell!

THE Webster Electric Pick-up is being selected for use in thousands of homes every year. Both in the United States and abroad, the brilliant performance of this highly developed unit has made it the preferred instrument of music-laving people.

Two models supply every demand for quality, price and performance. Much time has been devoted to making the Webster Pick-up a unit of exceptional merchandising possibilities. It is marketed with the idea of supplying dealers with highly salable and profitable merchandise of the finest quality.

Webster Pick-ups cannot be excelled in performance by any similar instrument on the market. They offer features procurable in no other pick-up—distinctive features that make easy sales and completely satisfied buyers.

It will be to your profitable advantage to join with Webster. A Webster Pick-up sales franchise will give you a dependable source of income during the coming season.

WEBSTER ELECTRIC COMPANY

RACINE

Established 1909

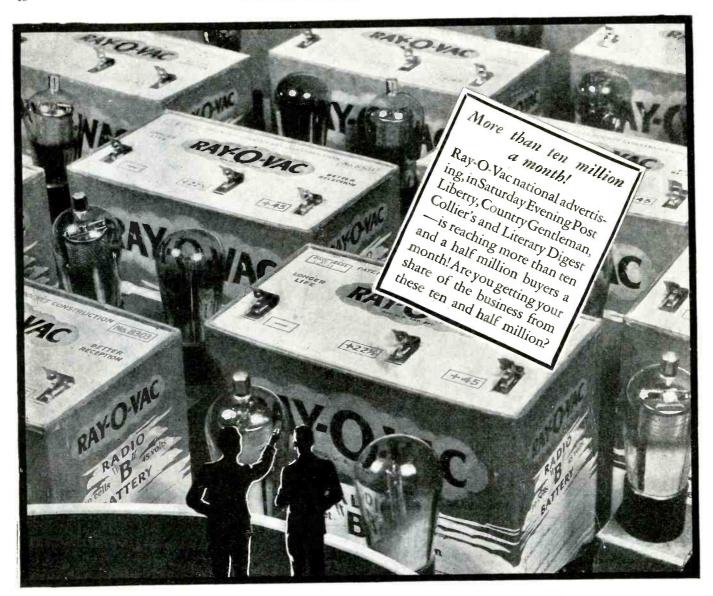
WISCONSIN





Webster Pick-ups are used as standard equipment by many manufacturers of radio-phonograph combinations.





... ask'em to buy RAY-O-VACS!



"A", "B" and "C" Radio Batteries; Autoradio and Aircraft Radio Batteries; Telephone, Ignition, and Flashlight Batteries; Rotomatic and Standard Flashlights; Electric Lanterns; Licensed Radio Tubes When they come in looking for tubes, or radio batteries, *ask 'em to buy Ray-O-Vacs! Tell 'em they can't buy any better tubes regardless of price...tell them that tests conducted according to U. S. Government standards prove Ray-O-Vac batteries better!

Ask 'em to buy Ray-O-Vacs . . . and watch your profits grow!

*Any type of dry battery—flashlights, too!

Factory: Madison, Wisconsin
FRENCH BATTERY COMPANY General Sales Office: 20 North Wacker Drive, Chicago

It costs an advertiser \$16,000 to buy a full page advertisement in THE AMERICAN WEEKLY, but this great magazine reaches nearly 6,000,000 homes and brings a lot of customers into your store



Main Office: 959 Eighth Avenue, New York City

Branch Offices: Wrigley Bldg., Chicago . . . 5 Winthrop Square, Boston . . . 753 Bonnie Brae, Los Angeles 222 Monadnock Bldg., San Francisco . . . 11-250 General Motors Bldg., Detroit . . . 1138 Hanna Bldg., Cleveland . . . 101 Marietta St., Atlanta . . . International Office Bldg., St. Louis

Ken-Rad

Fine Radio Tubes



*A Fine Product Backed by a Company with a Fine Standing

THE KEN-RAD CORPORATION
Incorporated
OWENSBORO, KENTUCKY



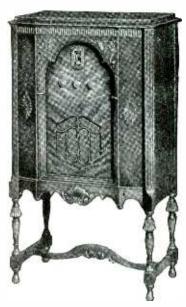


Zenith Super de Luxe Model 71...\$185, less tubes—A distinctive lowboy of carefully selected woods in authentic Tudor design. Like all Super de Luxe Zeniths, employs the new, advanced 70 chassis with super screen-grid circuit. 9 tubes, with rectification. Tone Control. Super-size, electro-dynamic type speaker. Entirely new degrees of sensitivity, selectivity, tonal purity. Other Super de Luxe Zeniths from \$210 to \$2500. Prices slightly higher in Far Wess.

THE TWO BIGGEST "BUYS" IN THE QUALITY FIELD



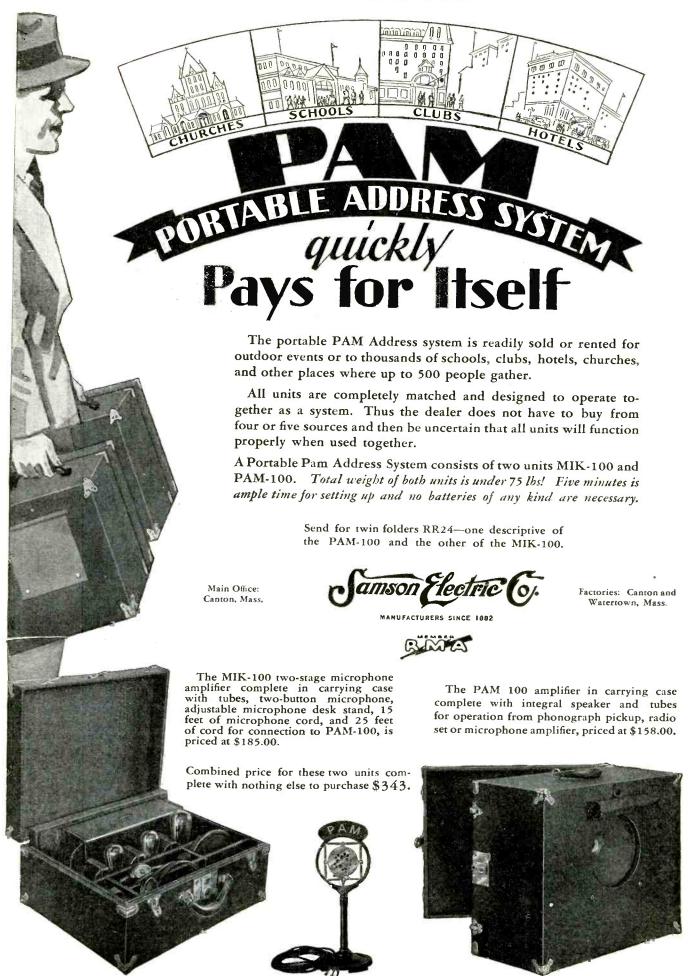
Super Zenith Model 11...\$155, less tubes—A charming, distinctive semi-highboy of selected woods. Employs new Zenith super-eight, screen-grid chassis, standard with all Zenith Super receivers. 8 tubes, with rectification. Tone Control. Performance beyond challenge by any other radio at or near this price class. Other Super Zenith receivers from \$155 to \$175. Prices slightly higher in Far West.



Here is the answer to the holiday demand for extra radio quality, and the everyday demand for extra radio value — a twofold reason why Zenith Dealers are enjoying extra sales and extra profits. Are YOU cashing in on these two holiday "hits"?

ZENITH RADIO

ZENITH RADIO CORPORATION, CHICAGO, ILL.



Keeping People Contented is a Sure Way to Win Their Favor

Your Radio Service Department is a great goodwill builder for your general business if it functions rapidly and smoothly. Keeping your customer's receiving sets in good condition insures the friendly feeling of the customer—and, what is more to the point—it is a source of continuous profit through the sales of new tubes and the charge for the service rendered.

But—Your Service Equipment Must Be Right

These are the days of Super-Heterodyne Sets; they are coming into general use; it is absolutely necessary to own an instrument which will care for the aligning of Intermediate Frequency Radio stages. We have met this condition for you with an instrument which will enable you to render full service on Super-Heterodyne Sets with unfailing accuracy and entire satisfaction to the customer.

The DAYRAD Type 180, Test Oscillator is Its Name

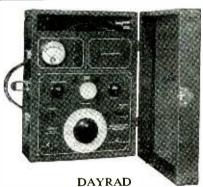
When your service man is in possession of this DayRad instrument he can make every necessary adjustment on Super-Heterodyne Receiving Sets. This Test Oscillator is also a Broadcast Frequency Oscillator, a universal type for aligning, ganging, neutralizing and all other functions.

It is accurate to a degree of ½ of 1 per cent; it is shielded to prevent radiation of signals and has a variable signal output control. The action of this Oscillator enables the service man to secure the greatest sensitivity and selectivity. Adjustments are easily watched on the Output Meter which is regular equipment furnished with the Type 180 Test Oscillator. Your Service Department is incomplete unless it contains this DayRad Test Oscillator.

The DAYRAD Type B Tube Checker is Also Needed

This DayRad Tube Checker, both as a portable form for outside service and as a counter checker, has paid for itself many times over. Many thousands are in daily use, giving satisfaction in every instance, which in itself is an outstanding tribute to its efficiency. This widespread use has naturally brought the price down to a point which is another factor in its popularity. Big production has reduced its cost and enhanced its efficiency.

Other popular DayRad Instruments are Set Analyzers (singly, or in portable combination with the Type B Tube Checker), Test Panels for shop use, the DayRad Voltmeter-Ohmmeter—but—get Catalog R for full details of all instruments. Our Engineering Department is at your service. If you have service department worries tell us about them.



TYPE 180 TEST OSCILLATOR
Designed for speedy and effective
work on Super Heterodyne sets. Accurate to ½ of 1 per cent.

Net Price \$57.50



DAYRAD
TYPE B TUBE CHECKER
For portable or counter work. Rapid, simple, compact.

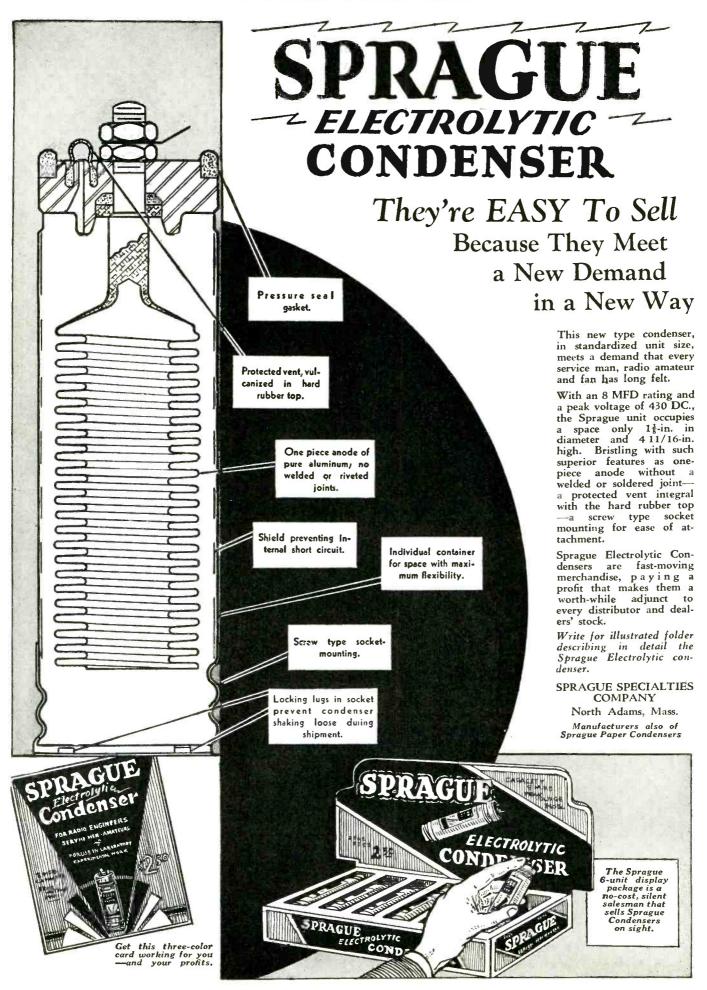
Net Price \$19.60

THE RADIO PRODUCTS COMPANY

5TH & NORWOOD

Department R.

DAYTON, OHIO, U. S. A.



Editors on WHEELS -are making your business paper!

He's out—but he's not at the country club. His chair is empty this afternoon—but it won't be tonight. He'll be back from the front with important news for you and your business.

For today your business paper is edited on wheels.

Is there a hint of a new process, a new method, a new machine that may cut costs for a whole industry? Your editor is there by the shortest, swiftest route.

Is there a rumor of impending price changes—of a merger that may affect competition—a tariff that may affect exports? Your editor is on the ground, looking at emergencies through your eyes, getting the facts for you.

Is there news of a selling plan, a packaging idea, a distribution scheme that moves goods quickly? He is there, to appraise its value to you, to bring you the story of just what happened.

No wonder your editor is not at his desk. He is riding the rails, flying the airlines, touring the roads—a reporter at the front, an editor on the way home. And he is doing it all for you. His reports, digested for you, written for you, published for you—are yours in the pages of your business paper.



THIS SYMBOL identifies an ABP paper... It stands for honest, known, paid circulation; straightforward business methods, and editorial standards that insure reader interest... These are the factors that make a valuable advertising medium.

RADIO RETAILING IS A MEMBER OF

THE ASSOCIATED BUSINESS PAPERS, INC. TWO-NINETY-FIVE MADISON AVENUE - NEW YORK CITY

www.americanradiohistory.com

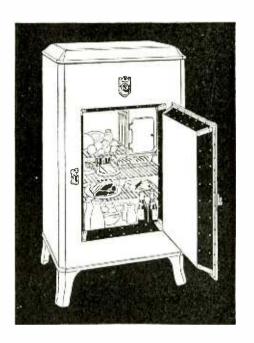
for you...

the LARGEST and MOST PROFITABLE

home market in America

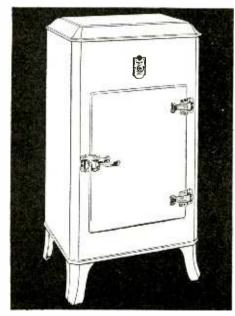
The only market of its kind left! And now Majestic opens it to you with the amazing new Majestic Refrigerator!

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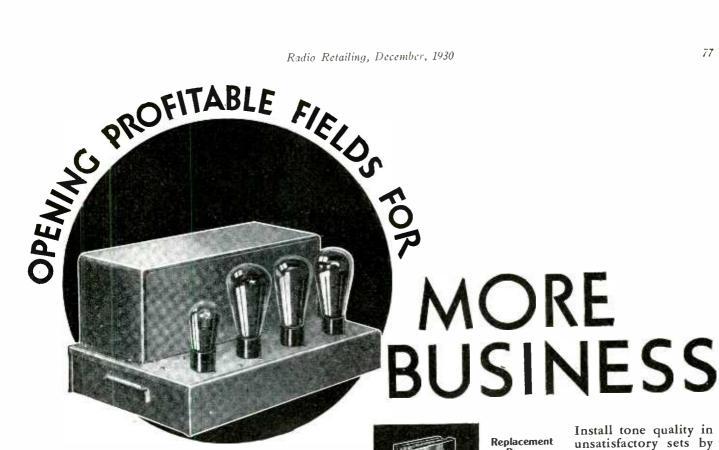


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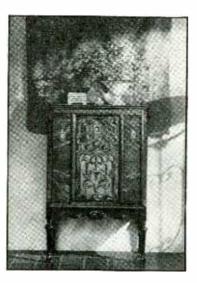
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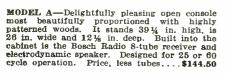
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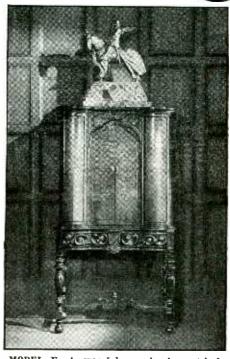




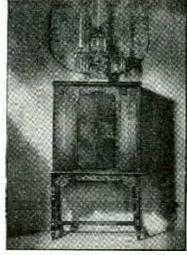


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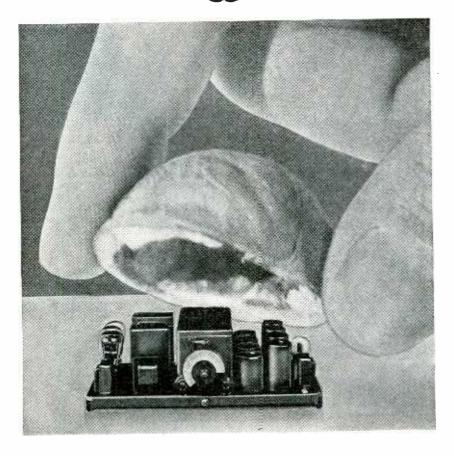
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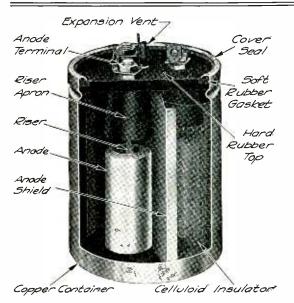
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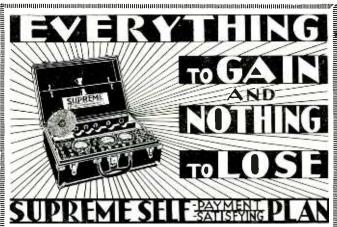
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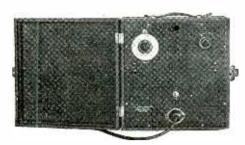


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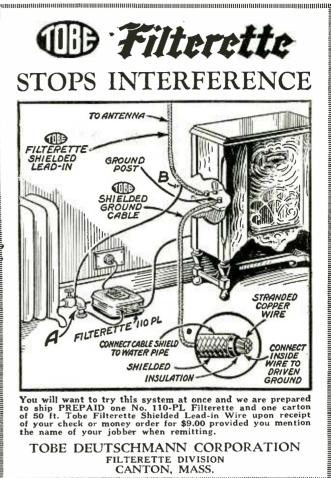
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Master Voltage Control

Protects AC Tubes from High Voltage



Wherever the line voltage exceeds 118 volts sell your customer a MASTER VOLTAGE CONTROL. It will protect your profits and make you money. Remember FREE SERVICE CALLS to replace burned out AC tubes never made any money for the dealer. Sell a MASTER VOLTAGE CONTROL with every Midget set.

Standard Type for magnetic speakers.

Heavy Duty Type for dynamic speakers,

Order at Once from Your Jobber MASTER ENGINEERING CO.

771 Mather St., Chicago, U. S. A.

SERVICE MEN REPLACEMENT TRANSFORMERS, CONDENSERS RESISTANCES

Replace with MAYO. "They're Guaranteed"



CONDENSERS FOR MAJESTIC A

Kodel (3 condensers)

Kodel (2 condensers)

Kuprox (same as Kodel)

Knapp (uses 3 this type)

Elkon (replacement)

MAYO 4000 mfd. can be

med as replacement in 2.00 ea. 2.00 2.00 ea. used as replacement in most any A eliminator... 6.00 3 CONDENSER BLOCKS FOR 3,00 ea *6.00

3.25 3.00 3.50 5.00

A Complete Line of Wire Wound Resistances

Write for new catalogue sheets MAYO LABORATORIES, Inc.
281 East 137th St., New York City

EMPLOYMENT and BUSINESS -DISCONTINUED MODELS

UNDISPLAYED-RATE PER WORD:

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

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

Proposals, 40 cents a line an insertion,

INFORMATION:

Box Numbers in care of any of our offices count 10 words additional in undisplayed ads.

Discount of 10% if one payment is made in advance for four consecutive inser-tions of undisplayed ads (not including proposals).

DISPLAYED—RATE PER INCH



POSITIONS WANTED

RADIO department manager, now employed, desires to make change. Capable taking charge sales, service and repairs. Excellent references. PW-125, Radio Retailing, 520 No. Michigan Ave., Chicago, Ill.

SALESMAN WANTED

Salesmen
We can use the services of several factory salesmen to sell a nationally advertised electric clock to the wholesale trade on a strictly commission basis. Upon replying state experience and present headquarters. Our men know of this advertisement. SW-133, Radio Retailing, Tenth Ave. at 36th St., New York.

WANTED

ANYTHING within reason that is wanted in the industry served by Radio Retailing can be quickly located through bringing it to the attention of thousands of men whose interest is assured because this is the business paper they read.

Distributors

We have been appointed distributors for the following nationally known products:

Amertran Parts and Power Amplifiers Samson "Pam" Power Amplifiers General Industries Microphones Pilot Short Wave Equipment National Company Equipment Gold Seal Electric Appliances Geo. W. Walker Multi-Unit New Haven Electric Clocks Radio Engineering Labs. Keu-Wel Sporting Goods Flechtheim Condensers Universal Microphones Electrad Resistors DeForest Tubes Esco Generators Jewell Meters Vibroplex

Send for catalogues and prices on the above.

AMERICAN SALES CO.

19-21 Warren St. Dept. R, New York City

SPECIAL NOTICE:

TO THE RADIO INDUSTRY

Advertising in connection with Advertising in connection with legitimate offers of surplus stocks and discontinued models of radio merchandise is acceptable in this section of "Radio Retailing."

Extreme care will be exercised by the publishers to prevent the use of advertising in the Search-light Section to encourage price cutting on current models of merchandise or equipment. Nor will advertising which invites violation of the dealer's contract with the manufacturer be acceptable.

All merchandise offered in the Searchlight Section must be accurately and fully described and must be available on order.

POWER PACK --SERVICE-

Replacement Parts

ALL RADIO SETS

(Current or Obsolete)
All Makes of Sets or Parts Repaired -LOWEST PRICES--WORK GUARANTEED--QUICK SERVICE-

Best equipped shop in Middle West. Power Transformers rewound like

AK. 37 Condenser Block\$6.00 SEND IN WORK FOR ESTIMATE ASK FOR PRICE LIST ON REPAIR WORK AND REPLACEMENT PARTS

Grant Radio Laboratories 6521 SO. HALSTED ST., CHICAGO, ILL.

WANTE

RADIO MERCHANDISE

Large or Small Quantities Wanted

Manufacturers etc. please note the Pacific Coast absorbs enormous quantities.

We export. We job. We represent worth-while products. We buy surplus.

In Radio since 1919

REPRESENTATION WANTED for SOUND Equipment Items and TELEVISION

WESTERN SURPLUS OUTLET CO.

3929 Moneta, Los Angeles, Cal. Phone Axridge 3883

SURPLUS WANTED

Raw Materials, finished parts, etc. No quantity too large.

Cash on hand for quick deal-Write, wire or phone.

Radio Supplies Co.

463 Greenwich St., New York, N. Y. Phone Walker 0698

TO HELP YOU

For Every Business Want

"Searchlight" Advertising



Quality--Price--Guarantee FEDERAL TUBES

Not Just a Temporary Offering

- 1. Quality -Equal in quality to the best obtainable at any price.
- 2. Price —Absolutely the lowest for which a quality tube can be offered.
- 3. Guarantee— 3 Months

We guarantee to replace free any tube that does not give satisfaction.

PRICE LIST			
226	.35	224	
280	.40	120	
201A	.40	200A60	
227	.40	WD11	
112A	.40	WD12	
171A	.40	210 1.25	
245	.45	250 1.35	
199X	.45	281 1.25	
199V	.45	222 1.25	

Complete Line Always on Hand

20% With Order; Balance C. O. D.-2% Allowed If Remitted In Full.

KUCKER RADIO & ELECTRIC COMPANY

67 Cortlandt St. Dept. R

Phone: Barclay, 4467 New York, N. Y.

You Are One of Over 25,000 men who read this paper-

If other readers can be interested in the opportunity you have to offer. this is the place to bring it to their attention.

HAVE YOU

Received Our 1931 Issue of

Bargain Bulletin?

This contains a complete line of replacement parts—Radio and Electrical

Fischer Distributing Co.

152 Chambers St., New York City

Dealers and Service Men Send for the Latest



It contains hundreds of Radio and Electrical bargains Have you received your Copy?

NUBOR RADIO CO. 14 Warren Street, New York City

Drum Dial Cable

for Majestic, Radiola, etc., sets sold by foot or mile Send for Free Sample
BLAN THE RADIO MAN, INC.
89K Cortlandt St., New York City, N. Y.

Surplus Stocks

When you have surplus stocks of radio equipment to sell coils, tubes, sets, speakers, cabinets, insulators, etc., or when you are in the market to purchase such surplus stocks of other dealers—

Use a "Searchlight" Ad.

KEEP POSTED ON PRICES

S. S. Jobbing House

156 W. 26th Street New York City, N. Y.

Without obligation add my name to your list so that I get your Radio and Electrical Merchandising Bargains regu-

TYPICAL VALUES IN THIS BIG SALE!



PRE-MO Hundreds of na take DRASTIC

The "CARDINAL" Midget RADIO and PHONOGRAPH Combination!

(Six Tubes, Screen Grid)

Model 70 Size 17 in. x 21 in. x 11 in.

Employs a screen-grid circuit, licensed under R.C.A. and Hazeltine patents. Three 224 screen-grid tubes used; also one 280, one 245 and one 227. Set is completely shielded throughout. Equipped with Magnavox 7 inch Dynamic Speaker and latest type Pacent Phonovox Electric Pick-up with volume control. Takes all standard records up to 12 inches diameter. Record table driven by a Green Flier silent induction motor equipped with automatic stop. Operates 110-120 V., 50-60 cycle A.C. with short antenna. Incorporates switch for throwing over Radio to Phonograph. Cabinet of beautiful walnut, artistically designed and sturdily constructed.

This set gives the radio buyer of today everything he desires—tone quality, compactness, screen-grid all electric operation and phonograph pick-up! Feature it as a leader to your trade! A real profitable item for you!

Clearance Price \$47.50 Complete Less Tubes!

THE CARDINAL MIDGET

(Without Phonograph Pick-Up)
Model 81
Size 17 in. x 17 in. x 11 in.

This set is exactly the same as the above in every detail with the exception of cabinet top and the electric phonograph pick-up feature. An ideal item to handle with the above set for those prospects who do not desire the phonograph pick-up.

Clearance Price \$32.50 Complete Less Tubes!

American RADIO TUBES

(65% Off List)

We can supply AMERICAN TUBES at 65 per cent off list on any type with an unconditional GUARAN-TEE FOR 6 MONTHS! They are especially made for us by a large well-known tube manufacturer and are first quality (not seconds). Packed in attractive cartons. Because of this unusual discount and guarantee no tube order for less than five dollars can be filled.

ANOTHER BARGAIN OFFER!



THE American MIDGET

"The Big Radio in the Small Cabinet"

A SIX TUBE SCREEN-GRID SENSATION!

Uses three 224 screen-grid tubes, one 227, one 245 and one 280 tubes in a screen-grid circuit that has proved a sensation for tone quality and all around efficiency of operation under practically every operating condition. Equipped with Magnavox 7 inch Dynamic Speaker. Completely shielded. Compactly housed in a beautiful walnut cabinet. Sizes 15 in. x 18 in. x 19½ in operates on 110-120 V., 50-60 cy., A. C. Current.

Clearance Price \$29.50 Complete Less Tubes!

The American Midget Chassis

Chassis of the above set completely shielded and with matched Magnavox 7 inch Dynamic Speaker.

Clearance Price \$26.00 Complete Less-Tubes!

Radio Retailing, December, 1930

SEARCHLIGHT SECTION

VAL CLEARANCE!

tionally-known RADIO PRODUCTS

PRICE REDUCTIONS!

Greater Profit Opportunities for every Radio Dealer!

Get This
NEW BARGAIN BULLETIN No.66
for complete list of stock offered
in this big clearance sale

AT NEW LOW PRICES!

Write NOW



HE exceptional values we have been consistently offering have brought us the business of thousands of progressive dealers who have made us their regular buying source for radio and electrical merchandise of every description. Our volume of sales has grown so large that we are absolutely forced to move to new and larger quarters in order to maintain larger stocks and our nationally-known reputation for IMMEDIATE SERVICE! The new quarters have been selected. We will have over 15,000 sq.ft. of floor space. Our shipping department will be TRIPLED IN SIZE!

NOW—here's the reason for this big clearance sale. Estimates for moving our

tremendous present stock, show it's going to cost us *plenty!* If we will be satisfied to take only a slight profit or loss on our present stock and reduce it quickly, it will cost us considerably less to move and we will be able to present the greatest buying opportunity to the trade! WE DECIDED TO DO JUST THAT—this advertisement is a bona fide offer that gives you a real opportunity to stock up for next year's business with quick turn-over items that will bring you worth while profits.

Write for our NEW BARGAIN BUL-LETIN No. 66—look over our pre-moval drastic price reductions! DON'T LET THIS SALE GET BY WITHOUT YOUR ATTENTION!

AMERICAN SALES CO.

19-21 WARREN ST., NEW YORK CITY

FEDERAL RADIO CABINETS

We will dispose of 400 Model "K" radio cabinets at a great sacrifice. Walnut finish—hand rubbed 42½ in. high—15 in. deep—20 in. wide. Any reasonable offer accepted.

THE M & M COMPANY

500 Prospect Avenue, Cleveland, Ohio

We Carry a Complete Stock of REPLACEMENT PARTS FOR

> FREED-EISEMANN, FRESHMAN, EARL AND FREED SETS

Send for special service parts bulletin.

We will answer all questions relating to above sets.

Freed Radio Sales Service

16 Hudson St., New York City, N. Y.

REPLACEMENT

Blocks, Condensers, Transformers and Resistances

TUBES

210-250-281

Write for special prices.

201-A-34c.

All tubes guaranteed

Mardot Laboratories

1215 Gilbert Place, Bronx, New York

TURN THAT SURPLUS STOCK INTO CASH

Advertise it in the "Searchlight Section"

3-10



SENSATIONAL RADIO TUBE OFFERING of ARCTRON TUBES



AMAZINGLY LOW PRICES

201A	v	200A · 226
199V 199X	25	22 6 22 4
199A	15°	227
120 WD11	UU	240 245
WD12 171A	Any assortment permitted	280 112 A
210	65.	250
222	0 56	281

Every Tube Meter Matched and Tested

GUARANTEED FOR 60 DAYS

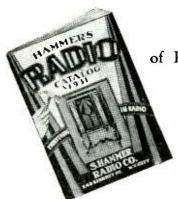
Remit 20% with order Balance C. O. D. 2% Discount if full remittance is sent with order. Minimum order \$5.00 THESE ARE NOT JOB LOT TUBES

ARCTRON SALES CO.

253 West 42nd Street

New York, N. Y.

CHOOSE NEXT YEAR'S STOCK



from this
BIG 1931 CATALOG
of RADIO MERCHANDISE•

Prepare now for next year's business! Get our new 1931 catalog offering hundreds of profitable items that you can handle. You've never seen a radio merchandise catalog like it—descriptions are complete and every item illustrated. Prices are so low you'll wonder how we can offer such standard products as such prices. Every item guaranteed under a money-back, no-questions-asked offer. Write for your FREE copy today—edition is limited!

We pay shipping cost on orders over \$50.

S. HAMMER RADIO COMPANY

142-A LIBERTY ST., NEW YORK CITY, N. Y.

The Buyer—

The Employer—

The Agent—

The Seller—

The Employee-

The Dealer—

You Can Reach Them All

through the

SEARCHLIGHT SECTION

Searchlight advertisements are quick acting. They usually bring prompt returns. There is no better way to reach the men of the *Radio Retailing* field at small cost.

For Every Business Want "Think SEARCHLIGHT First"

PROFIT-BUILDING Apecials from the "RELIABILITY HOUSE of Radio"

VICTOR

Replacement Condenser Elock

For replacement in all Victor sets. Total capacity 10% Mfd. 600 working voltage. Size 5% in, long, 5 in high 4 in, wide. Special Price.



\$2.25



R. C. A. FILTER CONDENSER AND OUTPUT CHOKE No. 8346

7 Condensers and Output Choke. Total condenser value capacity 8-mfs. Used in Radio No. 60. Special Price,

\$5.75

R. C. A.

Filter Condenser No. 8289

6 Condensers. Total capacity 14-n fs. Used in Radiola No. 17 and No. 50. Special Price.

\$5.95



\$1.85

VICTOR

Push-Pull Input Output Unit

For 171A, 245, 250 Tubes. Metal case.

Output matches

moving coil on all dynamic speakers.

Special Price

EARL Power Transformer

Used in Earl 22. Contains suitable resistors, two 4-mf. filter condensers, two 30-Henry chokes and by-pass condensers. Special Price



Double Filter Chokes No. 8336

Replacement part for Radiolas 33, 17, 18 and 51. Fully shielded. Contains two 30 Henry, 100 mil Chokes. Special Price.



95¢

R. C. A.

600 Volt Replacement Condenser Block No. 8333

Used for Radiolas 18, 33 and 51. Can be used for experimental purposes or in converting battery sets for pover. Special Price.

W.E. 37 Condenser Block
— u s c d in Radiola 6 2 and 66 Special Price.

W.E. 70 Condenser Block
— U S c d in Radiola 6 2 and 66 Special Price, where the set of the set o



W. E. 70 Condenser Pack—used in Radiola, 44, 46, 47, Special Price,

\$4.95

\$1.50

\$4.65



KOLSTER

Condenser Block

For Columbia Kolster No. 920 and K-43 sets. Total 5.1 mfd. Special Price,

\$1.50



\$4.75

SONORA

\$2.50

Replacement Power Transformer

For sets using 224, 227, 250 and 281 Tubes.

Special Price.

MAJESTIC

Replacement Block

For Majestic elim-inators. Cuaranteed for one year. Will last indefinitely. Special Price.



\$2.95

R. C. A.

Loud Speaker No. 103

Magnetic unit. Corrugates cone. 15 in. high, 13½ in. wide, 6¾ in. depth. In factory sealed carten. Special Price.



ATWATER-**KENT**

Filter Assembly Section

Models 37 and 38. Four necessary condensers. Assembled in one unit with leads brought out and marked. Special \$2.85



MERSHON

Elec	ctrolytic Con	idensers	
Type	Total Capacity	No. of Anodes	Price
S- 8 Upright S-18 Upright S-8 Inverted S-18 Inverted D-8 Upright T-8 Upright	8 mfd. 18 mfd. 8 mfd. 18 mfd. 16 mfd. 24 mfd.	1 1 1 2 3	\$1,47 2.06 1,47 2.06 2.50 3,24

GOLD SEAL TUBES All types—70% off list. Brand new Guaranteed for 30 days.

Send for our special bargain catalog—"the guidebook of radio quality." Hundreds of bargains in standard, nationally Hundreds of bargains in standard, nationally known radio merchandise. You will find it profitable and pleasant to do business with Wholesale Radio Service Company—the largest institution of its kind in the East. All merchandise absolutely guaranteed. 24 hour service. 25% deposit required on all orders. Be sure to send for our catalog!

Write Us Today!



ATWATER

KENT

Replacement Block

For Model 37 sets. Contains proper chokes and high voltage condensers. All flexible wire colored leads identical to the original. Special Price.



\$4.95



Power Transformer

Replacement for Zenith Models 33—33X—34—35—35A. Delivery 300 volts on each side of center tap. Special Price.

\$3.50

Zenith Filter Assembly Block for Z-E 9 Power Pack. Special Price,

\$6.50



PHILCO

Power Transformers

For models 65 and 87 sets and others using 5-227 or 224; 2-245; and 1-280. Special Price,

\$4.75

THESE BUYERS KNOW

buying from

BALTIMORE RADIO

means guaranteed
SERVICE!
SAVING!
SATISFACTION!

Read what they say!

"Like to do business with you. Have instructed our Radio Manager to buy from you in the future."

"Appreciate your promptness in taking care of incompleted order. Certainly will boost your organization to the limit."

"Order received in first class condition. Best service I have had on radio supplies ordered not only out of New York City, but also from less distant cities."

"Received speaker 24 hours after ordering. Appreciate that service and from now on you will have all my business."

"Thank you very much for prompt service on Shortwave Adapter."

"Thank you for prompt shipment of volume control. It works perfect. Am more than satisfied. Will recommend you to my friends and buy my parts from you."

Now that you've read these testimonials of our service

GET THE BALTIMORE RADIO BARGAIN BULLETIN

and see exactly what you can save on standard items of radio merchandise for stock. Thousands of dealers use it regularly as a buying guide to profitable items.

When you need it quickly or there's time, put

Baltimore Radio Corp., 47A MURRAY ST. NEW YORK CITY



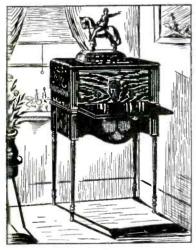
CHRISTMAS!

The 1931



TRIPLE SCREEN GRID CONSOLE SET

For Apartments, Clubs and



Catalog No. 11

A Complete Electric Set for 110-120 V. 50-60 Cy. A.C.

\$29.50 Tubes \$3.00 extra

Absolutely the lowest price at which a modern electric receiver has ever been offered. You can give your customers real value by selling the out-fit for \$69.50 and still double your investment.

Public Places

TRIPLE SCREEN GRID

Three powerful screen grid tubes are the foundation of this set. They make possible full-range reception equal with any expensive set on the market.

TONE CONTROL

The newest thing in radio-tone control—enables you to regulate the reception at will. The bass notes can be brought out prominently or the music brought in in its full brilliancy, which includes all the high notes, as well as

BEAUTIFUL CABINET

A compact cabinet of the spinet desk Constructed of selected walnut ne American gumwood. Door and fine American gumwood. embellished with overlay of birdseye maple. Cabinet richly high-lighted maple. and finished in durable rubbed lacquer. Lift top gives easy access to set. Speaker mounted on baffle board. Speaker mounted on baffle board. Height, 38½ in.; width, 20½ in.; Height, 381/2 depth, 14 in.

Shipping weight 57 lbs.

Terms: 20% With Order, Balance C.O.D.

POWER DETECTION

A screen grid power detector permits handling the powerful output of the radio frequency amplifier. Power detection eliminates the possibility of dis-Power detortion in the detector circuit.

245-POWER STAGE

Transformer coupled 245 power amplification allows for great volume without distortion and with marvelous tone fidelity. Plenty of volume for the largest room.

SINGLE ILLUMINATED DIAL

A clear visioned illuminated dial is used, with no cable or gears; but direct friction drive, which prevents backlash and play.

EQUIPPED WITH UTAH DYNAMIC SPEAKER

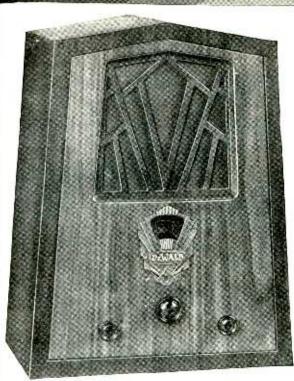
A genuine Utah dynamic speaker is used in this receiver, small and compact in size, but fully capable of handling all the power output of the receiver with no distortion at all.

Uses 3-224, 1-245 and 1-280 Tubes, \$3.00 Extra

Send your orders in promptly to insure delivery in time for Christmas.

Mail orders to Federated Purchaser 16 Hudson St., N. Y. City, N. Y.

SEND FOR OUR 40 PAGE CATALOG



De Wald Companion. A.C. Model 524. D.C. Model 32 Triple screen grid chassis—dynamic speaker. Solid walnut two-tone modernistic cabinet, 16"x14"x8 ½". Remarkable amplification with excellent tone. Eye and ear value beyond comparison.

Minimum Space and Cost But Big Set Performance

"DE WALD"

The Miniature Companion of the Famous



Now R. C. A. Licensed
For A.C. or D.C. CURRENTS

Put a "De Wald" Midget in your window and on your counter. It's a big trade puller. Write for sample and particulars regarding our direct proposition to the trade.



A.C. Model 724

Pierce-Airo Chassis D.C. Model 727

PIERCE-AIRO, Inc., 113R Fourth Ave., New York City

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ROSLEY adds three Outstanding Models to a Successful Line



On Mantel



On Table



Next Easy Chair



The Crosley NEW BUDDY BOY

Now comes this amazing new radio sensation—The Crosley BUDDY BOY—suitable for endless uses in the home—suitable for use in every room of any house—delivering ultra-performance on all not too far distant stations—incorporating all of the most recent Crosley radio developments—and sold complete with tables at an astonishingly low price—and only 15½" high, 17" wide,

The cabinet introduces new beauty in sets of this type—and an entirely new method of construction—a one-piece cabinet without seams, joints, nails or screws. Learn about this new radio marvel now—your Crosley distributor will gladly demonstrate. There's nothing approaching it in the radio world today for only.



The New Classmate

A marvelous cabinet exactly like the famous Crosley MATE except that it is five inches higher. Contains the same type sensitive and scheetive receiving set as The MATE and, in addition, incorporates the latest type Crosley moving coll dynamic power speaker. Amazingly low in price at only WITH TUBES

The New Adminimistrator

Here is a truly magnificent eabinet of thoroughly modern and special design which houses the same type receivingset and latest Crosley moving coil dynamic power speaker as The DTRECTOR. Has positive automatic volume control and local-distance switch. Priced startlingly low at only...

\$112.50
LESS TUBES



WITH TUBES

The BUDDY



The PAL



A marvelously beautiful cabinet, 25%" high, suitable for use as an end, bedside or occasional table. Contains the same receiving set and dynamic power speaker as The MATE and number and type of tubes. The price is smartney low for the quality and performance,

The MATE



evident.....

A delightfully designed and executed cabinet that harmonizes with any surroundings in the home. It contains an entirely new receiving set and dynamic power speaker. Employs three type -21 screen Grid tubes, one type -45 and one type -80. The unusual value of The MATE at the exceptionally low price is self-

The DIRECTOR



A particularly beautiful cabinet containing a receiving set employing three screen Grid tubes type -24, one type -27, two type -15, and one type -80. Positive automatic volume control, local-distance switch and latest type Crosley moving coil dynamic power speaker are features of this set. \$107.50 ingly low in price...

The ARBITER



Electrical Phonograph and Radio Combination

Available with induction type self-starting motor at \$147,50

THE CROSLEY RADIO CORPORATION

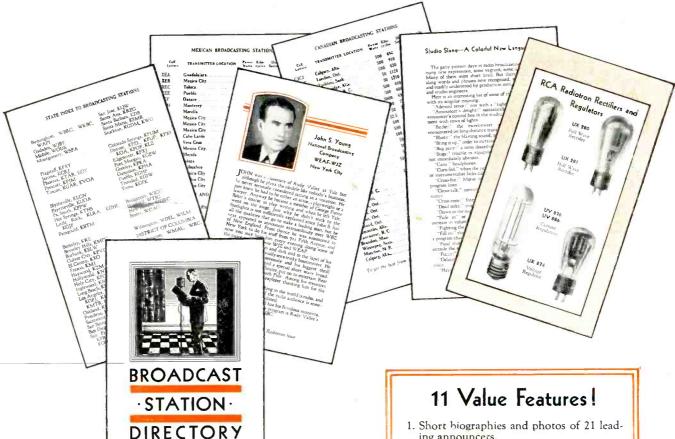
POWEL CROSLEY, JR., President

Home of "the Nation's Station"—WLW CINCINNATI

4lso manufacturers of CROSLEY Battery Radio Receivers, the CROSLEY ROAMIO Automobile Radio Receiving Set, and the famous AMRAD RADIO

YOU'RE THERE WITH A CROSLEY

Bigger and Better



THE recent RCA Radiotron Broadcast Station The recent RCA Radiotion Directory has proved to be one of the most popular radio logs ever published. That your customers are interested in this new type of Broadcast Station Directory is evidenced by the fact that the first edition is completely exhausted.

RCA Radiotrons

Now we are pleased to announce a bigger and better second edition. Here is another unusual opportunity for RCA Radiotron dealers to increase their sales and spread the message of RCA Radiotron quality. Price, \$2.50 per 100; in lots of 1000, \$2.25 per 100; in lots of 2500 or more, \$2 per 100, with or without imprint.

- ing announcers.
- 2. Studio slang, a corlorful new language found among broadcasters.
- 3. U.S. broadcasting stations listed by call
- 4. Canadian stations listed by call letters.
- 5. Mexican stations listed by call letters.
- 6. List of U.S. Possessions' stations.
- 7. Cross index of U.S. stations by kilocycles.
- 8. U.S. stations listed by states.
- 9. Catalog with photos of RCA Radiotrons.
- 10. A pointed message to the customer on the value of equipping every set with RCA Radiotrons.
- 11. Personal message from you to your customers on back cover, telling of your ability to serve them. Your imprint at bottom.

RCA RADIOTRON COMPANY, INC. » » HARRISON, N. J.

diotrons

THE HEART OF YOUR RADIO