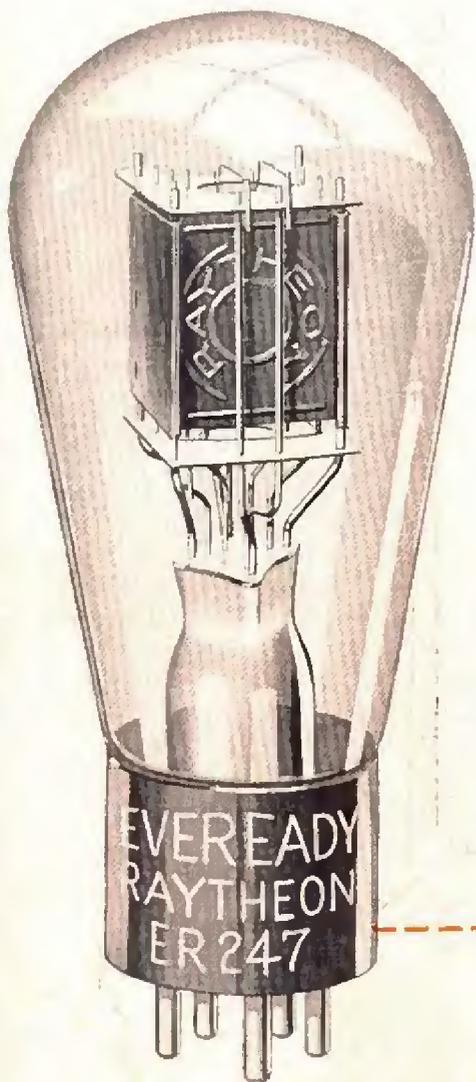


RADIO RETAILING

HOME ENTERTAINMENT MERCHANDISING

THE LONG-LIFE PENTODE

★ **ER 247**



JUST EXAMINE the new ER Power Pentode and you can clearly see that it has oversize construction throughout which permits of widely spaced husky elements—and the patented Eveready Raytheon 4-pillar construction permanently insures precision spacing of all parts.

These basic factors all contribute to uniformity and long life—the two most important requirements of Power Pentodes.

In all of the new-type tubes, with their many, heavy elements, the Eveready Raytheon 4-pillar construction is a vital improvement. Compare these tubes with others!

NATIONAL CARBON COMPANY, INC.

General Offices: New York, N. Y.

Branches: Chicago Kansas City New York San Francisco

Unit of Union Carbide  and Carbon Corporation



TRADE-MARKS

4-PILLAR RADIO TUBES



NICE FRESH PENTODES
— MIGHTY MU'S
— GORGEIOUS GADGETS

Sure! . . . Brunswick has 'em all . . . and many of 'em exclusively . . . But that isn't the *only* reason why Brunswick Radio and Panatropewith-Radio are the world's finest instruments for the reproduction of music. New devices and technical refinements mean very little in themselves . . . It's the way those refinements and devices are *used* that *counts*!

Of course, you'll always find in Brunswick instruments *all* the latest improvements and refinements in tube and circuit design. With the enormous combined resources of Brunswick and Warner Bros. Pictures, and the highly specialized radio and acoustical technique that forms the background of these two great organizations, you can be sure that

no *proven* development will be neglected in building Brunswick instruments to a standard of musical performance.

Brunswick gives *you* and *your customers* far more than "gadgets". To *you*, Brunswick offers an established dealer policy . . . sales to authorized dealers only . . . price protection . . . stability and strength . . . and the opportunity to concentrate on Brunswick with complete confidence in your future. To *your customers*, Brunswick offers enduring satisfaction with a musical instrument they will be proud to own through the years.

And remember that the Brunswick "Step-Ladder Sales Plan" will step-up your profits!

Brunswick Radio Corporation

MANUFACTURERS OF RADIO, PANATROPE AND THE WORLD-FAMOUS BRUNSWICK RECORDS
 NEW YORK—CHICAGO—TORONTO Subsidiary of WARNER BROS. PICTURES, INC.

BRUNSWICK RADIO

RADIO RETAILING

HOME ENTERTAINMENT MERCHANDISING

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C O N T E N T S

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A Tribute to Recorded Music on the Radio

WHEN voices that for years have ceased to sing
 Are heard across a thousand leagues tonight,
 Can space be other than a phantom thing
 Or time be longer than a rocket flight?

Stanton A. Coblentz

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

Cable Address: "Machinist, N. Y."

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An Enviably MERCHANTISING RECORD

Guarantees the Value of a Stromberg-Carlson Franchise

THE Stromberg-Carlson franchise has always been fearlessly and justly administered, without favoritism

The factory has never reduced its consumer prices

Over-production has never necessitated dumping

No receiver has ever been dropped from the Stromberg-Carlson line until dealers' inventories are exhausted

Careful zoning of dealers has prevented over-crowding

The all-important principles which we have stated in this and previous advertisements give a Stromberg-Carlson franchise a real money value for the dealer.

By maintaining one of the most completely equipped acoustical laboratories in the world, Stromberg-Carlson insures that its product shall at all times represent the latest advancements known to the radio science.

Stromberg-Carlson has recently put into effect a workers' unemployment insurance plan. Such a plan is based on a manufacturer giving practically continuous employment to a standard-sized force of workers throughout the year—making for the development of expert workmen which is reflected in the quality of the product, and preventing mass seasonal production, which many times is *over-production*. A manufacturer who makes radio alone could not take this measure, as Stromberg-Carlson has done, which is so humane in itself, and results in such a high type of workmanship.

Stromberg-Carlson unsurpassed quality Receivers range in price from \$195 to \$375. The Multi-Record Radio (automatic radio-phonograph combination), \$660. Prices, complete with tubes, East of Rockies.)

Listen to the Stromberg-Carlson Hour Monday Evenings over the N B C Blue Network and Associated Stations.

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



1894

Stromberg-Carlson

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



1931

An advertisement in
THE AMERICAN WEEKLY
reaches 5,500,000 families,
comprising nearly $\frac{1}{5}$ the pop-
ulation of the United States.
This is the greatest advertis-
ing inducement a manufac-
turer can employ to bring
customers into your store.

THE AMERICAN
*Greatest
Circulation
in the World*
A WEEKLY

Main Office: 959 Eighth Avenue, New York City

*Branch Offices: PALMOLIVE 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*

AMERICAN BOSCH RADIO

Six models

ENGINEERING FEATURES THAT
INCORPORATE EVERY WORTH-
WHILE IMPROVEMENT IN RADIO

- PENTODE TUBES
- SUPER-HETERODYNE MODELS
- FIVE TUBE MODELS
- EIGHT TUBE MODELS
- AMAZING SELECTIVITY
- VARIABLE MU TUBES
- TUNED RADIO FREQUENCY MODELS
- PRICED COMPLETE WITH TUBES
- PERSONAL RADIO MODELS
- SURPRISING SENSITIVITY

RANGING IN PRICE FROM **\$43⁵⁰** to **\$139⁵⁰**

American Bosch Radio is licensed under patents and applications of R. C. A. Western prices slightly higher.



UNITED AMERICAN
SPRINGFIELD, MASS. Branches: NEW YORK

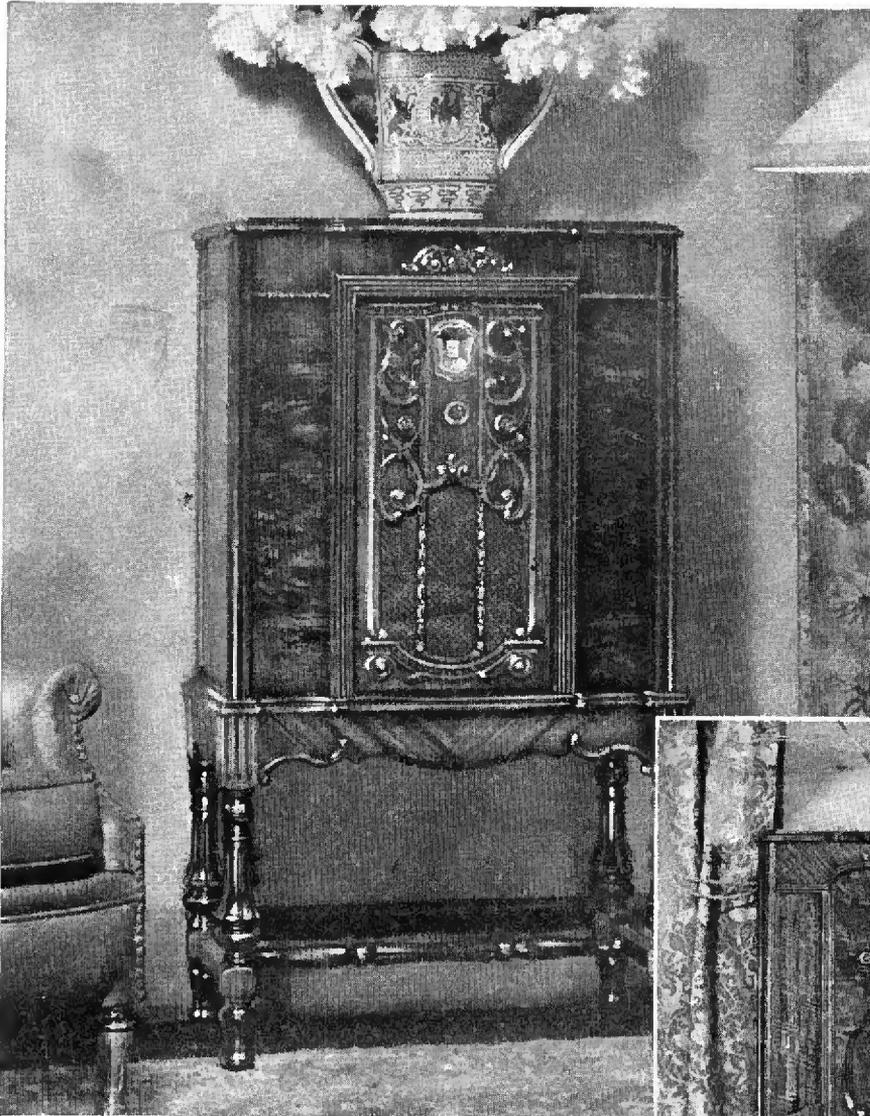
AMERICAN BOSCH RADIO

AMERICAN BOSCH RADIO this year is a line of merchandise which has intense dealer and public interest. The price range—the engineering improvements—the quality of the merchandise are generating business. In the "Personal Radio" American Bosch has created an innovation that is winning wide spread attention. It is selling unlike anything you have ever merchandised before. Write to the nearest American Bosch Branch today for the whole story.

COMPLETE WITH TUBES – THE BEST IN RADIO.

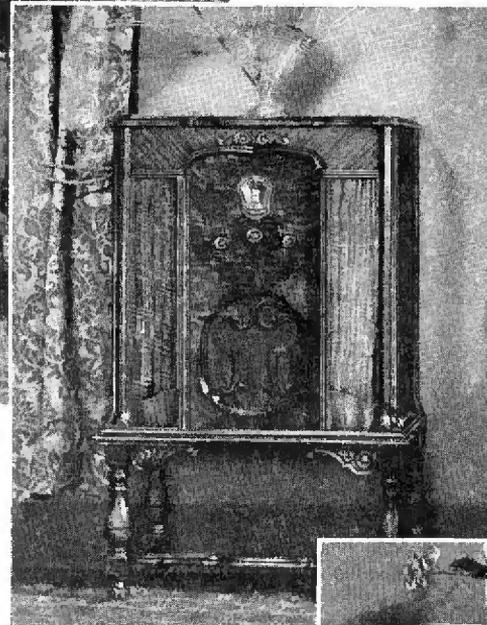


BOSCH CORPORATION
 CHICAGO • DETROIT • SAN FRANCISCO

**MODEL K80**

Completely shielded, nine tube, band pass superheterodyne with automatic volume control, push-pull pentode output with specially designed large input transformer. The cabinet by Jan Streng suggests the influence of Seventeenth Century English design. Oriental walnut top rail and apron. Matched butt walnut pilasters. Decorative instrument panel. Spool stretcher. Lacquer finish.

List \$129.50 with tubes

**MODEL K70**

Completely shielded, eight tube, band pass superheterodyne with automatic volume control. Jan Streng, in designing the cabinet, took his inspiration from the period of Charles II. Oriental walnut top rail, figured walnut pilasters, butt walnut instrument panel, ornamental carvings on top rail and apron. Shaped stretcher. Lacquer finish.

List \$99.50 with tubes

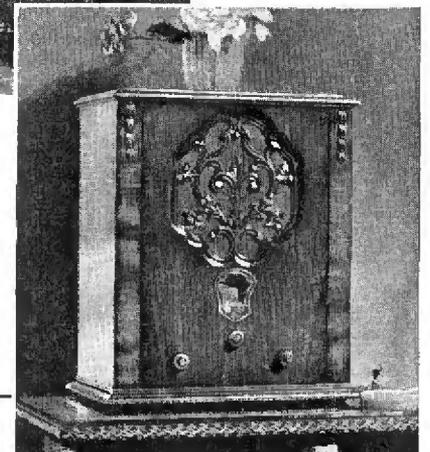
NOW

MODEL K90

(not illustrated)

is a completely shielded, ten tube, interstage double band pass superheterodyne with automatic volume control, push-pull pentode output with specially designed large input transformer.

List \$149.50 with tubes

**MODEL K60**

Completely shielded, seven tube, band pass superheterodyne. Cabinet design has been produced with figured walnut front panel and Oriental walnut pilasters with decorative grill.

List \$69.50 with tubes

THE NEW KOLSTER INTERNATIONAL THE REFINED SUPERHETERODYNE

The new Kolster International incorporates the latest developments of the industry, refined through progressive engineering and sound manufacturing to new high standards of performance. These include the band pass superheterodyne circuit, pre-selector, pentode and variable mu tubes, variable tone control and automatic volume control on the console models. Selectivity, sensitivity and undis-

torted output have been developed far beyond usual standards. Fidelity of tone has been maintained uniformly throughout the entire frequency range.

The new Kolster International cabinets are in keeping with the high quality represented by engineering and manufacturing. Simple in design . . . excellent in taste . . . they lend to the new series a degree of quiet dignity and beauty.

...THE NEW KOLSTER *INTERNATIONAL* KOLSTER

IS HERE!

**BACKED BY THE FINANCIAL AND
ENGINEERING RESOURCES OF
MACKAY RADIO AND TELEGRAPH CO.**

NOT just another radio... a *Kolster*... traditionally *Kolster* in its performance... typically *Kolster* in its superior tone qualities... and now backed by the financial and engineering resources of a great communications system... Mackay Radio.

Here is the super-heterodyne, refined through engineering and manufacturing, to a point where it represents new standards of superheterodyne performance.

Here is the finest series of models that *Kolster* engineering genius could produce, housed in a new series of cabinets... Today, the new *Kolster International* represents an unparalleled

opportunity for responsible distributors and dealers.

The financial resources back of it assure stability. The reputation of the organization that sponsors it assures the soundness and fairness of the merchandising policies that will govern its sale. The combined engineering genius of *Kolster Radio Inc.* and *International Communications Laboratories* are twin guarantees that the new *Kolster International* will keep pace with and possibly anticipate the new developments of the industry.

**THE
KOLSTER
INTERNATIONAL POLICY**

To manufacture up to a definite standard of performance rather than down to a low scale of prices . . . and yet to sell at prices that are well within the moderate range.

To sell only through distributors and dealers of recognized standing in the industry.

To provide sales assistance of a type and character that will help create a ready public acceptance of the new *Kolster International*.

To support distributor and dealer not only by means of fair merchandising but by carrying on intensive research of a type that will keep the new *Kolster International* constantly abreast of public demands.

To maintain a distribution policy which will assure sales at prices that will provide a fair profit for dealer, distributor and *Kolster Radio Inc.*

...and possibly anticipate the new developments of the industry.

Write or wire for more information direct to 67 Broad Street, New York...today.

KOLSTER RADIO INC.

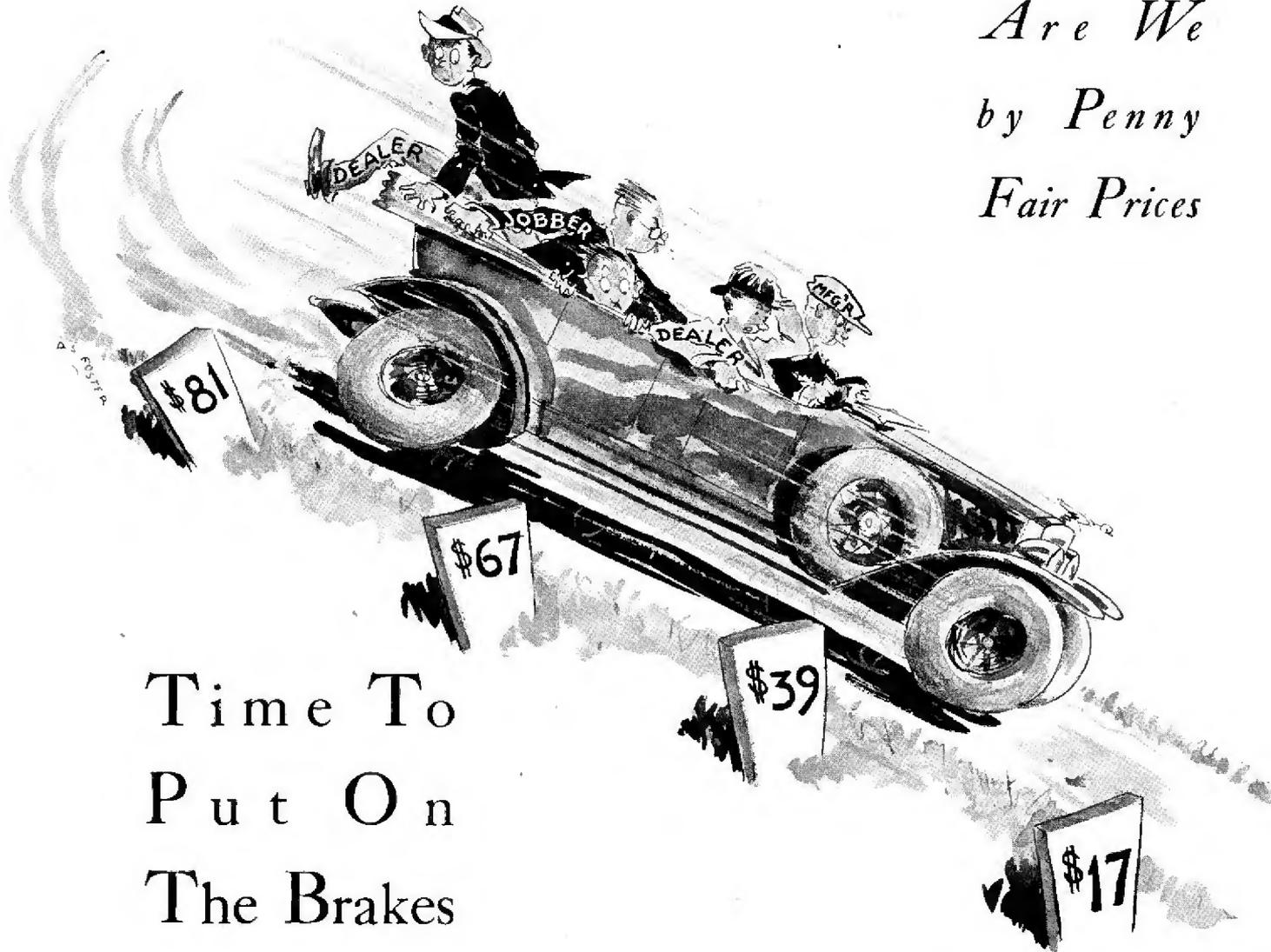
International Telephone and Telegraph Building, 67 Broad Street, New York City

IN CANADA
Kolster Radio Ltd., Toronto, Canada

PLANT
360 Thomas Street, Newark, N. J.

NEEDED—

*Are We
by Penny
Fair Prices*



Time To Put On The Brakes

PRICES hit new lows at Chicago—with substantial rumors of more gift offerings to be announced just as soon as the executives could hurry home and start the mimeograph machines. And strange to relate, neither the dealer, the jobber nor the public really favors this folly—nor the manufacturer either . . . “But what can we do? We *must* meet the other fellow’s price,” the manufacturers argue, in defense of this suicidal conduct.

Such an attitude is based upon the exigencies of the hour. It takes no account of the future business health of our distribution and retailing structure, nor the fact that ours primarily is a business

of merchandising an instrument for the *true reproduction* of sound. Such an attitude disregards also the ultimate reaction of the listener to radio in general.

A continuance of these present policies most certainly will result in disaster. Supporting this statement we submit the following facts for serious consideration:

ONE hundred million dollars is a lot of money. Yet far more than this amount has been spent by radio manufacturers, dealers and distributors during the past five years, creating public acceptance for their wares.

Leadership!

*Further to Cheapen This Business of Ours
Peddling or Are We Going to Build For
and Fair Returns All Along the Line?*

Today, the broadcasting facilities of this country represent an investment in excess of another \$100,000,000.

One hundred dollars is little enough to pay for a real radio set, and for the marvelous enjoyment faithful reception brings to the home. And there still remains at least 20,000,000 potential purchasers for radio sets. In other words there is a latent market for radio which should gross two billion dollars.

Is it our purpose to kick this first \$100,000,000 in the face? Do we want to negate the investment of our indispensable friends, the broadcasters? Is it our intention to prostitute the splendid tonal quality of the program transmissions now on the air nightly? And are we striving to exchange this \$2,000,000,000 birthright still due us for a mess of pottage?

It would appear so.

BUT maybe we're wrong. Perhaps it is the best of business to peddle \$39 sets (the average suggested list, with tubes, for the four- and five-tube jobs shown at the Stevens was \$39.20). Let's see:

Did the reputable, nationally known set concerns make money on midgets last year? To our definite knowledge all but three lost handsomely. In each of the cases of those who won the circumstances were unusual and not likely to be repeated.

How did the dealers fare? The two biggest retail failures in radio history occurred within the last 60 days—both nationally known chain operations whose god was Price.

The situation is so bad that one dealer, from Philadelphia, printed at his own expense an open letter to radio manufacturers on this subject and distributed it at the show. Read also the letters on page 44 of this issue. Read also the speeches of Dr. Julius Klein, assistant secretary of the

Department of Commerce, and of Louis Buehn, president of the Radio Wholesalers Association, concerning this matter.

And what of the future reputation of those engaged in this fight to the survival of the fittest?

No, when unit sales income falls so low that it cannot possibly carry necessary overhead and selling expense there can be but one answer.

GENTLEMEN of the radio industry again we say, "Wake Up!" Meet this most serious crisis which so far has faced us with a new brand of courage. Stop this insane, self-destroying, childish "voyage to nowhere"—this drifting which is periling those who want to be real merchandisers as well as the heedless.

Bring out a small set—Yes!—we would not stay the hand of progress or withhold radio from those who cannot afford the best. But price this item properly, so that you may use honest parts and workmanship. Price it so that it will return a decent profit all the way down the line, from factory, worthy distributor and long suffering dealer right into the consumer's home. The industry will reap in dollars, and the user also will profit—because he will get a commodity built to perform adequately the service to which he is entitled, namely the faithful and continuous reproduction of broadcasting tonal values.

We must unite on this policy. The situation cries to high heaven for courageous leadership—and from those in the high places. Given this leadership the worthwhile radio trade will rally as one man in support of quality merchandise at livable markups.

Note: This trend also is alienating from radio many of the best dealers and distributors in the country. A further discussion of this phase of the problem is presented on page 34.

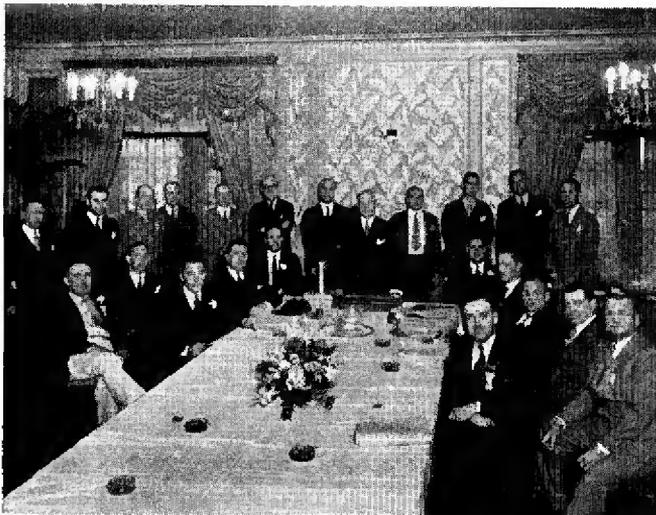


The SHOW

All About It

By

Ray V. Sutcliffe
and W. MacDonald



The RMA Captain and His Crew

On deck, standing from left to right: M. F. Flanagan, executive secretary; Eugene R. Farny, director; B. G. Erskine, director; Ernest Kauer, director; Ralph Langley, engineer; Frank D. Scott, legislative counsel; Judge John W. Van Allen, legal counsel; Morris Metcalf, retiring president; H. B. Richmond, past president; Meade Brunet, director; Herbert Frost, past president and Lloyd Hammarlund, director.

Seated about the mess table: Henry C. Forster, director; Arthur Moss, director; Leslie Muter, treasurer; Arthur Walsh, director; A. S. Wells, first vice-president; Nathan P. Bloom, third vice-president; Arthur Kleckner; R. T. Pierson, director; E. N. Rauland; Fred Williams, second vice-president and the new captain, J. Clarke Coit

“SEEMS like the old days,” said many dealers, referring to the splendid turnout, the spirit of aggressiveness and the number of exhibits seen at the Stevens, June 8-12. “Hectic but hopeful,” was another popular characterization of our seventh annual convention and fifth trade show.

Opinions differed widely as to the ultimate trend which would emerge from this transition period through which we unquestionably are passing, and which was so markedly apparent at Chicago. One group was convinced that the small set soon will dominate the industry, another that this radicalism will cause the pendulum of sales effort to swing back to the better consoles, a third group looked upon television, because of its popular imaginative appeal, as a coming “Moses,” while equally as many favored home talkies because of its imminent merchandising possibilities and opportunity for repeat business.

It was noticeable that the set concerns, with two or three exceptions, presented a complete line from a popular priced midget to a de luxe console. Price class delineations have disappeared.

TECHNICAL "TALLY"

DESIGN trends are best indicated by breaking down a tabulation of the exhibits. Thirty-four set manufacturers displayed 185 models, an average of 6 per line. By contrasting the following figures with these two totals a good idea of the popularity with manufacturers of particular circuits, cabinet styles, tubes and refining "gadgets" may be obtained.

We find, for example, that 30 companies have produced midgets, about 2 to a line. This shows an even more pronounced leaning toward small sets which will undoubtedly dominate this year's selling. On the other hand, 24 factories have marketed double purpose furniture models, which indicates that the industry is still striving to find something with which to bolster up set prices. Only a few sets of this variety were offered last season.

Just 8 manufacturers had combinations, a sign that all is not so well on the phonograph front in these days of slack business. Not even automatic record-changers, heralded as the possible saviour of this type, lured designers. There were 6 lines with automatics, not counting 3 exhibitors who specialize in the automatic musical instrument field. Possibly this is but a temporary shelving of combinations.

Battery sets using 2 volt low-drain tubes have not materialized in any great number. Eight companies had sets of this variety at the show. The same applies also to auto-radio, exhibited by 4 companies that had them last season and 3 specializing outfits new to the radio business. Progress in these two virgin fields is slow but steady.

New Tubes Generally Accepted

The average midget uses 5 tubes. Consoles average 7, ranging from 5 in the cheaper t.r.f. models to 13 in the more expensive supers. Consolettes pull the average down while the de luxe sets haul it up, holding the average closely parallel to last year's.

The audio pentode, not shown in any set at Atlantic City, appears to have swept all before it. Thirty-one companies make pentode sets, 13 using these efficient tubes exclusively. One hundred

and thirty-five models, of the 185 shown by all exhibitors in Chicago, used at least one pentode. Fourteen manufacturers used them in push-pull in 36 models.

Variable-mu tetrodes were similarly successful in worming their way into r.f. stages. Introduced by the Radio Frequency Laboratories just about 6 months ago these tubes are now used by 31 manufacturers. Nineteen of the exhibitors use them in all models and they were to be found in a total of 175 sets at the Stevens.

Superhets Predominate

There has been a decided increase in the number of companies producing superheterodynes. Twenty-seven displayed sets of this type, 7 building nothing else. One hundred thirty-two models seen by visiting dealers were supers. While several companies continue to produce t.r.f. sets in the \$100 to \$300 field, in general receivers employing such circuits are to be found in the super-midget and consolette class.

Tone control has apparently held its own as a sales-producing refinement. Twenty-six exhibitors continued to offer it while 46 out of all the models shown were so equipped. Automatic volume control has done well, 18 lines including sets boasting this circuit. A total of 63 models, principally de luxe types calculated to justify top prices, had it.

Visual tuning indicators were used by 4 companies, about the same number as last year. Seven sets had built-in meters while one introduced a new gaseous pilot lamp designed to do a similar job.

Two refinements which came in like a lion last season have apparently now gone out like a lamb—remote control and home recording. Although several accessory home-recording devices were in evidence just 1 set manufacturer offered a set having this feature as standard equipment. A few others made "provision" for it.

Two companies exhibited remotely controlled sets, offering 5 models. This is considerably fewer than we saw in '30. Perhaps we shall have these two refinements back again when consumers resume spending.

Applying the more accurate measure of the mathematician's yard stick, the picture may be summarized as follows:

IN GENERAL—Attendance, 22,500; number of manufacturers exhibiting sets, 34; speakers, 7; special furniture or dual-purpose outfits, 18; parts and accessories, 61; public address and multiple installations, 7; tube concerns, 14, and 7 home talking motion picture projectors.

PRICE TRENDS—Toward lower prices and smaller sets. Price range (midgets and consoles), \$18 to \$375. Average low, \$39.20; average high \$148.08. Combinations (average), \$238.75. Sets with electric clocks, \$40 to \$183.

FURNITURE—Special furniture appeared to be stag-

ing a comeback. Most of the radio-desks, tables, book-cases and grandfather clocks were well built and of excellent design. Period motifs or modified modernistic predominated.

TELEVISION—The immediate merchandising future of this will-o'-the-wisp was analyzed by the trade in conservative fashion. Refusing to be swept away by the enthusiasm of the more imaginative, the dealers admitted television's attention value and its novelty, public interest and potential value, but the majority felt that as a merchandising factor it has not quite arrived. The demonstrations were far better than heretofore and received much favorable comment. Larger pictures, for home receivers, were promised.

(Please turn to page 43)

DIVERSIFY



Robinson operates two stores—each one near a railroad station. His store traffic is particularly heavy.



DEWEY RADIO

recommends these "sidelines":

microphones
motor generators
coin operated instruments
"trick" aeriels
voltage regulators
log books
portables

and these might also be added:

tone controls
pickups
shortwave sets, converters
extra speakers
headphones
home recording devices
records, needles
remote controls
television kits, parts
midget tables
time switches
record changers
radio benches
interference filters
radio magazines
auto radio

DIVERSIFICATION is the order of the day. Dealers are giving all sorts of sidelines a whirl, often doing a good job with equipment entirely foreign to the home entertainment business, and freely recommending their particular pets to others. Now along comes Ernest H. Robinson of Boston who urges radio retailers, figuratively, to "See America First." Like the wise old shoemaker, Ernie believes he can do a better job by sticking to his last.

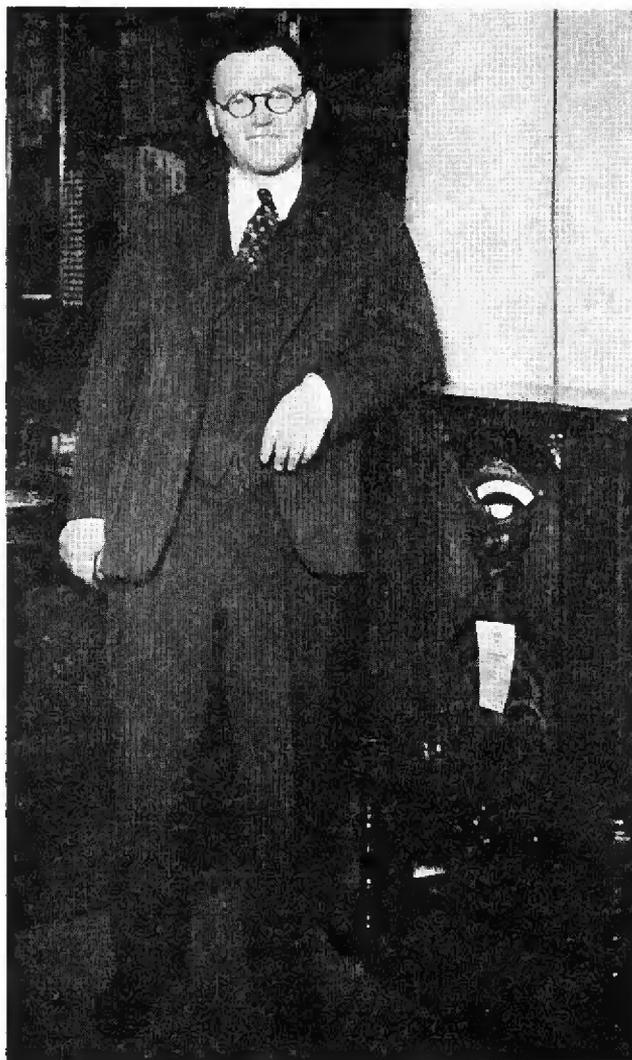
"To me, the radio business is made up of more than just consoles, midgets and tubes," states Robinson. "There are a lot of closely associated items, many of which have been neglected, that can be sold at a nice profit. I have found it much easier to sell equipment with which I am familiar than merchandise which is outside my line.

"I did \$148,000 in radio last year. (Robinson, who does little outside selling, has two stores opposite railroad stations where store traffic is heavy and has a good 'fan'

..... in Your Own Line

says

Ernest H. Robinson



“There’s a lot more to the radio business than just consoles and midgets”



following.) Although the bulk of this business was in sets and tubes I obtained \$8,921 worth of business in radio equipment that the average dealer does not bother with at all; another \$7,000 worth by going after industrial business on a systematic basis and \$3,750 through the rental of radios, a total of \$19,671 of extra business!

“The \$8,921 in merchandise sales was built up in this manner:

30 “baby” microphones @ \$7.50.....\$225

These were bought by people for home recording, for use in small public address systems and in “trick” apparatus. I advertised them by word of mouth. My brother helped a lot by staging a fake broadcast at a lodge meeting with one of the mikes and an amplifier. Other organizations heard of the stunt and copied.

5 motor-generator sets @ \$58.....\$290

These were sold, together with a.c. sets, to people who lived in direct-current districts, by pointing out the efficiency of a.c.

operated receivers by comparison with those using lower d.c. voltages on the tubes. A few were also sold separately.

6 coin-operated automatic radio-phonographs @ \$1,260\$7,560

These were sold to restaurant proprietors with whom an employee or myself are well acquainted. I find it very costly to obtain a volume of this business by canvassing indiscriminately due to strong local competition. A few electric refrigerators have been sold from the store on the same basis but even this business has been difficult to obtain.

600 radio logs @ \$0.15.....\$90

These were sold by showing them to all store customers and by having installation and service men carry a supply when in the field. They not only return a good profit but also constitute good publicity for the store.

“Trick” aerials\$156

These included the familiar ball type of antenna, which can easily be sold to fussy set users, stiktape indoor antenna and a new-fangled cage type which has attracted much attention among the more technical of the local fans. Window displays were largely responsible for the sale of this equipment.

400 voltage regulators @ \$1.50.....\$600

I consider these a valuable accessory for any store as they not only sell in quantity if properly pushed but in this section also cut down my free service calls. Some regulators were sold in the

store, with original set purchases, while others were brought into homes by my service men.

"With the exception of the slot machine business all of these items were individually small. Gathered together, they represent an appreciable amount of business, especially as the trade discount in most cases was considerably higher than on sets.

IN ADDITION to the practicability of diversifying with respect to merchandise without stepping out of character there is also the possibility of diversifying in sales appeal. Rentals, producing \$3,750 worth of business for me, required no paid advertising. By personally contacting a few clubs, hotels, and hospitals word of mouth advertising soon rolled up a substantial business for me.

"About 40 sets, chiefly portables, were rented to hospitals and 10 or more to private clubs. I charge \$7.50 for the first 10 days and \$3.50 a week thereafter, requiring a deposit large enough to cover the actual value of the set loaned. Console models, which are inexpensive and easy to handle, constitute the bulk of the console rentals, larger sets requiring a proportionately higher fixed charge. One large console was rented for \$15 per week this spring.

"Industrial business, responsible for \$7,000 of my volume, is particularly valuable, not only netting a satisfactory profit but also permitting me to buy in quantities, carrying better discounts.

"I consider my method of obtaining this business, which all dealers accept at one time or another, less injurious than the haphazard courtesy discount selling generally practiced. Dealers have been selling to employees of large concerns here in Boston for some years on a rather slipshod basis, I among them. Discounts have been more or less variable and have undoubtedly been accorded to friends of friends of this or that worker who alone was entitled to them. The business, nevertheless, seems to have possibilities so I have organized for it and have established a hard and fast courtesy discount policy and a discount scale which keeps such extra business profitable.

"My first move was to send a circular letter to the purchasing agents of 150 large, reputable concerns in this city, offering to cooperate with employee-buying groups, carefully selecting companies likely to have such organized employee groups. My list included city, state

and federal departments, insurance companies, newspaper offices, the navy yard commissary, telephone company, railroad, banks, investment concerns and similarly established enterprises.

"It merely outlined the reliability of the standard merchandise stocked, expressing our willingness to cooperate on purchases and also the occasional loaning of sets to employee organizations on special occasions. I next hired a man to follow up these letters, paying him \$25 a week for the first two weeks and \$15 per week plus a 2½ per cent commission on all industrial business obtained by the store thereafter. He did not fail to bring in business enough to cover his salary from the very beginning.

"About 20 per cent of the concerns circularized responded with business and I believe that at least 50 per cent will eventually send in buyers when it becomes possible for my man to complete his calls.

"My discounts depend entirely upon what legitimate industrial purchasers demand of me. I give them 10 per cent where they wish me to deliver, install and service, 20 per cent if it is merely necessary to ship the set to their home, without obligation for installation or service. 30 per cent is available on cash and carry business, where an industrial customer comes to the store, selects his set and relieves us of responsibility for delivery, installation and service. When delivery is required in such cases I turn the set over to a local expressman and charge the customer the exact delivery cost.

"BUSINESS done on this basis is profitable to me as my gross margin is approximately 15 per cent. Industrial business has been in console models, principally, and it has not been necessary to go to any great expense or trouble to get business. I don't advertise other than by direct mail to the industrial concerns already mentioned; I order sets from distributors only as needed and remain free of service obligation in most cases. No time-payment business has been accepted in this department.

"An important rule, which has been inflexibly maintained, is the sale of sets carrying industrial discounts only upon receipt of an order signed by a purchasing agent with whom I have corresponded to the effect that the buyer is entitled to one. This rule must be strictly adhered to if industrial business is not to interfere seriously with store sales."

The Government's Radio Census

(18 states are yet to be heard from)

State	Total Number of Homes	Homes with Radio, April, 1930	Per Cent of Homes with Radio	State	Total Number of Homes	Homes with Radio, April, 1930	Per Cent of Homes with Radio
Alabama.....	592,530	56,491	9.5	Mississippi.....	472,354	25,475	5.4
Arizona.....	106,630	19,295	18.1	Montana.....	137,010	43,809	32.0
Arkansas.....	439,408	40,248	9.2	Nebraska.....	343,781	164,324	47.8
Colorado.....	268,531	101,376	37.8	Nevada.....	25,730	7,869	30.6
Connecticut.....	389,596	213,821	54.9	New Hampshire.....	119,660	53,111	44.4
Delaware.....	59,295	27,183	45.8	New Mexico.....	98,820	11,404	11.5
District of Columbia.....	126,014	67,880	53.9	North Dakota.....	145,382	59,352	40.8
Florida.....	377,823	58,446	15.5	Oklahoma.....	565,348	121,973	21.6
Georgia.....	654,009	64,908	9.9	South Dakota.....	161,332	71,361	44.2
Idaho.....	108,515	32,869	30.3	Utah.....	116,254	47,729	41.1
Indiana.....	844,463	351,540	41.6	Vermont.....	89,439	39,913	44.6
Iowa.....	636,905	309,327	48.6	West Virginia.....	374,646	87,469	23.4
Kansas.....	488,055	189,527	38.8	Wisconsin.....	713,576	364,425	51.1
Kentucky.....	610,288	111,452	18.3	Wyoming.....	57,218	19,482	34.0
Maine.....	198,372	77,803	39.2				
Maryland.....	386,087	165,465	42.9				
				Totals.....	9,707,071	3,005,327	32.6

Start with

“SILENTS”



A special letterhead will attract the discriminating

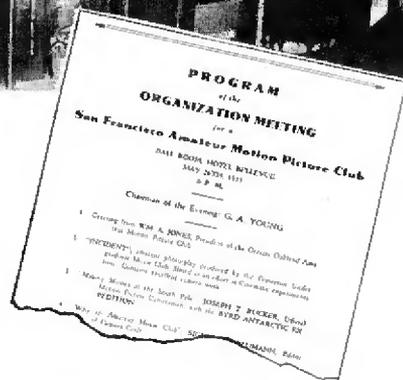


In these restricted quarters Unmack found enough room to build an adequate motion picture demonstration room



Entrance to 4 1/2 x 11 projection room

Organizing an amateur home movie club will help matters along



WITH 20 manufacturers, from coast to coast, now in the market with talking motion picture projectors for home use, and planning to cooperate in the production and distribution of 16 mm. films and synchronized records, radio dealers, with a flair for this coming business, should swing into action.

“Start with ‘silents,’” declares Eric Unmack, San Francisco radio man. “Gain preliminary experience by stocking a line of movie cameras, projectors and films for amateur use—and be sure to include a small demonstration room at the side or rear of your sales room. Then, when ‘home talkies’ hit your town—with their radio circuits and amplification gadgets—you’ll be ready.”

For five years, Unmack has been a camera fan. He has been pushing motion picture equipment and supplies for two years. Recently this activity has been grossing \$500 a month. What, then, may be learned from this successful “case history?” Here’s the boil-down:

The dealer must first become an ardent motion picture taker and projectionist himself, or get someone to work who can talk the language. The best type of picture to demonstrate is one you have taken yourself.

The most profitable customer is the one who becomes a genuine fan. Such a person will deal only with an experienced salesman, who can give him good advice and develop his desire for better equipment.

The necessary store projection room is not difficult to achieve. Unmack erected one, not quite five feet wide, between show case and desk. During the demonstration appropriate phonograph or radio music is played softly. On Saturday afternoons a brief picture show is run for children, admission free, by card. The parents are especially invited to accompany the youngsters.

The classified section of the telephone book is a fine

medium for reaching the picture prospect. It catches the transient trade, a sizable factor in this game.

A mailing list of camera users must be maintained, Unmack has adopted a special letter head which features the motion picture side of his business exclusively.

Keep within a three-month limit on time payment terms. Cameras and projectors are too readily transportable and too easy to dispose of.

Five hundred dollars will finance the start of a movie department, including demonstration room, major stock and accessories.

Don’t neglect the film library. Sell them a projector first. The camera order will follow. Meanwhile another customer for films has been created. Film subjects should be displayed prominently in a glass case.

Start the timid buyer with an inexpensive, hand-operated projector. The outside salesman should carry one of the little affairs with him.

Organize an amateur movie club and see that two or three of your faithful customers are among its members. Loan your apparatus to club and church affairs.

The Oratorical

Summarizing the Focal Points of the



MORRIS METCALF
Former President, RMA

Revives Movement for

PATENT INTERCHANGE

THE outgoing president in his message to the members of the Radio Manufacturers Association, viewed the revival and consummation of the much discussed patent interchange agreement as a near-future possibility.

"It now seems possible that something resembling a patent pool may come into being as a result of the ownership of the important patents by one group or from legislation which will demand that the industry and the public be freed from the present burden of litigation. In the former case, one royalty would cover everything, and the licensee would be comparatively free from litigation. We notice that some members of Congress now feel that perhaps a patent pool would be in the interest of the public good. Altogether, it is not impossible that the work done by the Association in this field may not have been entirely wasted.

"Radio advertising, speaking generally, has been weak and futile," President Metcalf continued. "Ninety per cent of it has been a jumble of technical phrases, catch words and superlatives, and might have been written in Sanskrit as far as the reading public was concerned.

"It has been estimated that the radio industry spends approximately \$30,000,000 annually advertising its products. Possibly \$100,000,000 has been spent in five years. I venture to say that half this amount spent collectively in an instructive and educational manner, and without competitive selling arguments, would have doubled the sales of radio sets and scrapped two-thirds of the 5,000,000 obsolete sets now in existence."

C. C. COLBY

Chairman, RMA Legislative Committee

Favors

REDUCTION OF DEVIATIONS

INTERFERENCE of radio stations with each other and the consequent interference with reception by radio set owners will be lessened to a great extent when radio stations reduce their frequency deviation from 500 cycles to 50 cycles, C. C. Colby, Canton, Mass., chairman of the Radio Manufacturers Association committee on legislation, declared.

"Recently, based on the advancement in precision equipment," Mr. Colby said, "the Federal Radio Commission promulgated an order reducing the frequency deviation from 500 cycles to 50 cycles. When the necessary precision equipment has been installed to insure such consistent adherence to frequency it will materially improve radio reception throughout the entire United States. An investigation has disclosed that more than 90 per cent of the radio stations in the United States have heretofore caused undesirable and often destructive interference with other radio stations because of their non-adherence to frequency."



WALTER J. DAMM

President, National Association of Broadcasters

Warns Against

GOVERNMENT MONOPOLY

A TREATY instead of a gentlemen's agreement to eliminate interference between radio stations on the North American continent was suggested by Walter J. Damm, Milwaukee, Wis., president of the National Association of Broadcasters. Mr. Damm also warned against the proposal being put forth by educators for 15 per cent of the broadcasting channels, characterizing such proposal as an entering wedge of government ownership and operation of all broadcasting stations.

"Educators who are clamoring for 15 per cent of the broadcasting channels fail in their propaganda campaign to inform the public that such a system of education stations could be supported only by public funds, raised by taxation upon the general public. They are clamoring for facilities without knowing what they want to do with them if they are awarded."

In pointing out that "no other country in the world is served by more efficient transmitting equipment," Mr.

Digest

Convention Speeches

Damm said: "Unless you, as manufacturers, sell to the public receiving sets capable of deriving the maximum benefit from these transmissions, you are not only failing in your duty to the public, but you are greatly injuring our business."



LOUIS BUEHN

President, Radio Wholesalers Association

Discusses

PRODUCTION AND ADVERTISING

THE ability to produce in less than three months' time all the merchandise that can be used in twelve months is wrong and must be corrected. Until this problem is solved, or at least controlled, we cannot hope for any improvement in sales conditions. It is the direct cause of having constantly a surplus supply of merchandise at bargain prices, the liquidation of which is not confined to any season but is a constant evil throughout the year.

"Under ordinary conditions it might be argued that this would correct itself by the elimination of the unfit, but where merchandise is manufactured under a special license agreement the usual law of economics does not seem to function.

"Many concerns which started out hopefully as manufacturers of radio have fallen by the wayside for various reasons, but the failure of such companies apparently did not cancel the license under which they operated and it has been possible to buy the assets of such defunct concerns, including the license, add a little new capital and start all over again. Proper control of these license agreements, it seems to me, should provide for cancellation whenever a failure is made and to this extent reduce the number of competing concerns."



DR. JULIUS KLEIN

Assistant Secretary of Commerce

Says We Must

COOPERATE EFFECTIVELY

THESE factors (over-production and inexperience), the inescapable results of the youthfulness of our industry, certainly indicate the imperative necessity of one thing, namely cooperation. To a peculiar degree this industry must demonstrate its capacity for collaborative action.

"Much has been said during this depression of the value of cooperation. What does it mean? Simply belonging to a trade organization, paying dues and attending conventions? Or does cooperation have a deeper significance? By going so far with your trade organization arrangements you have established the means of cooperation, but not in all cases the fact. You have there the facilities for mutually beneficial trade studies, with and without the correlated action of the Department of Commerce as that action may or may not be necessary. You have the means of stamping out the practices that interfere with good will toward yourselves and your products. You have the means of reducing overhead, increasing returns, increasing sales, improving your relations with dealers. But are you sure that you are making the maximum use of these facilities for the attainment of such highly desirable objectives?"

"Reports still persist of the resort to short-sighted business practices on the part of irresponsible firms and individuals. As one instance, I might mention the occasional regrettable marketing of receiving sets of distinctly dubious performance. While these cases are, of course, exceptional, nevertheless, they do discredit the industry in the eyes of consumers and they heighten the difficulties of radio administration. Here again is a field for sorely necessary collaboration."

Dr. Klein brought joy to the hearts of the radio men when he stated that figures compiled by the government indicate that the bottom of the depression was hit last January; and since that time the country has been bumping along on the rock bottom of a valley. In all previous depressions, the valleys, such as the one in which the country now finds itself, have averaged about six months in width. Consequently, although he did not state so definitely, the radio men were led to believe that upturn out of the valley could be expected in July, with a sharp acceleration thereafter, because of the fact that the depression had slid down hill with "four-wheel" brakes instead of descending precipitously.

J. Clarke Coit

New President

R. M. A.

Other Officers Elected

A CHICAGO man, J. Clarke Coit, was elected president of the Radio Manufacturers Association at its annual meeting, held at the Stevens Hotel, June 10.

Within a span of 20 months Mr. Coit has become one of the outstanding figures of the radio industry. In September, 1929, he was made president of the United States Radio and Television Corporation, with manufacturing plant in Marion, Ind. Under his guidance this concern has maintained a high record of production and sales.

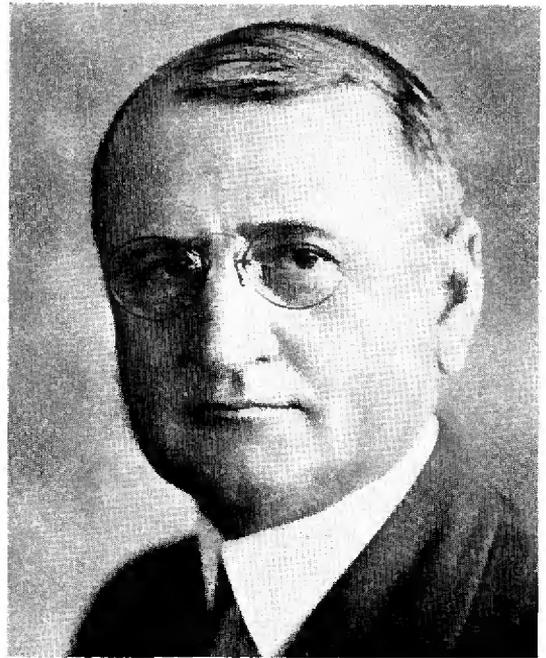
Mr. Coit was born in Missouri Valley, Ia., in 1872, the son of a country doctor. His business career started in 1890 when he joined the Lee, Clark, Andreeson Company, wholesale hardware dealers of Omaha, Neb. In 1913 he was made vice-president and general manager and the name of the firm was changed to the Lee, Coit, Andreeson Company. Four years later he was elected its president.

MR. COIT'S reputation as a successful merchandiser attracted wide attention and in 1924 he accepted an invitation to become president of the nationally known Simmons Hardware Company, doing a business of some \$30,000,000 a year. At the same time he was made a vice-president of the Winchester Simmons Company. These offices were held until September of 1929 when the call came for him to accept the presidency of the United States Radio & Television Corporation.

Mr. Coit is a vigorous personality of apparently inexhaustible energy.

TWO other Chicagoans were elected to RMA offices: A. S. Wells, president of the Gulbransen Company, first vice-president, and Leslie F. Muter, president of the Muter Company, treasurer.

Fred D. Williams, New York City, manager of the Radio Tube division, National Carbon Company, and N. P. Bloom, president, Adler Manufacturing Company, Louisville, Ky., were elected, second and third vice-presidents, respectively.



“DO YOU men realize that 30 per cent of all the goods now being manufactured were not heard of 30 years ago? The automobile, electric refrigeration, the airplane and the radio set have come into existence during that time. And during that same period I worked with some 30,000 retail hardware dealers. The last six years of this experience were largely devoted to trying to make them realize that the goods they had in stock, to a great degree, were out of date.

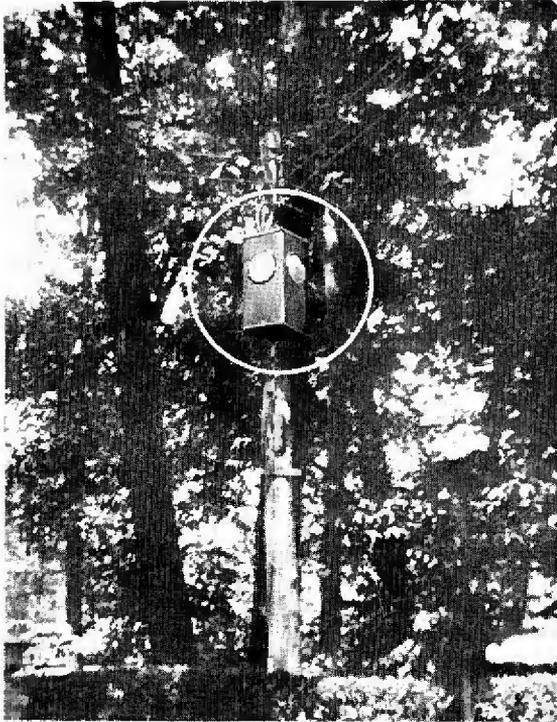
“Who, today, can dictate where radio is going, or who will distribute it? I hold that we must ever be on the alert, to keep pace with our new developments and the changing merchandising conditions.

“I am not discouraged concerning the radio industry. All pioneer developments have to go through a period such as we are now in. If I fail, somebody else will succeed. A billion dollar industry cannot fail. The radio industry is too big for any major misfortune to overtake it. If you and I cannot make a success out of it, gentlemen, somebody will come along who can.”

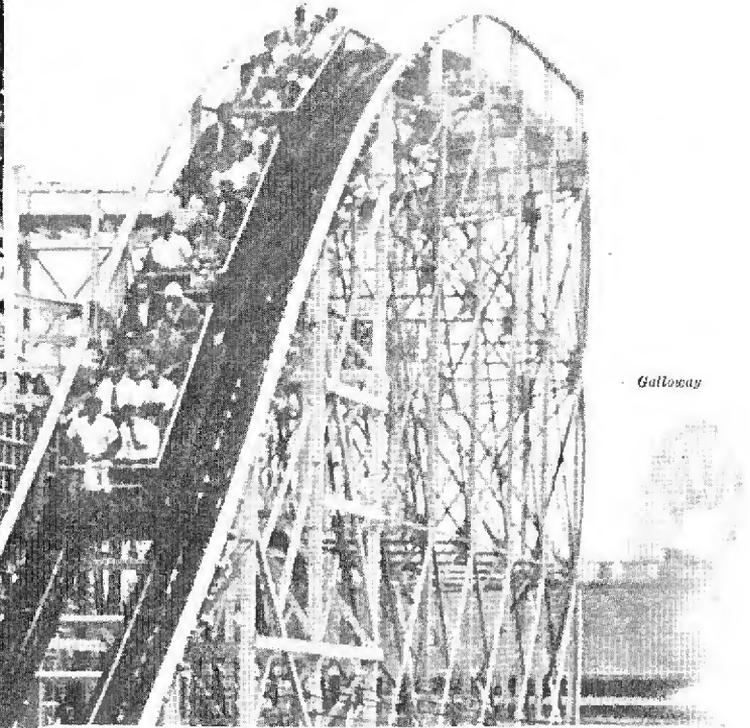
Excerpts from Mr. Coit's speech accepting the presidency of the Radio Manufacturers Association

P.A. for Parks

*Amusement Centers Are
Excellent Summer Prospects*



Four speakers suspended from the top of an electric pole, in a protective case which also serves as a baffle, floods this grove with sweet music supplied by a distant amplifier

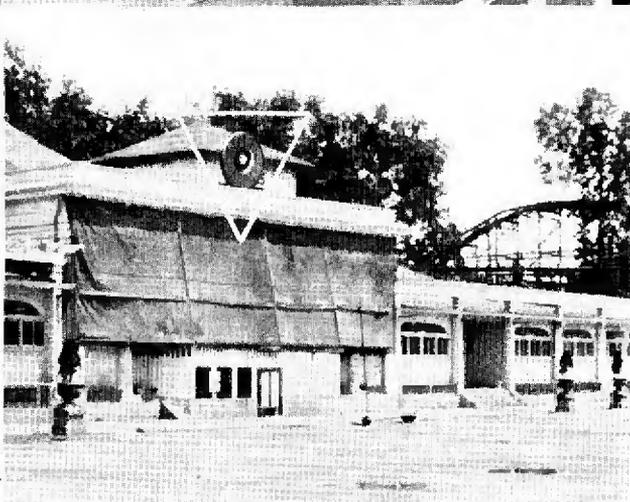


Galloway

Another unit is installed close to the spring-board and artificial falls in this park pool where it dispenses hot numbers that take some of the chill out of cold water



When the brass band goes to lunch this speaker ably takes its place, keeping customers in a happy, holiday mood. No one appreciates the profit building possibilities of amplified music more than an amusement park proprietor



(Photos courtesy OPERADIO)

What every dealer should know about...



Conditional Sales CONTRACTS

FFIFTY thousand years ago our Neanderthal grandfathers arranged conditional sales contracts quite similar, in intent, to those of today. Precisely as the contemporary radio merchant accepts his customer's promise of future payment. Uk would give Ig a fine flint hatchet or quiver of arrows on Ig's promise to pay five nice fat sheep for them on a specified day in the future.

It may be asked how this is known. The evidence lies in the finding, by scientists, of the fossilized skulls of several Igs, bashed in by the clubs of fellow tribesmen—ages-old evidence of man's earliest attempts at repossession.

The modern dealer often would like to proceed similarly but, being under the restraint of certain anile laws which frown on skull-smashing, his final resort must now be to the courts when conditional sales contracts are in default or dispute. And there's the rub—because it has recently been estimated by an eminent legal specialist in this field that of all such contracts not more than fifty per cent could survive a determined legal onslaught in court.

*An outline of the legalities
involved in installment selling*

By Alan Streeter

It should not be inferred from this that the defaulting customer always would be the gainer; there are many possibilities for dealer-loss through third parties, utter strangers to the original signing of the sales contract.

There is, for example, the case of the Tennessee dealer whose customer went into bankruptcy. The receiver, as usual, grabbed everything in sight, including the merchandise for which the dealer had been only partly paid. Although the conditional sales contract provided that title to this merchandise remained in the dealer until it was fully paid for, the receiver refused to surrender it on the ground that, inasmuch as the merchant had failed

to include the serial number in the contract, there was no proof that the seized merchandise was that referred to in the papers. The dealer took the matter to court and, although he nearly lost his case by failure to include the serial number, he finally recovered the merchandise by identifying on it some special paintwork referred to in the contract.

While the courts of Tennessee are unusually strict in demanding the inclusion of serial numbers in conditional sales contracts, dealers should bear in mind that they are vitally important in all states. Even in the most liberal courts their inclusion constitutes an overwhelming advantage when legal identification is required.

But, you may ask, how are we to include a serial number in the contract when the number of the set assigned to the customer cannot be known until some time after the signing of the papers?

The answer to that is, *not* by leaving a blank space on the contract into which the serial number may be later inserted over the customer's signature. Another Tennessee dealer tried that recently and, when the Federal courts ascertained that he could not have known the number at the time of the contract's signing, he nearly went to Atlanta for forgery.

The proper way for the merchant to protect himself in this case is by inserting, at that part of the contract which refers to the serial number, a parenthetical notation to the effect that "the purchaser hereby authorizes the seller to insert serial number *when it becomes known*"—before the customer is asked to sign, of course.

A SOMEWHAT different type of dealer-loss appears in those cases where the merchant, having repossessed merchandise, finds it in unusable condition. A recent case of this sort involved a customer who, having broken certain parts of considerable value, replaced them at his own expense. On learning that the dealer intended to repossess, however, he removed the new parts and replaced the broken ones, maintaining that the latter were the dealer's. Some very expensive litigation was required before the dealer got back usable merchandise.

Adequate protection may be secured in such cases if dealers insert in their contracts agreements to keep in repair and accession clauses which give them title to replacements made by the customer, such as tubes and other accessories. Such an accession clause might be phrased somewhat as follows: "Any spare, extra or replacement parts now or hereafter purchased by you shall be deemed to become and remain an inseparable part of the set."

All dealers are, of course, energetic in keeping track of the location of the customer and merchandise; practically all conditional sales contracts contain the familiar clause requiring customers to keep the seller informed of removals. But far from all dealers are equally energetic in following up this information to its legal conclusion; i.e., by renewing the filing or recording of the conditional sales contract at the office of record. Unless they do this they are open to heavy losses.

A recent case will illustrate the danger. The customer had removed the merchandise from the county to which it was first delivered and some months after arriving at his new home, but before he had completed his payments, he sold the goods to a neighbor. He then defaulted on his payments and the dealer, learning of the sale, tried to recapture the merchandise from the neighbor. The courts refused to uphold the dealer, however, saying that inasmuch as he had failed to renew the filing in the new county within the prescribed time limits, he had given the neighbor no opportunity to ascertain the presence of a lien. The dealer replied that he was unaware of the removal, but when it was shown that two men from his own service department had repaired the merchandise subsequent to its removal, his case was hopeless. This single case illustrates two important points: first, that it is necessary to renew promptly the recording on each removal; second, that notice of removal does not necessarily mean notice to the dealer's credit department, but that knowledge of the removal on the part of any employee with agency status is sufficient to imply legal knowledge on the dealer's part.

The multiplicity and variety of state and county regulations covering filing, recording and renewal prohibit any detailed study of these subjects in this paper, but each dealer is urgently advised to accurately ascertain his local laws, and those of abutting states, and to follow them to the letter. The laws which govern are those operative where the merchandise is located.

Dealers who use the conditional sales contract form which contains the familiar phrase, ". . . either with or without legal process, take possession of and remove said goods . . .," are often inclined to exaggerate the authority given them by the phrase. The courts undoubtedly have, in many cases, interpreted it to cover trickery, deceit, entry during the absence of the customer, and other forms of ruse to repossess, but this writer is unable to find a single case where it has been interpreted to cover assault and battery or other forms of Neanderthalian repossessive methods. On the other hand, there are a number of cases wherein dealers have been assessed



Contract or no contract—Possession is 9 points of the law!

heavy damages for violations of the peace incidental to repossession. If merchandise cannot be repossessed without the use of force, the dealer must delegate the use of force to those state or county officials who are authorized by law to use it. Their help may be secured by routine forms of legal application.

Broadly speaking, the danger of loss from conditional sales contracts arises from three sources:

Adequate contract forms that are improperly used by those who fill them in for the dealer; meaning, specifically, the over-anxious salesman who is in so much of a hurry to get his order that he has no time to care for the little details which go to make up his dealer's bank balance. The remedy should be obvious in this case.

Vague and incomplete contract forms are susceptible to a variety of interpretations. This phase is not liable to bother dealers who use the Uniform Conditional Sales Contract in those states where the Uniform Conditional Sales Act is operative; they have but to properly use it. In all other states, dealers cannot be too thorough in determining local laws and usage, and in having their contracts drawn up by the best attorneys available.

Finally, laxity in observing the local laws and regulations concerning conditional sales. Good, bad or indifferent in phrasing, the contract will hardly hold water if it is not safeguarded by those devices which the states and counties have created for that very purpose.

On all papers set down the full name, status (if individual, partnership or corporation), legal residence and place of business of the buyer. This is required by some states; in all states it is an aid to filing and clearly determines just who the responsible parties are.

Describe the merchandise, in the body of the contract, so fully that there can be no question of its identity. Use the manufacturer's serial numbers if possible; if he provides none, create your own serial numbers and mark them on the merchandise in some ineradicable form.

If the interest charge is over six per cent, include it in the selling price without specific reference to it. Do this whether or not your state permits a higher rate—the customer might move into a state where a rate higher than six per cent would be usurious.

Consult an able attorney about your retention of the title clause if you have not already done so. Such a clause, improperly worded, might at the least be held to convert your contract to a chattel mortgage—with the necessity for foreclosure proceedings instead of the comparatively simple repossession methods open under conditional sales contracts. Foreclosure is an extremely expensive and troublesome process.

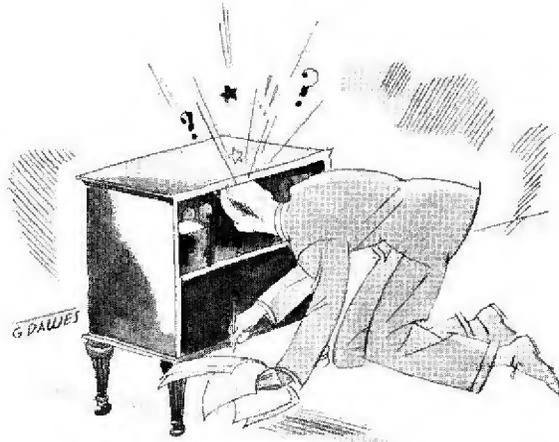
Does your contract contain a clause making the buyer responsible for losses or damage after delivery? Who does it commit to responsibility for fire losses after delivery? Does it provide that the entire amount unpaid becomes due and payable on an individual default? Or are you committed to suing for the individual installments as they become due? Or is it safe for you to allow defaulted installments to accumulate until the last is due, and then sue for them as a whole?

Does your contract make provision for the payment to you of an attorney's fee to reimburse you for collection expense? Does it properly disclaim responsibility for oral agreements and restrict the transaction to those statements contained within the contract itself? Or may you be held responsible for the statements made by over-energetic salesmen? Are you protected against the claims of

customers who attempt to set off, against unpaid installments, exorbitant charges which they claim were paid by them to put a "defective" set into operating order? Does the agreement contain a non-assignability clause, or might you have to do business with an assignee?

Do you know that you must formally accept a contract before it is binding upon the customer, even though he has signed it and made his down payment? Immediate shipment of the merchandise will, of course, be generally accepted by the courts as an acceptance binding on the buyer. If you cannot deliver immediately, however, write him a letter of acceptance and thanks for his business. If you fail to do this, he may demand the return of his money, alleging non-acceptance on your part.

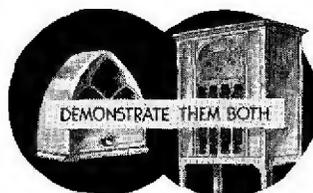
And, whatever your conditional sales contract says, be sure that it says it clearly and completely. Above all, avoid legalistic patter—"party of the first part," "hereinafter," "said," etc. Such terms may lead a nervous prospect to believe that he is being hurried to the chair.



Get the serial number—even if it hurts!

Demonstrate Them Both

Especially if the prospect is undecided or doesn't appreciate the difference.



"Let the customer decide"

But Push

the set that's worthwhile handling . . . and that your customer is entitled to enjoy.

Dealers, Too, can apply THIS PLAN

How jobber Hinsdill's system for using the local bank as a time payment collection agency may be adapted to a direct, retailer-customer, relationship

THE May issue of this magazine described a unique yet practical plan whereby a radio distributor, Hinsdill, of Troy, N. Y., utilizes the deposit slip system of banks for the collection of monthly installments on sets sold by his dealers. We see no reason why this same idea, modified, of course, to fit each local condition, could not be used by merchants who deal direct with their time payment customers. Practically the only change necessary would be to substitute on the deposit slip the name of one's own firm in place of that of the jobber.

For those who cannot readily refer to the May number of *Radio Retailing* we present the fundamentals of this plan, revised for adoption by the dealer who collects his own time payment accounts:

a. Dealer sells a set on time—20 per cent down, the balance in 10 monthly payments.

b. Dealer tells customer that arrangements have been made whereby the balance of the latter's payments are to be made at a local bank, mutually agreed upon, and gives him or her the first deposit slip all filled out.

c. Dealer mails confirming letter, see illustration, to customer, accompanied by nine deposit slips similarly filled in and on the same bank.

d. Once a month, the bank mails its statement of the net account on deposit to the credit of the "Dealer Electric Company." Furthermore, each bank sends the duplicates (special lower perforated part—see illustration) of its deposit slips to the dealer at regular and frequent intervals.

For jobber use, separate deposit slips are necessary on banks in each town where a dealer account is located—

DEALER ELECTRIC CO.
TROY, N. Y.

Feb. 21, 1931

RADIO FOR ALL ITS APPLICATIONS PHONE ENTERTAINMENT DEVICES

Mrs. Mora De Long
182 Fourth Ave.,
Schuenebady, N. Y.

Dear Mrs. De Long,—

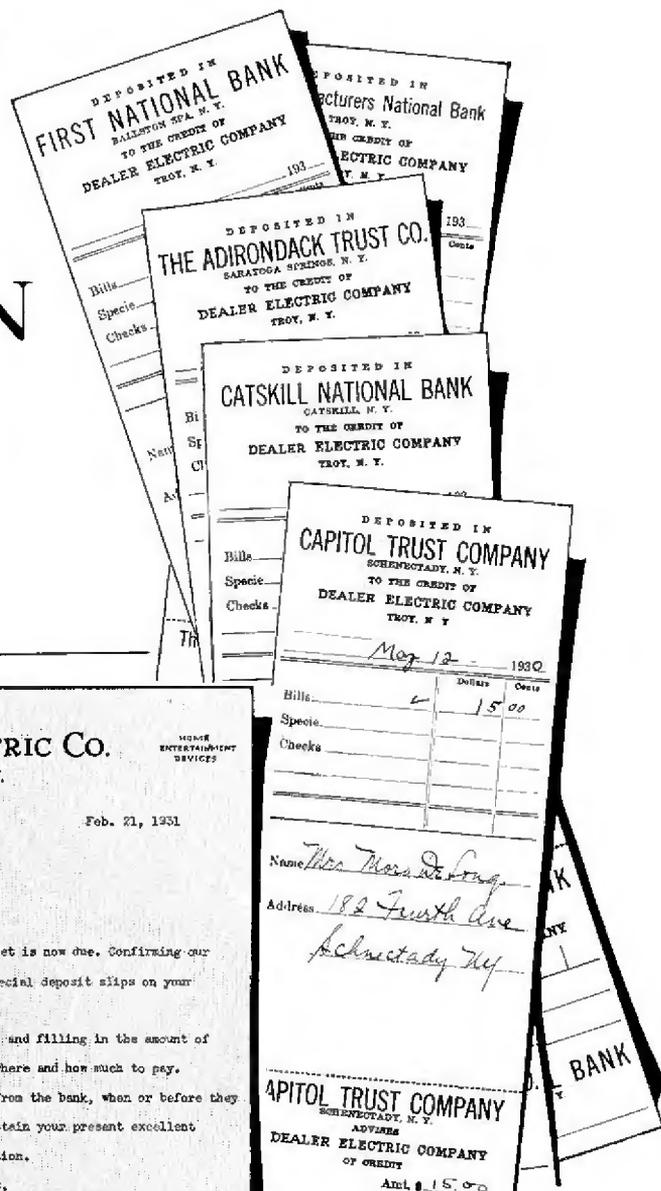
The second payment on your radio set is now due. Confirming our conversation and contract, we enclose nine special deposit slips on your bank, the Capitol Trust Company.

We have taken the liberty of dating these and filling in the amount of each payment so that you may know just when, where and how much to pay.

Your prompt attention to these requests from the bank, when or before they fall due, not only will please us but will sustain your present excellent credit record with this local savings institution.

Very Truly Yours,
Dealer Electric Company
L. A. Smith
President

The dealer confirms contract and encloses balance of deposit slips, dated and filled out.



Showing how slip, or slips, could be printed with name of dealer instead of jobber.

as pictured on this page. For direct dealer use, however, it will be possible to limit these specially printed deposit slips to from one to three local banks.

Now quoting, in part, from the original article: "At this point I questioned my friend concerning the attitude of the local banks on this unusual procedure.

"'At first there was some resistance,' Mr. Hinsdill replied. 'But after I had sold three or four on the worthwhileness of having many persons come to their institutions who might be prospects for new accounts, the rest fell in line. Note also the moral effect of having the customer make his payments to the bank. All delinquencies are immediately caught when we review the deposit stubs for entry on our ledger. My bookkeeper can thus keep in close touch with overdue accounts.'"

TUBES

Tie This Sales Talk To Your Tester Demonstration

REPLACEMENT tubes can be sold through the possession of a good tube tester, but this device cannot be expected to do all the work. If the testing service is properly advertised, and a carefully formulated sales talk is given to people who respond, tube business can be considerably increased. This is the experience of Lou Conner, of Piper & Taft, Inc., Seattle, who has built up a \$1,500 monthly business where scarcely \$50 worth of tubes formerly went over the counter.

Lou invites his old customers, by direct mail, to call at the store for a souvenir which will "greatly improve reception." When they respond he is ready with a *sales talk which ties right in* with his testing demonstration. When a customer inquires for the present, Conner goes

into action right away in about the following manner.

First, he reaches behind the counter and obtains a large tube carton, placing this in full view on top of his tube tester (Acrometer). This, he says, is the gift promised in the circular. Letting it remain on the tester, blank side up, he then launches into his talk, confident that the customer's curiosity about the contents of the box will keep him interested.

He explains that 90 per cent of all cases of poor reception are caused by weak or defective tubes. Realizing this, Piper & Taft obtained an efficient instrument with which to spot such tubes for their customers without charge—in order that they might continue to enjoy the good reception of which sets sold by the company are capable over long periods of steady use an illustrated

RECORDS

Keeping Stocks Within Bounds

ONE of the riddles constantly confronting the phonograph dealer is that of keeping his stock of records to a minimum—and at the same time maintaining a varied and adequate supply of hits and perennial favorites. This problem is not beyond a certain solution.

The return privilege allowed by the various recording companies (Brunswick 10, Columbia 10 and Victor 7½ per cent) provides a partial answer. Dealers complain loudly, however, that this credit certificate plan does not materially diminish the unsalable numbers. Complaint is made that the percentage allowance is not as high as it should be.

After investigating thoroughly and interviewing many dealers, as well as the record sales managers of three major recording companies, *Radio Retailing* has arrived at the following conclusions:

The present percentage allowance for returns should be, and frequently is, sufficient to compensate for the depletion of "cut-out" numbers and left-overs of former hits.

Comparatively few large dealers stock a complete

monthly output of any individual record publisher. Other dealers, finding records a small but agreeable sideline, stock an assortment of that classification of subjects which appeal particularly to their local customers.

Taking, therefore, the typical case of a medium sized dealer specializing in dance and popular discs, how large should his stock run annually? On the assumption that the average monthly release from one company yields fifteen popular dance and vocal records of the usual ten-inch, seventy-cent disc, and allowing for one copy each in the record shelves, the sum total stock of the year would be approximately 180 records. This figure does not include depletions or the extra stock carried for the latest, fastest selling current hits. This clean, even lean, stock represents an investment of \$135 list price, less the usual trade discount.

GOOD buying and good salesmanship will turn over the surplus stock quickly and promote hearty sales for the numbers most in demand. "Shorts" should be ordered daily, if the wholesaler is in the same city, or weekly for express or mail delivery. The buyer and

talk which has proven to be effective is then given. Using a good tube with the glass removed, as an example, it is explained, non-technically, that the elements must be properly spaced. The demonstrator is then inserted in the tester to show its action. Shorting the grid to the filament and later the grid and filament to the plate with a penknife, the telltale action of the meters under these conditions are pointed out.

In some instances it is possible to make an impression by telling about the customer who brought in, only a week earlier, a tube with an intermittent short, that had annoyed him for months. Lou then produces and re-tests the actual tube. This adds a human touch to the sales talk and often induces the customer to talk about his own particular difficulties.

The electrical tests possible with a modern instrument next are explained—Conner telling how it measures the efficiency of a tube and the service still possibly remaining in an "antique." The customer is told how, by reading the allowable maximum and minimum on the socket tags, he can see for himself the condition of his own tubes. The necessity for equal output by each plate of a 280, fair matching of push-pull tubes for best results also proves interesting.

THEN, with the description of the testing instrument over, Lou sets about inducing the customer to bring in his own tubes for test. He points out that this is a free service, explains how the tubes might properly be

removed from the particular set in question, how easy they are to replace. Then a knocked-down tube carton is handed across the counter, a duplicate of the one placed on the tester panel early in the talk, "for his convenience in bringing tubes to the shop for free test." This, it is explained, is the present which will greatly improve reception. In order to get the full benefit of the company's offer it is only necessary to bring the tubes to the store where this service will be performed, gladly, without charge, and on an ultra-modern instrument.

The talk is closed by thanking the customer for his call, assuring him that the company has his best interests at heart and has gone to considerable trouble to make it possible for him to secure the best possible service from tubes and therefore from his radio receiver.

While this particular talk and sales plan has been designed for a specific type of tube tester, in principle it may be adapted to almost any testing device. The point is that dealers should have a prepared sales talk—built to *tie in with* their testing of tubes in the presence of the customer.

By

John Lambert

seller must cooperate to decide on what surplus of fast-selling records should be maintained. The popularity of new hits naturally fluctuates monthly. Add to this skeleton stock the special types of records merchandised and it will be seen that intelligent buying is the keynote to a proper stock of records.

The advance lists regularly issued by every phonograph company are a highly important adjunct to discriminate record purchasing. These lists are issued about the tenth of the month previous to the release date. Shortly afterwards, and in plenty of time for advantageous purchasing, samples are issued. We are sorry to discover, from both dealers and companies, that many merchants do not take this service regularly. By this reluctance, they pass up their best aid to sound buying. It is not necessary to take the complete release samples, but only those of the series you are particularly interested in. In company with his sales force, the dealer should listen to new sample records regularly, to determine the best possible purchase order.

Years ago phonograph record dealers subscribed wholeheartedly to this service. They should do so again. Those single discs which you do not care to stock permanently may be placed on the display shelf. It won't be long before some inquiring customer will take them off your hands.

Do not depend entirely on the opinion of the wholesaler. The best buying angle comes from the person behind the counter. That is, if she or he is alert and unprejudiced and will supplement personal taste with useful knowledge of the new trends.

The following suggestions should limit that ever-

growing accordion commonly known as the record itself:

1. Discover the class of records best suited for your trade. Go after the Red Seal and Celebrity trade only if your sales force is capable of merchandising these super-sales. Stock the records you can sell.

2. Adequate demonstration means using an electrical reproducer.

3. Salespersons who know how to make tactful suggestions are the volume producers.

4. Study the advance lists. Listen to the samples before placing the order with the wholesaler.

5. Use display racks for overstocked records. Distribute advertising matter with every sale. Mailing lists are wonderfully efficient.

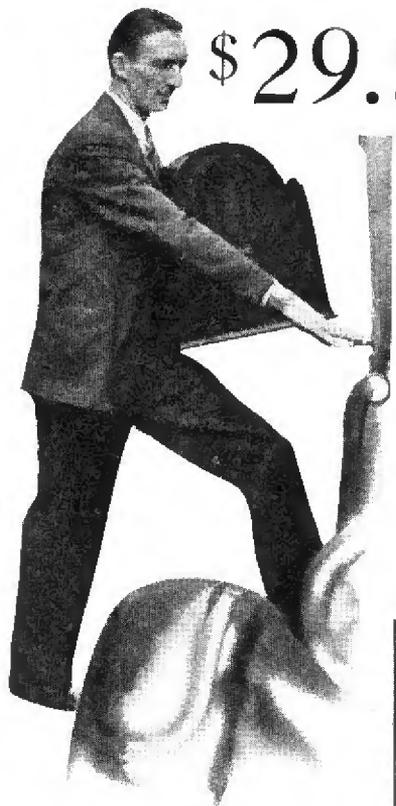
6. Even though records are a sideline, don't forget that they repeat monthly.

7. Distribute as many complete annual catalogues as possible. Here is a good way to get rid of some of the old stock.

8. Read reviews of phonograph records. The *Phonograph Monthly Review*, *The New Yorker*, *Disques*, *Radio Retailing*, *The American Mercury* and many newspapers publish excellent criticisms by experts.

By

Richard Gilbert



\$29.50 or \$2,950

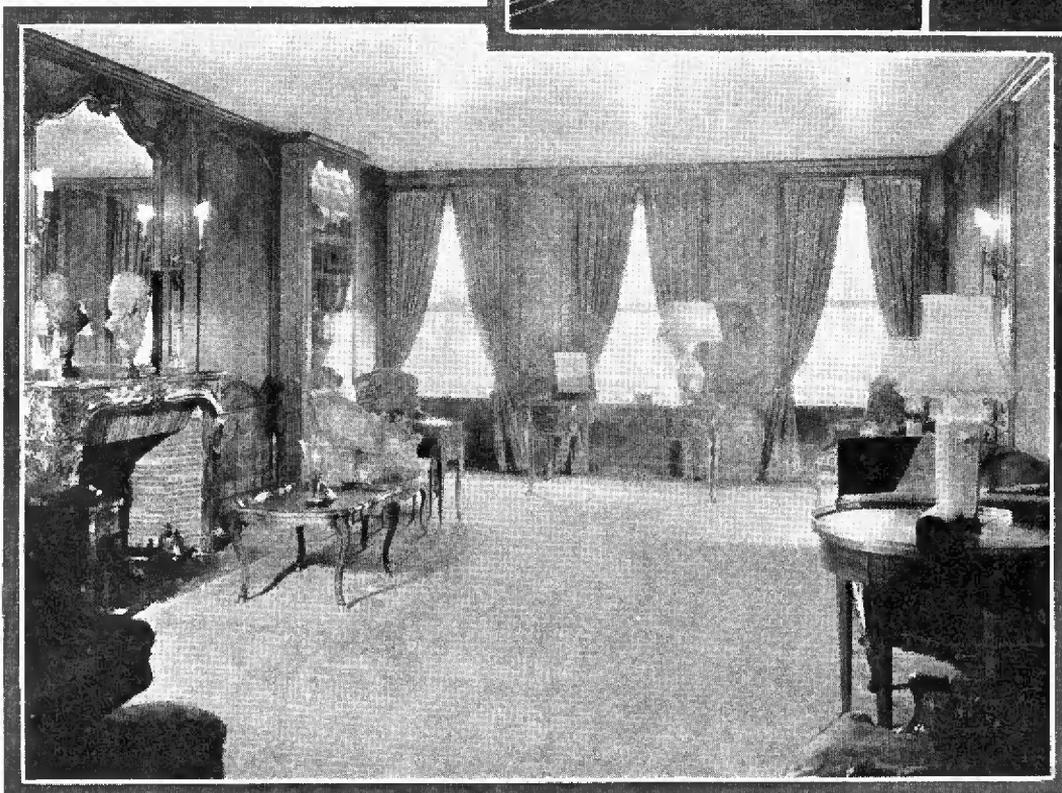
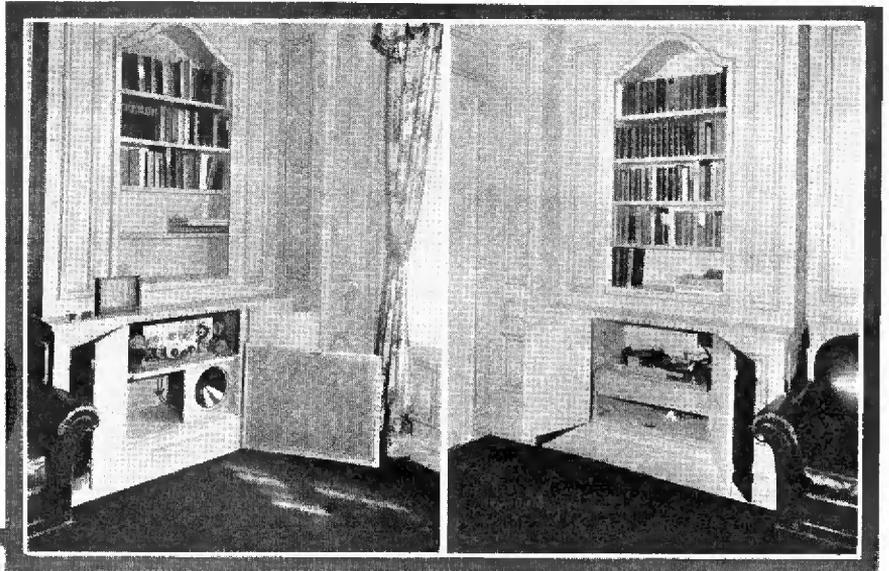
which

RADIO SALE

would you rather make

?

MOST dealers have had their noses so close to the price grindstone that they have forgotten that a market for de luxe installations exists. There are certain people who demand the best in radio service regardless of expense. True such prospects are far between but the profit from such



A de luxe installation in the home of Charles Leichner. Engineered by Cushman and Cushman, Inc., New York, in cooperation with Louis D'Arclay, interior decorator

(Right hand page) Business office of Michael E. Paterno, real estate operator, on 50th floor of the Lincoln Building, New York. Note concealed speaker in top picture behind light bracket and remote control box on desk



jobs more than compensates for the relative scarcity of customers. That \$2,950 radio outfits can be sold is a fact, not a fairy tale. These pictures illustrate but two of these type of installations, obtained in the last year by specialty dealers of an engineering turn of mind, cooperating with architects and interior decorators



The Customer Gets

The Dealer Pays

Four speakers, recessed in wall, covered by ornamental grilles	\$70
Standard telephone rack and panels (or period cabinet if preferred)	80
Containing: choice of finest radio set	175
Equipped with remote control mechanism for volume, tuning and switching	100
Choice of finest automatic phonograph	200
Four remote control boxes, performing all tuning functions	192
Concealed wiring, in accordance with underwriters' specifications	230
Cable, outlet boxes, jacks, etc.	50
Antenna, erected on 10 ft. masts	30
Expert labor and supervision	250
COST TO DEALER	\$1,377
GROSS PROFIT	1,573
SELLING PRICE	\$2,950

High SPOTTING

the Slow SELLER

STANDARDIZATION may be a good thing. In radio merchandising, however, it leaves the public free to accept or reject radio sets on the most superficial details. The dealer with one or more slow-selling sets on his hands knows only too well the curse of standardized design.

What, then, shall we do for a talking point in the case of the slow-moving set? That problem, faced by most radio dealers, has apparently been solved by Willis LeClair, enterprising radio dealer of Peekskill, N. Y. Not only did LeClair face—and solve—that problem with an occasional new set which simply did not appeal to his trade, but also with sets taken in trade. We let him tell his own story of how to high-spot the slow-moving sets:

"The striking similarity among sets of today makes it increasingly difficult to make out a case for the average set, unless it be price," states Mr. LeClair. "Being in business to make a profit, however, and catering to a small-town public, let alone doing business close enough to New York City to feel price competition, I cannot use price as a lever to move goods. Obviously, something new, something startling, something to talk about must

be found for the average set to work up the buying urge in a close-fisted public.

"Although in our territory, northern Westchester County, we are reasonably free from troublesome line voltage fluctuations, we have nevertheless found that tube life is materially increased and our service costs decreased by providing sets with automatic regulation of input voltage. Until recently, we have considered line voltage regulating devices entirely from the technical end, having been sold on the need for such devices in the average radio set.

"Lately, however, we have come to consider such devices from the merchandising side. The reaction of our public to the suggestion that we could save them money on their radio entertainment cost has been most gratifying. Quite definitely, the public is not interested in kilocycles or watts or meters; the public of today is buying a season's seat in the theatre of the air, and wants to maintain that seat, with an unobstructed view of the radio stage, at the lowest possible cost. That's our story and we have stuck to it.

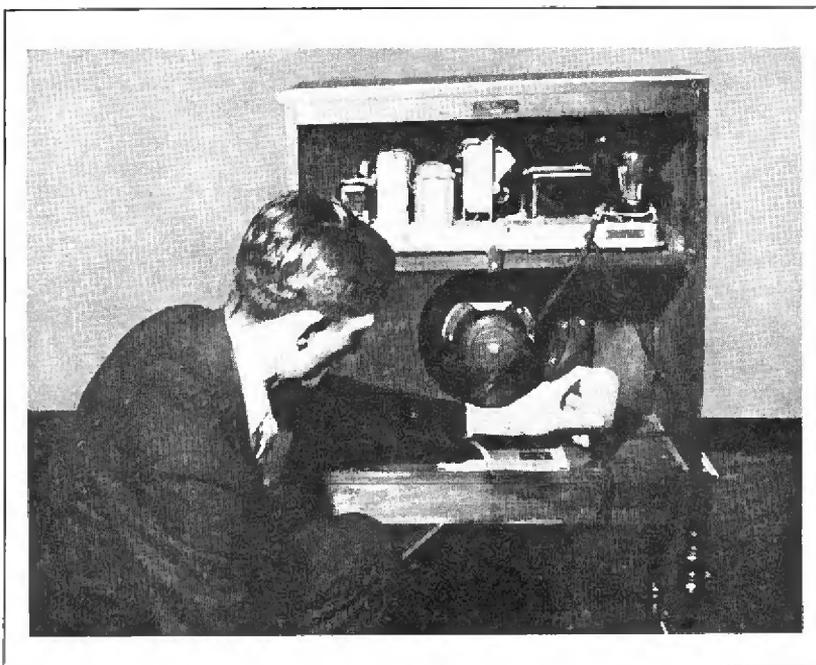
"In the case of the average set, we have introduced the line voltage regulator idea with even greater success. A special adapter or receptacle, mounted inside the cabinet, is inserted in one leg of the attachment cord, and takes the proper

LeClair

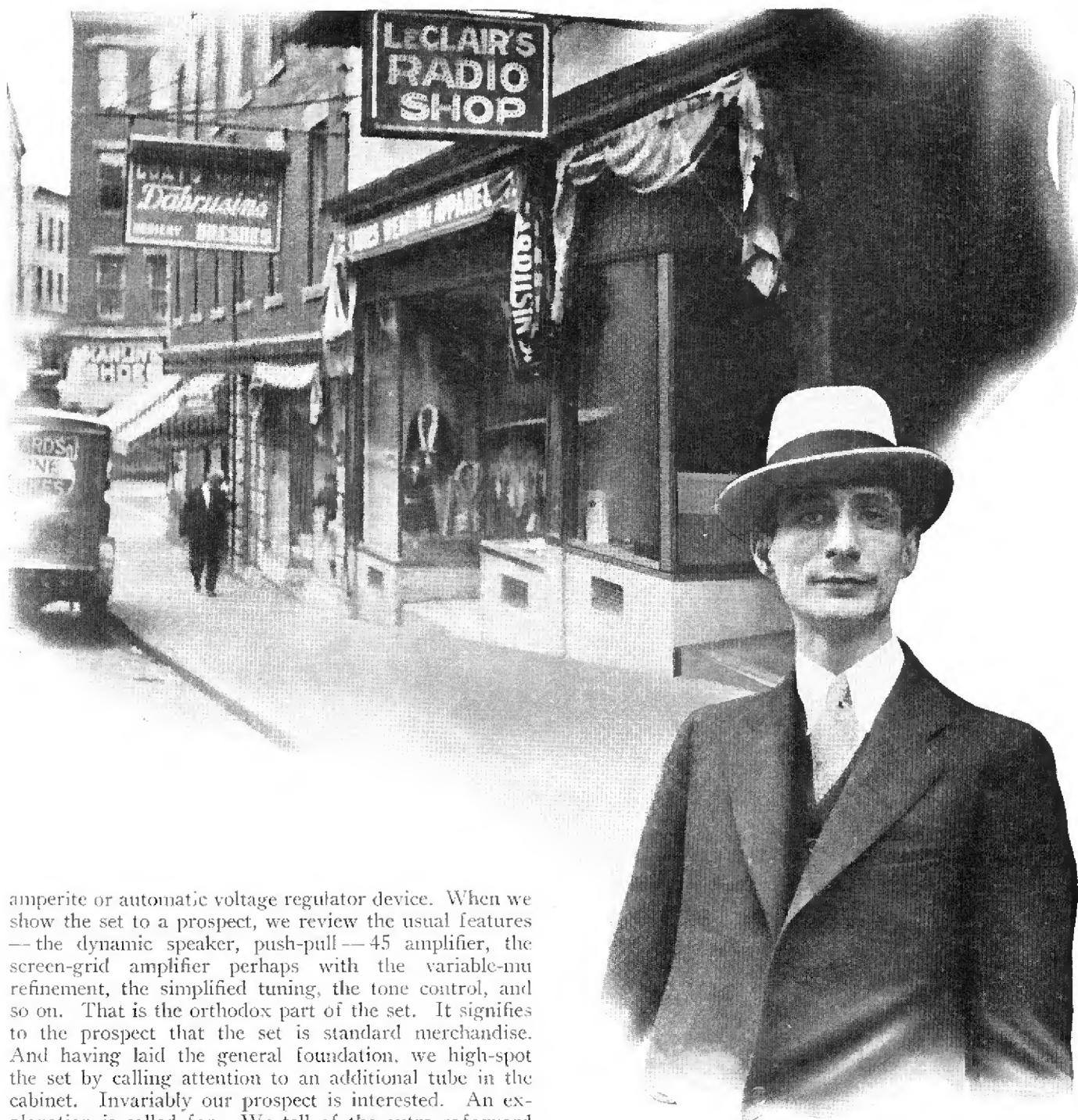
adds a special feature and swings the decision his way

By

Austin C. Lescarboursa



The ballast tube, easily installed in a set, is immediately noticed by the customer because of its frosted glass bulb



WILLIS LECLAIR

Peekskill, N. Y., dealer who has discovered a way to make standard sets look better to the consumer than those offered by competitors

amperite or automatic voltage regulator device. When we show the set to a prospect, we review the usual features—the dynamic speaker, push-pull—45 amplifier, the screen-grid amplifier perhaps with the variable-mu refinement, the simplified tuning, the tone control, and so on. That is the orthodox part of the set. It signifies to the prospect that the set is standard merchandise. And having laid the general foundation, we high-spot the set by calling attention to an additional tube in the cabinet. Invariably our prospect is interested. An explanation is called for. We tell of the extra safeguard provided by the automatic line voltage regulator; how it permits the set to operate on an even keel, electrically speaking; the assured savings in tube life and service calls; and so on. It is the idea of *saving money* in the operation of that set that moves it off our floor.

"We have found, furthermore, that by equipping sets with this automatic line voltage regulator which has proved of value as an additional sales argument our service costs are reduced. We tell this to the customer before he buys his set as evidence that the tube actually makes it possible for him to buy a more trouble-free radio, which appeals to him not only because he wants a minimum of grief in the merchandise he buys but also because he knows that service will eventually cost money.

"I believe the radio trade looks upon fluctuating line voltage as a purely technical matter, whereas it should be considered as a merchandising opportunity. Whether you are troubled or not with uneven line voltage—and in

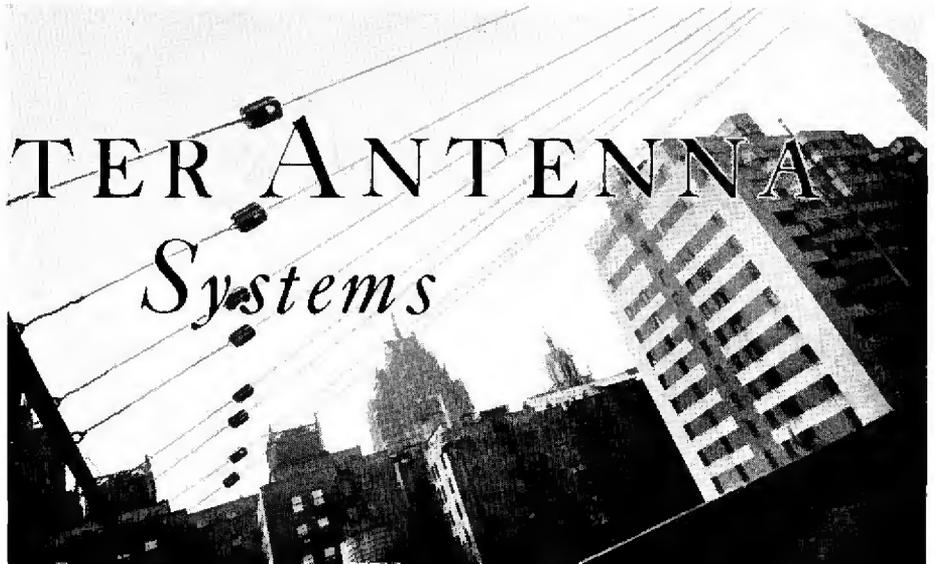
most territories and in most homes this is a far greater menace than is generally realized, you can capitalize on line voltage uncertainties by very legitimately promising your buyer a better, more uniform, highly economical radio performance. Until such time when set manufacturers decide to include this feature as regular equipment, I shall continue to capitalize on the merchandising help which it offers in the case of certain sets that are hard to move."

Installing

MASTER ANTENNA

Systems

How
H. F. Thornell
locates and anchors
"skywires"; handles
downleads, lateral
wiring and coupling



INDIVIDUAL radio antennas on apartment roofs are doomed, we are assured by Harrison F. Thornell, Manhattan dealer specializing in the erection of master antenna systems. And his prediction appears to be well founded. The installation of such aerials by tenants of the larger buildings produces an unsightly, dangerous and inefficient tangle of wires which has already been condemned in New York, where an ordinance now prohibits the stringing of wires less than 10 feet above the roof. Similar rulings calculated to improve conditions will undoubtedly be made in other cities as the problem becomes more acute.

The erection of master antenna systems is a job that radio technicians can well afford to tackle. Such systems, properly designed and installed, not only assure greater radio satisfaction to large numbers of apartment dwellers but also produce additional revenue for the industry. In the light of this trend Thornell's methods will be of general interest. The manner in which a number of sets are coupled to one antenna will be particularly interesting inasmuch as it requires only small, fixed condensers as coupling and blocking units.

Antennas

He standardizes upon No. 12 half-hard copper, enamelled aerial wire, experience indicating that it withstands strain and corrosion best and is easy to handle in long lengths. Using a simple capacitive system of coupling, this system requires the longest collector permitted by local surroundings. In the smaller buildings where only 40 or 50 apartments are to be served and where adjacent tall structures producing directional shielding effects are not present, 100 to 150 feet of wire usually suffices while in the 30 story skyscraper homes located in the cañons of Manhattan lengths as great as 750 feet, suspended between the tops of buildings, have been resorted to.

Antennas are strung over open courts wherever possible to secure greater effective height and in several cases have been projected 8 feet or more out over the sides of a building with metal brackets. In the case of the Beaux Arts installation pictured it was possible to carry wires across a private street to another building. In Tudor City apart-

ment group long collectors are suspended 35 stories in the air over a private street and park.

While as many as 60 receivers have been operated from a single wire all new jobs provide an antenna for each 25. Where two or more are used these are usually 15 inches or more apart although several with 10 inch spacing are in satisfactory operation where greater separation could not conveniently be obtained.

In the larger installations support for the antenna wires is provided by double T-shaped, angle-iron brackets formed of three lengths bolted together and securely anchored in the masonry. Various sizes of angle-iron are used, up to 2 inches, as in the photographs. Where the brackets are mounted in coping, holes are star-drilled into the masonry to accommodate lead bushings and heavy expansion bolts. Galvanized, stranded iron wire guys, also anchored in masonry, are provided. When con-

nection is made directly to brick chimneys the expansion bolts carry through and through. Wood plugs are avoided.

Two brackets are frequently used on one roof where an antenna is carried to various levels over one roof in order to obtain length before jumping across a court. Strain insulators of the type used in guying phone poles, providing emergency support for the wire should the insulator fail, are employed wherever long stretches of wire are used. Antennas are pulled hand-tight, no winches being used even on the larger jobs.

In the 42nd Street district it has been necessary to alter the direction of antennas with the erection of tall buildings in adjoining property. Salmon Towers and the Chrysler and Empire State buildings made it necessary to shift several wires which were formerly satisfactory in Tudor City in order to receive WEAJ and WJZ satisfactory. This condition is rarely encountered in less populous centers.

Downleads

Color-coded No. 14 stranded wire, rubber and cotton insulated, is used for all downleads. Red, green, black and white are used in this order, one for each floor starting from the roof and repeating in the same order for floors beneath. This permits downleads to be identified by floors without laborious tracing. All downleads are soldered to their respective aerials and carried to the point of entry into the building through porcelain insulated screweyes star-drilled and lead-bushed for support wherever masonry is encountered.

In small apartments downleads are most conveniently carried through dumbwaiter shafts to the respective tenants. Open courts and elevator areas also provide means of distribution. In the larger buildings other paths must be found. In Manhattan such buildings must provide enclosed halls with ventilation. Downleads are often snaked down through the ventilating ducts to the various floors. In the Beaux Arts building they are carried from floor to floor through slop-closets beside the steam risers. Several buildings in Tudor City are supplied through the seldom used fire-towers, the wires following water pipes. Unexposed courts are available in some buildings of this type.

In new buildings the architect is



The necessity for securely anchoring master antennas cannot be overstressed. This angle iron support fastened to the coping atop the Beaux Arts apartment is a model of sturdy design

usually induced to provide 1 inch conduit risers for radio downleads and a Condulet entrance bushing at the roof. No attempt is made to shield downleads. The tremendous pickup afforded by the unusually long antennas employed in this system apparently make it unnecessary to push receivers to the point where they are sensitive to extraneous noise. Where unusual conditions make it advisable to shield care is taken that the conduit or metallic braid is large enough to provide good spacing between shield and downlead in order to keep the capacity of the system low.

Downleads in modern apartments are well shielded naturally, we are informed. Fire-towers, dumbwaiter shafts, elevator shafts and enclosed corridors are often metal-lathed to comply with building regulations. Ventilator risers are good natural shields and these are most often used for downleads in Manhattan. Thornell has no objection to the bunching of several unshielded downleads from separate aeriels together in one duct or conduit; in fact believes the inductive relation between them to be of genuine value in his system.

Flexible loom is threaded over the wires at all points where downleads may chafe on masonry. In the Beaux Arts the leads terminate in slop-sink closets on the various floors where they are provided with lightning arresters grounded to the water pipes. In this particular job an innovation is introduced in the form of a master cutout switch which permits the superintendent to enforce quiet hours by cutting off the master aerial at a box to which he only has the key.

Laterals

Number 16 stranded, rubber and cotton covered wire is used for all lateral leads joining downleads with the various apartments on any given floor. In small, occupied buildings, these may be forced beneath the base in corridors. Metallic picture moulding installed in the corridors of most modern buildings holds the laterals nicely and partially shields them too. Architects are urged to include such mould in corridors to provide a carrier for telephone and radio wiring.

On many jobs lateral leads share metal mouldings with twisted telephone pairs. Despite the fact that many New York exchanges now use dial signalling systems no interference has been noted because of the proximity of the wires.

The lateral leads are carried in the moulding directly over the doors to the individual apartments. A small coupling condenser is connected to the lateral directly before each door and the lead from this coupling capacity passes through a small hole star-drilled through the partition above the door, into the apartment. Laterals remain unbroken around an entire floor, the condensers merely tapping into them.

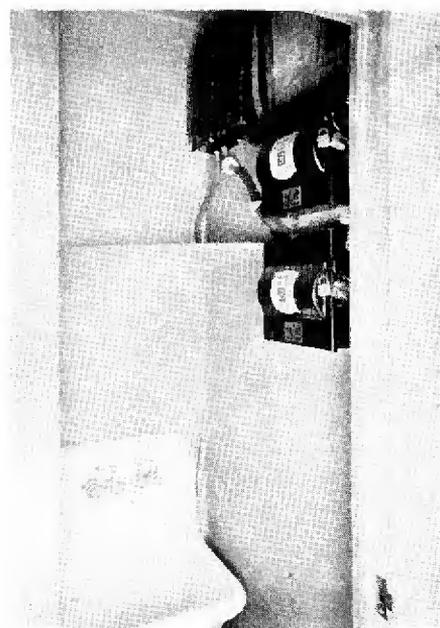
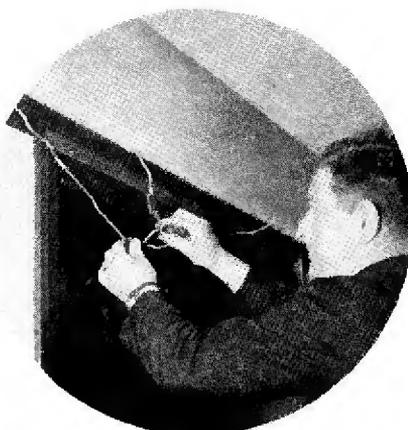
When the condenser has been securely soldered in place it is securely wrapped in friction tape and pressed down into the moulding. In new jobs a metal sleeve is provided for entrance to the apartments over each door.

Coupling

Small, fixed condensers are the only blocking and coupling devices used in this system. The sizes in use range between .00025 mfd. and .000025 mfd. The small capacities are used to couple some

of the older type receivers which are readily overloaded by long antennas to the laterals while the .00025 generally works satisfactorily in connection with the newer receivers which remain selective irrespective of antenna length. Coupling condensers are selected for each set in use in an apartment by air test. The process merely involves the selection of the smallest capacity which provides satisfactory pickup. In general, large capacitances aid selectivity but injure selectivity while small ones perform in an opposite manner.

In the multi-story skyscrapers it has been found advisable to "stagger" the coupling arrangement, using small condensers generally on the upper floors where pickup is high and larger sizes on the lower floors where some of the energy from the antenna has been



Downleads terminate in the slop-closets of each floor where lightning arresters and main cutout switches are provided (Above)

Laterals are carried in the metal mouldings of corridors while the leads to individual apartments pass through holes star-drilled over the doors. Coupling condensers are installed outside the apartment (Left)

dissipated in the downleads. This assures more uniform reception throughout the building. This plan is not necessary in buildings under 20 stories.

Despite the relative simplicity of the coupling system employed no interaction between receivers on a common aerial is experienced. In some of the larger jobs a .002 condenser has been placed in series with the lateral lead to each floor in addition to the capacities coupling to the individual sets. In the event of an individual condenser short-circuiting this capacity prevents the ground so caused from shorting the whole antenna system, confining trouble instead to one floor where it may be readily located.

The system described in this article is that of the Radiant Sales Corporation, a pioneer in the master antenna field. This company has installed such aeriels in upward of 50 New York buildings, ranging from three-story, 45-apartment structures in the Bronx to 35-floor, 3,000-room skyscrapers of the 42nd street district.

In view of the growing demand for such jobs and their value as a source of revenue to dealers, other systems, in particular those using r.f. coupling transformers and vacuum tube "booster" units, will be described in early issues.

In some instances the use of exceptionally long antennas makes it necessary to provide a high resistance path to ground for heavy static charges which collect in the system. A 1000 ohm resistance in series with a half mike fixed condenser is generally connected to the antenna and grounded to a standpipe for this purpose. Unusual cases in which cross-talk from one particular station has been experienced have also succumbed to this treatment. The use of such a resistor and capacitance is, however, rarely necessary in any but the larger buildings.

Metallic braid shielding is occasionally employed where leads pass through motor rooms. And in a few cases it has been necessary to eliminate electrical interference at its source. Oil-burners are shielded rather than trapped while electric refrigerators not provided with noise suppressors at the factory are so equipped when they offend.

Master antenna systems, Thornell points out, suffer from interference pickup much less than is generally supposed owing to the fact that the collectors are usually so efficient that it is not necessary to work receivers at high-gain, where they are most susceptible to pickup of noise from the light-lines. The principle precaution to be taken in this business, we gather, is to use oversized, securely fastened material on the roof so that the likelihood of failure high in the air is reduced to the very minimum.

This is a job, by the way, in which radio dealers must often cooperate with electrical contractors. While antenna erection does not come under the jurisdiction of the wiring unions it is usually necessary to subcontract the job of stringing downleads and laterals to a licensed electrician.

SERVICE SHORTCUTS

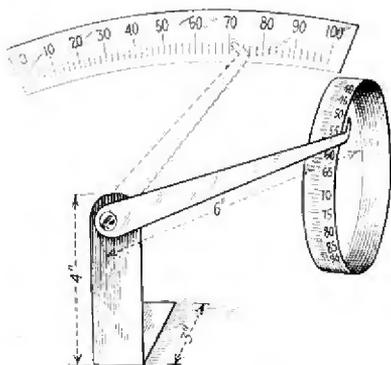


Reading Chassis Dials

By A. O. Crim

When a chassis is removed from a cabinet it is difficult to read the dial as the indicating pointer is left in the cabinet. This makes it hard to align receivers. The difficulty may be overcome by fashioning a simple, universal pointer out of brass as shown in the illustration.

Take a flat piece of brass about 1 in. wide and 7 in. long and bend it at right



angles 3 in. from one end. Drill a hole large enough for an 8-32 bolt $\frac{1}{2}$ in. from the end of the 4 in. leg. Cut a piece of brass 6 in. long in the shape of a pointer, with the point hooked over at the extreme end as shown.

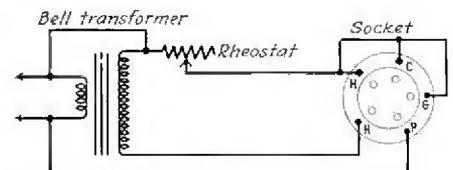
To use the gadget, slip the 3 in. flange of the supporting piece between the workbench and the bottom of the chassis and adjust the pointer to zero with the tuning condensers at minimum capacity. The hooked end will permit the pointer to be used on either drum or full vision type dials.

For Dirty Sockets

By S. R. Rich

Sockets which have become dirty or corroded, preventing good contact with tube

prongs, may usually be cleaned without removing them from the subbase by turning a No. 6 machine screw in each hole. The screw will be found just small enough to drop in place, its sharp spiral cutting away corrosion quickly.



receives the proper voltage. Tubes may be then tested whether or not an a.c. set is handy.

The size of the rheostat must be determined by test as it depends upon the type and make of bell transformer used. Most transformers supply about the same voltage, no load, but under load the drop varies depending upon the size of the wire used in the primary and secondary windings. A 10 ohm rheostat will usually operate satisfactory. If the unit is to be used on 110 volt d.c. current the positive side of the line should be connected to the tube plate.

Removing Insulating Compound

By S. J. Lyon

An easy and clean way to remove the compound used in sealing a transformer, condenser or choke in a metal case is to put the part in an electric refrigerator. It should be placed in the center of the coil, with the ice trays removed, or directly beneath and close to the freezing unit.

Leave the part in the machine for three or four hours. Then remove it and tap the sides sharply. The compound usually becomes so hard that the part can be removed from its metallic case clean and free of the substance.

Dial Drive Repair Tool

By R. L. Wittman

Dial drive belts such as those used in Majestic and similar receivers may be re-

Electrifying Old Tube Checkers

By J. Howard Parry

Old tube checkers not equipped with built-in power supply may be greatly improved at low cost by using them in conjunction with an external unit consisting of a cheap bell transformer, rheostat and five-prong socket. The device is also useful where servicemen desire to use a set analyzer as a tube checker.

Wire the external unit as shown in the diagram and insert the tester plug in the socket, carefully adjusting the rheostat so that the tube filament re-



placed with much less trouble if a home-made tool such as the one illustrated is handy. The tool is made of a slider arm from a discarded wire-wound volume control and a 4 in. length of rigid bus-bar with a hook at one end.

By slipping the volume control arm over the tuning dial shaft and fastening it in place by means of the set-screw, one end of the belt may be held in place by slipping the hooked end of the bus-bar over a corner of the chassis. The other end of the belt can then be wrapped and drawn tight without fear of the first finished end unwinding.

Homemade Drive Cable

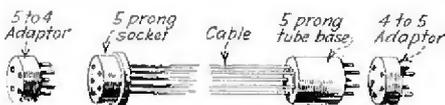
By Edwin W. Holscher

Here is a "kink" that might prove of interest to servicemen. Quite a few of the radio receivers that use cables to drive the tuning condensers break these cables. This trouble can be eliminated by using a good grade of fish line soaked in a mixture of graphite and oil in place of the old cable. The graphite and oil makes the cord smooth and frictionless, giving long service, longer in my opinion than the original metallic belts.

Speaker Extension Cable

By M. E. Henzler

It is often necessary to remove chassis from cabinets in order to service them properly in the shop. This usually makes it necessary to remove the speaker from the cabinet as well, despite the fact that



many speakers are distinctly separate units and are not fastened to the chassis or power pack in any way.

In order to save time I have fashioned an extension cable with which a chassis on the bench may be connected with its speaker in the cabinet. By using a five prong socket for one end and an old five prong tube base for the other and having two adaptors, one a four prong to a five and one a five prong to a four, this cable can be used on very nearly all makes of radios.

Resistor Color Coder

The Globar Corporation of Niagara Falls, N. Y., will be glad to supply radio servicemen with a card which permits the value of resistors coded in accordance with R.M.A. standards to be determined.

Correction

The "harmonic" oscillator described on page 65 of our June issue is a DayRad, not a Jewell.

PILOT LIGHTS

Anurad 70's and Crosley 704's sometimes develop hum due to breakdown of an 8 mfd. anode in the Mershon filtering the detector plate supply. If re-formed, we are told by L. M. Bannon of South Bend, the hum will shortly reappear as there is not enough voltage on the anode to keep it clear of impurities. He suggests that in such cases the anode be disconnected and replaced with a 1 to 2 mfd. paper condenser. Keep the new condenser as far from the hot 281's and 250's as possible.

A friend of ours reported that every time he walked across the floor his radio set up an ungodly racket. By wiring suspended from the 2 x 4 floor supports, on the cellar ceiling, caused the trouble. The metallic covering made intermittent contact where it entered the suspension light terminal boxes.

V. W. Hodge of Claremont, N. H., writes: "Intermittent operation of Brunswick model 15 has been traced to open .25 mfd. cathode by-pass condensers. Pulling on the leads to these with the set operating disclosed the trouble. Abnormal hum is sometimes caused by the shorting of a .14 mfd. unit across the filter choke. A .1 mfd. condenser can be used for replacement. Distortion is caused if metal-clad audio bias resistors short. Absence of an 800 ohm reading from —45 filament to ground shows up this trouble.

A check on the amplification factor of screen-grid or variable-mu tubes can be made with a Supreme model 17 in the following manner: Pull the control grid lead plug out of the control grid jack and plug it into the pentode jack. The meter should read between 24 and 25 mils on the 100 mil scale. Wilbur T. Golson of Dothan, Ala., says this check should be used in fitting tubes to supers.

Stan Newhard had a "sticker" in a Stromberg using 201A's, 112A power tube and an A, B, C pack equipped with a 280 and a tungar bulb out in Slatington, Pa., Filament voltage had dropped to 3 volts on the panel meter and installing a new tungar merely pepped it up for a week, whereupon back it dropped again. An equalizing coil was found in the pack with loose windings. It was re-wound tightly and coated with Duco cement and the trouble ceased.

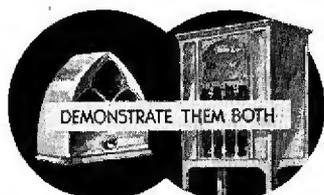
Modernizing old Radiolas by replacing the 171A with a 245 has made a few pennies for Charles Howlett, Jr., Ulica, N. Y. He obtains the filament supply from the 227 filament winding or through a resistor. C bias takes care of itself while plate voltage is raised by putting another 2 mfd. condenser across the rectifier output. Watch the bleeder resistor when trying this stunt. If it overheats replace it with a huskier one.

Balkeit B-eliminators are right up M. Schneider's alley; he has made a specialty of their repair up in Rochester, N. Y. These hints will be useful: "When the tantalum element wears out in the acid, pull it out and reverse it. Take a piece of flat brass long enough to extend from the terminal of the transformer to the rectifier cover, drill a hole on each end, put one end on the transformer, put a nut and screw with a washer on the other end and clamp the old part of the tantalum in place." Another idea: "When the jars keep dropping out it is caused by the acid stretching the rubber washer in the cell hole. Remove the washer and screw the jar back in place without one." Still another: "When the elements break off at the glass tube and reduce voltage output unscrew all the jars from the assembly, break off about one inch of the glass tube, scrape the heavy lead element until it is bright. Put in new acid, replace all jars, put the rectifier back in the eliminator. Then connect it to the radio, turn on the eliminator, take a pair of pliers and short two or three sections of the elements at a time for about a minute."

Crosley Bandbox receivers were made without provision for alignment of condenser gang with the shields in place and J. E. Fox of Madisonville, Ky., finds that the adjustment is thrown off upon replacing these shields if they are removed when the work is done. He gets around this difficulty by removing the two end condensers from the chassis and sawing a slot in the end of each shaft with a hacksaw and then adjusting them with a screwdriver with the shields in place.

Charles Andres of New Orleans gives us these tips on servicing of AK 40, 42, 44, 45, 46 and 47's: "When plate voltage is low the cause is usually a shorted unit in the filter block. These can be repaired without replacing the entire block. There are three wires connecting the condenser block to the filter choke in later models. These can be repaired without replacing the entire block. There are three wires connecting the condenser block to the filter choke in later models. These are found by removal of the attachment cord. In earlier types they are imbedded in the pitch. Chip this pitch away, cut the white wire. A re-check is then made for voltage and if no reading is obtained the blue wire is severed and the check re-made. In the dynamic type receivers, types 46 and 47 the blue wire leading to the speaker field is disconnected where it leaves the condenser and then connected to the blue wire coming out of the filter choke. In each case whether the white wire or the blue the installation of an 8 mfd. electrolytic condenser is necessary. A one-inch pipe clamp is used to hold the new unit in place on the outside of the power unit by drilling two holes in the housing and then plugging it in with screws and nuts. This automatically grounds the negative side of the condenser and one positive lead is brought over to the lead of the unit, to which the defective condenser was originally connected."

EDITORIAL OBSERVATIONS



"Let the customer decide"

Skywires

TEN years ago the roofs of America were relatively clean, shipshape. Today they are in a horrible condition. Wires criss-cross at every conceivable angle from all available projections, and apartment house roofs in particular look like the handiwork of giant spiders gone berserk.

This deplorable condition is largely due to the fact that many dealers, in order to eke out a profit in these days of ultra-cheap sets and free antennas, must demand that their installation men "make time." Haywire jobs result.

Low, inter-tangled antennas, in addition to being a nuisance against which several cities have already passed ordinances, give poor satisfaction. It is high time something was done about them. Master antennas will undoubtedly solve the apartment house problem in the next few years and dealers would do well to investigate this business. But the private home problem must be solved in some other manner.

If dealers must continue to erect aerials free what is to prevent them from offering, at the time of sale, a *special* antenna job for a few dollars extra. Supporting brackets, shielded lead-in wire, transposition systems, these and similar refinements might well be used to justify this cost.

"Giveaway" Prices on Sets Stimulate Interest in Home Talking Movies

ONE interesting, and constructive, result of this fight to give away receivers has been to awaken keen interest in allied lines offering better profit possibilities. The 12,000 tradesmen at the Chicago show responded in sympathetic and

significant fashion to the appeals of those concerns featuring higher-priced receivers, dual purpose jobs, clock and phonograph combinations, custom furniture, electrical appliances, television, amplification systems and last, but by no means least, home talking movies.

For the first time in the history of the radio industry sound with 16mm. film projection occupied the spotlight. The news events giving rise to this statement will be found in other pages of this issue.

From now on then, keen thinking dealers will accept the \$39.20—and lower—sets at their true merchandising valuation. They will stock them, of course, but they will devote 90 per cent of their energy to marketing those home entertainment and utility devices which carry profit-making margins, not the least of which will be sound movies.

This latter observation is based on two things: First, the existence of a strong consumer desire for "sight" entertainment. Second, the fact that no major technical difficulties stand in the way of the near future perfection of sight and sound screen service, and at such a reasonable investment that the buyer will receive full-measure return in the form of satisfying entertainment.

"Tube Service"—The Sesame

OF ALL the front door appeals offered by ambitious salesmen, free radio set inspection and tube service is the hardest for the housewife to resist. The tube inspector, in other words, has the best opportunity of all in-the-home contactors for establishing a friendly sales relationship with the "lady of the house."

Realizing this advantageous circumstance, and appreciating, moreover, that radio men require a greater incentive than the present profit margin on tubes alone to undertake house-to-house selling, a well-known tube concern has devised the following promotional plan:

Equipped with a complete assortment of new tubes, the salesman-servicer announces that he is calling to make a gratis check-up of the operating status of Mrs. Brown's radio set. This he proceeds to do in all sincerity—using the simple comparative tone and volume test, rather than elaborate instruments, substituting new tubes for old. After a set has been inspected—and the tube replacement sales talk presented—the conversation is directed to the matter of other electrical appliances, or of the need for some specific home or

automobile device. In other words, the salesman is provided with sufficient sales material to make his daily outside rounds worth while.

The general philosophy of this plan is sound and opportune. It well might be adopted by radio dealers throughout the country, as a logical way to increase tube replacement sales, and at the same time to cash in on the entree thus obtained.

*Specialty Selling—
not Price—
Will Move Refrigerators*

MANY new refrigeration dealers are being created this year. The largest number of these are coming from the ranks of the radio, music and furniture dealers—estimable merchants, with all the requisites for selling electrical refrigeration save one . . . a keen recognition of the fact that, unlike radio, this device can be sold in volume only by the application of specialty methods and the use of specialty men.

Refrigeration is having a wonderful year. And it is in the interest of preserving the health of this situation that we sound a note of warning, particularly to those radio dealers without previous experience in moving specialty appliances.

Price reductions will *not* speed the sales of electric refrigerators. Only hard, in-the-home contacting will sell refrigerators in worthwhile volume.

When August rolls around, therefore, refrigeration retail inventories should be well in hand.

Too often have we seen the futility of trying to make money based on the appeal of "sensational radio values." To disregard this bitter lesson, to feature price and "dump" refrigerators will be the height of folly.

The remedy must be applied *right now*. It calls for the cooperation of the refrigerator manufacturer with the retailer. Working together, specialty selling organizations can be formed and trained and the experience of veteran electrical appliance men applied to a situation fraught with harmful possibilities if conservative buying and aggressive selling are not employed.

*"There Ain't
No Sich Animal"*

RADIO is as indispensable to the social and business sides of our existence as clothing and food are to our physical well being. Just so long as people have the desire to keep up-to-the-minute, whether it be on clothes, autos, radios or garden tools, just so long will radio sets be bought *and discarded* by thousands as fast as technical and external improvements are made. From this point of view there will be no such thing as market saturation.

Like the well known remark of the farmer, viewing for the first time, a giraffe, "There ain't no sich animal."

FRED G. CARSON, *Colonial Radio Corporation*

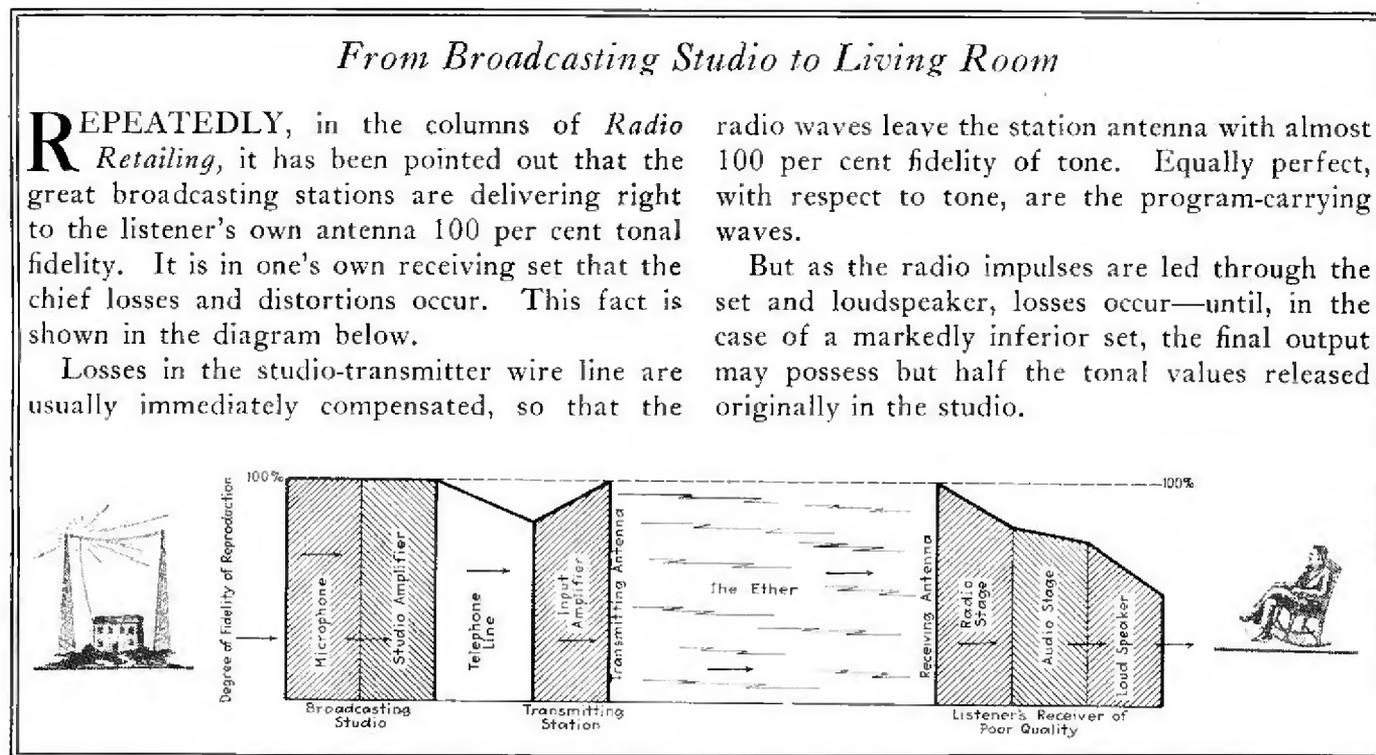
From Broadcasting Studio to Living Room

REPEATEDLY, in the columns of *Radio Retailing*, it has been pointed out that the great broadcasting stations are delivering right to the listener's own antenna 100 per cent tonal fidelity. It is in one's own receiving set that the chief losses and distortions occur. This fact is shown in the diagram below.

Losses in the studio-transmitter wire line are usually immediately compensated, so that the

radio waves leave the station antenna with almost 100 per cent fidelity of tone. Equally perfect, with respect to tone, are the program-carrying waves.

But as the radio impulses are led through the set and loudspeaker, losses occur—until, in the case of a markedly inferior set, the final output may possess but half the tonal values released originally in the studio.



Highlights on the

July, 1931

Arranged for

EDWIN R. WEEKS HEADS MUSIC MEN

NAMM Passes Resolution Urging Radio Manufacturers Not to Overproduce

The new president of the National Association of Music Merchants, Edwin R. Weeks, of Weeks and Dickinson, Binghamton, N. Y., who was elected at its convention at the Palmer House, Chicago, is one of the most striking and interesting personalities in the music industry.

Mr. Weeks has been connected with the retail piano and music business for a number of years. He began his career, not as a business man but as a musical artist. He studied for opera and is possessed of a voice of unusual quality. The urge, however, to be in active business overcame his desire for the operatic stage. It is probable that one of the reasons for his undoubted ability as a "showman" may be traced to his early theatrical experience.

Mr. Weeks is a prominent Rotarian, being past Governor of the 28th District, Rotary International. He has taken prominent part in social and musical affairs in Binghamton. He is at present treasurer of the Binghamton Civic Music Association. He was formerly president of the N. Y. State Music Merchants Association.

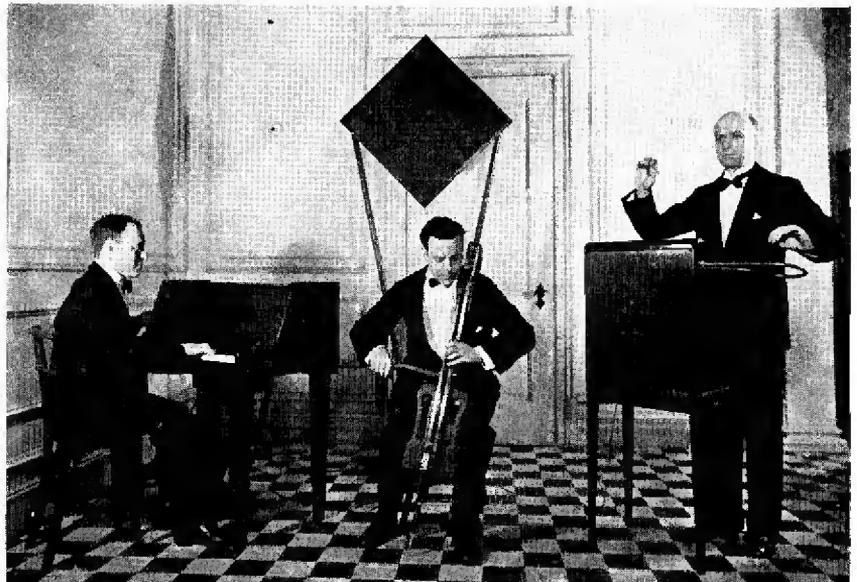
The Resolution

The following resolution was passed by the music merchants at Chicago:

WHEREAS, Since President Metcalf of the Radio Manufacturers Association at the banquet of the National Association of Music Merchants on June 9th, 1931, having made the statement in his address that the Radio Manufacturers Association looked upon the music merchants as being among the best of radio merchandisers and having asked that a still closer and more friendly relationship may exist between radio manufacturers, and music merchants, and—

WHEREAS, Many members of the National Association of Music Merchants having in the past met with loss and embarrassment on account of the manufacture of radios beyond current demand, incurring the natural consequence of distress markets, it is—

RESOLVED, That it is incumbent upon the National Association of Music Merchants, as an exemplification of this asked for spirit of cooperation, to bring to the attention of the manufacturers of radio, through its association, its position and attitude relative to the matter of over production and to urge them to use every possible effort to keep their hands on the pulses of demand, at the same time assuring them that a like effort will be asked for of the merchants to help bring this about, to the end that the losses to members of both organizations may be lessened.



"With Music by the Ether Wave Electrico"

The world première for a trio of ether wave musical instruments occurred Thursday evening, June 25, over WJZ and associated stations. This innovation in the world of creative music proved so popular that it unquestionably will become a frequent program feature.

The sound from these three electronic devices emerges from the diamond-shaped speaker in the background.

This "electrio" consists of Messrs. Valdimir Brenner, Leonid Bolotine and George Boreff.

Southern California Show

The ninth annual radio and electric show, sponsored by the Radio & Music Trades Association of Southern California, Ltd., will be held in the auditorium of the Ambassador Hotel, Los Angeles, Aug. 2-8, inclusive. Plans for the show were outlined at a recent meeting of the Radio & Music Trades Association at the Alexandria Hotel.

Radio for Nautilus Cook



Peels 'em to music, does "cookie" on the Nautilus. "And no doubt whatsoever but that he'll get excellent reception right under the North Pole," declares GE's publicist.

Shortwave Evening Reception a Possibility

One important result of the visit of Sir John Reith, president of the British Broadcasting Corporation, to the United States, from the standpoint of the American radio audience, may develop within a few months. Late short wave transmissions of British programs are promised, so that listeners on the high frequencies may receive these in the United States from 8 to 11 o'clock at night. This opens up a new field of entertainment.

PCJ in Eindhoven, Holland; the German high-powered Keonigwusterhausen transmitter, and several other European stations have already experimented with such programs, and the reports of reception have been most encouraging.

As a further augury of interesting programs to come from across the Atlantic at night, Arthur R. Burrows, secretary of the International Broadcasting Union, writes: "In the question of short wave broadcasting, there is undoubtedly development (in Europe), inasmuch as nearly every broadcasting organization has now a short wave station conducting experimental transmissions.

"One or two organizations have stations working on more than one wavelength, with the object of discovering wavelengths suitable for both European broadcasting and for extra-European broadcasting. The tendency at the moment, however, is to use, for serious intercontinental relays, the commercial wireless telephone stations employing beam transmissions."

News of the Month

Busy Readers

New York, N. Y.

HOLDS RCA DOES NOT CONTROL AIR

Commission Permits Renewal of Broadcasting Licenses

By a three to two decision, the Federal Radio Commission, on June 24, held that the Radio Corporation of America and its subsidiaries were not guilty of unlawfully monopolizing the air for radio communication purposes. Hence it rejected a petition by independent radio interests against a renewal of the broadcasting and ship communication licenses of this system. Commissioners Robinson, La Fount and Starbuck signed the majority opinion, while Saltzman and Sykes dissented.

A fine point of law and of interpretation of the statutes was involved, the majority holding that Section 13 "deals only with monopolies in radio communication" and that the court decree at Wilmington pertained only to a "contract for the sale of goods, to wit, radio tubes," and that "no question of a monopoly in radio communication was involved."

Mr. Saltzman, in his dissent concluded as follows:

"In my opinion the language of the Delaware District Court as hereinbefore quoted, when considered in light of the fact that vacuum tubes are an essential part of radio broadcasting receivers and so necessarily of radio broadcasting communication, precludes any escape from the conviction that the Radio Corporation of America was unlawfully attempting to monopolize radio broadcasting communication within the purview of section 13 of the radio act."

Sanabria and Shortwave in Television Merger

Television's first merger has arrived with the affiliation of the laboratory of U. A. Sanabria, Chicago experimenter, with the Shortwave and Television Corporation, which has visual and sound broadcasting stations in Boston and television headquarters in New York.

This action followed a conference in which W. Stuart Caton, and other representatives of Shortwave and Television Corporation participated. Hollis Baird, chief engineer of the Boston company, is in Chicago consulting with Sanabria on the methods of further research in which they will collaborate, although each will act independently with their own assistants in the respective laboratories in Chicago and Boston.

William Dubilier Again in Harness

After an absence of several years from the organization which he created and developed, William Dubilier has resumed the presidency of the Dubilier Condenser Corporation, New York City. He was asked to take charge of the condenser

manufacturing organization by its board of directors in order that his extensive experience in the condenser and allied arts might once more be made available for the further development of the Dubilier laboratories.

"Ryp" Takes a Lesson in Tuning



"It's easy. All you have to do is twiddle the knobs," declares M. C. Rypinski, referring to Miss Columaire.

Philadelphia Gets Next NFRA and RWA Convention

The boards of directors of the National Federation of Radio Associations and the Radio Wholesalers Association have selected Philadelphia as the city in which the 6th annual convention of the two organizations will be held. The Radio Distributors Board of Trade, together with the Radio Retailers Association of Philadelphia, are to be the official hosts for the convention. The dates will likely be February 14-17.

Philadelphia was chosen after a serious consideration of the many advantages offered by eight competing cities.

Wextark Bankrupt

An involuntary petition in bankruptcy has been filed by attorney A. L. Shapiro against the Wextark Radio Stores, Inc., on behalf of three petitioners. At the same time it was revealed that Federal Judge Charles E. Woodward, shortly prior thereto, appointed the Chicago Title and Trust Company receiver for this concern and its subsidiaries. This action followed the filing of an equity petition with a claim of \$5,000. The assets of the company are given as approximately \$4,000,000, and greatly in excess of liabilities, although much of this amount is tied up in accounts receivable.

MACKAY-KOLSTER DEAL ANNOUNCED

Powerful Telegraph Interests to Re-establish Well Known Set—Will Market Full Line of New Merchandise

A new company, Kolster Radio, Inc., will succeed to the good will, patents and manufacturing facilities of the old Kolster outfit. Behind this announcement are marshalled the financial, engineering and sales resources of the Mackay Radio and Telegraph Company. Mackay holds a controlling interest in the Orange Securities Corporation, which recently purchased the assets of the Kolster Radio Corporation, including the control of Federal Telegraph Company of California. Revitalized Kolster will carry on at 360 Thomas Street, Newark, N. J., with offices also in the International Telephone and Telegraph Building, 67 Broad Street, New York.

The new officers of Kolster Radio, Inc., are as follows: Franklin Hutchinson, president; Frank Holstrom, Jr., vice-president in charge of sales; St. George Lafitte, production manager and W. F. McAuliffe, in charge of field organization. His assistants will be A. H. Rhinow and W. E. Goff. A field force of district managers, well known in radio circles, already has been organized.

Manufacture of the new line is underway at Newark and is promised for early fall delivery.

"All models will be priced in keeping with the present economic trend and will be marketed under a policy manifestly fair to both distributors and dealers," states President Hutchinson.

Executive Appointments

LOUIS WILLI will serve Grigsby-Grunow as Pacific Coast sales manager.

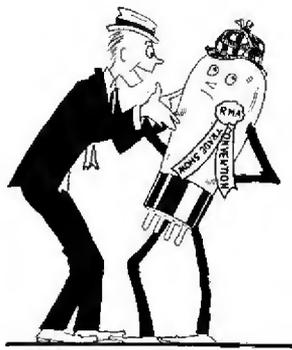
H. A. LINES becomes general manager of the New Haven Electric Company, New Haven, Conn., jobbers for Atwater Kent.

DOROTHY LOUDON is home economist for Majestic. Will advise on preparation of food and matters relating to home refrigeration. Has just written a 40-page recipe book for dealer use.

A. G. BURT, JR., joins Operadio to be in charge of speaker sales. Started with Stewart-Warner as divisional sales manager in 1925.

F. J. ARMSTRONG is now sales promotion manager for Zenith. Comes to help Art. Haugh from the Radio Division of Club Aluminum Company.

J. W. KENNEDY, will hold down the Buffalo territory for Stromberg-Carlson. Kennedy replaces Elliott Lauderdale.



Cracked Ice and Ginger Ale

Michigan Avenue was "Radio Row" during Show week—every lamp post wore gay "Welcome, Radio Men" banners.

Help! Doctor! There's an epidemic of tube testaritis abroad in the land. KenRad claims credit for starting this—and certainly gave a thorough demonstration of Acrometer, one hour lessons, up in room something-or-other.

Mohawk pulled an "Indian" party Monday night at the Congress—distributed feathered head gear to each guest.

Ever heard of the Clavilux? Philco was toying with it—getting dealer reactions, mostly favorable. Well, brethren, its a gadget for showing beautiful colored lighting effects in a niche in one's radio set—the color blending being keyed to harmonize with the music. Has real possibilities.

Another "synchronous" stunt was Victor's dancing dolls. Actuated by the speaker vibrations they dance in perfect time to whatever music happens to be on—recommended for window publicity.

The shoemaker's children are never shod—tubes were overloaded, records played to death, speakers turned up to deafening volume—really somebody should give radio manufacturers and dealers a lesson in sweetness of tone as a sales point.

The peak of "mass" influx was reached Monday noon—600 "Philcostines" disembarking at Navy Pier from the Great Lakes line's "gigantic" "Secandbee; 300 disgorging from Len Welling's New York Central special; 175 from the Jersey Radio Special and some 500 others arriving on or thereabouts in chartered Pullmans from all points north, south and west.

Gets Ultra Short Wave Permit

The Short Wave and Television Corporation of Boston, Mass., has been granted a construction permit for the erection of a 30 watt portable television transmitting station to experiment with television transmission on the ultra short wave length of 35,300 to 36,200 and 39,650 to 40,650 kilocycles.

Authority was also granted to operate on the frequency around 43,000 to 48,500 and 50,300 kilocycles. The Boston experimenters have thus joined the ranks of the small group of research men testing the efficiency of the extremely short-waves between 6 and 8.5 meters.

The Commission also granted a license for the newly built experimental

The stag party was a howling success—keeper give those lions their raw meat.

Sanabria and Baird—Eric Palmer presiding—laid 'em out cold at the world's first television banquet served to the King's taste at the Drake Tuesday evening. Pictures six feet square came through in fine shape.

Radio manufacturers have gone clock-minded. Every room and booth showing them.

Western, Shortwave, Jenkins, Freed, Insuline and Pilot all presented creditable television demonstrations. Promises of pictures, for home use, one and two feet square, were freely predicted—this fall. Sixty line, 20 frames per second, now is accepted as standard.

They shoved the elections of RMA officers a day ahead—"a bird in the hand

Eveready fooled them all with its phoney "television?" 'Twas a peep show, with real actors performing in a closed box, focused down to 4 x 4 inch television lens size. An idea that ought to go good in the sticks.

Powel Crosley was "there" with another typical innovation—has a hand ironer which works on reverse English principle, flutters the clothes instead of rubbing and pressing them. Turned in a very acceptable performance, too.

Ten representative sales managers, interviewed by Detector, with two exceptions, reported booking business and signing up new accounts in far excess of expectations.

All in all it was a grand affair. Attendance not more than 20 per cent less than the balmy days of '29. The ballyhoo was held within proper limits. The manufacturers were there in full force and with complete lines—ready to do business.

station WIXAU, to operate with 500 watts on the experimental frequency of 1,604 kilocycles.

This is to be used as the sound path for the television transmission of WIXAV which operates on the television band between 2,850 and 2,950 kilocycles with 500 watts power. Both stations are owned and operated by the Short Wave and Television Corporation.

New Personality Enters Radio

A new personality has come into the radio industry through the acquisition by the CeCo Manufacturing Company of the services of Thomas E. Conway, who has been placed in full charge of the production and engineering departments.



Avocation and Vocation

In his "off" moments H. G. Erstrom's avocation is fishing—knows where and how too.

His vocation also is—fishing. For "H. G." is the well-known and justly popular executive vice-president of NFRA and WRA . . . and has a record for landing many dealer and jobber memberships for these two associations.

Rola Moves Oakland Factory to Cleveland

The Rola Company has just doubled its plant space at Cleveland, moving factory Number 1 from Oakland for consolidation and thus increasing production in one central city. New offices are being occupied at 2532 Superior Avenue. An elaborately equipped experimental laboratory for the further measurement of sound transmission characteristics has been installed.

Concentration in Cleveland will permit better coordination between Rola's engineering and manufacturing activities.

Siamese Prince A Home Talkie Fan

Home talkies will soon be introduced into Siam. As in many other matters in that country related to Western modes and manners, the royal family is taking the lead.

From Bangkok, His Royal Highness Prince Purachatra has just sent his Filmó projector, bought some years ago, to the Bell & Howell factory in Chicago to have it fitted for use as a unit in one of this company's portable amateur talkie reproducers. The Prince will find that there is already available a library of nearly 300 sound picture records for his home talkie outfit.

Duovac tubes are to be sold in the southern territory by H. L. Grupe, formerly an RCA man . . . J. S. Payne, once president of Simmons Hardware, will distribute on the west coast . . . Leo Ungar has taken over the mid-west territory.

QUOTING THE MANUFACTURERS

AZTEC . . . starts "the only licensed radio set plant in Kansas." Under the direction of Fred Stein, an eight tube and a nine tube chassis will be turned out. Atchison, and the radio industry, welcome the Aztec Radio Company.

MAJESTIC . . . "After many days of jolt and jar tests" is out with an automobile-radio outfit euphoniouly called "Motor Majestic."

SYLVANIA . . . announces "the most unselfish plan ever formulated" for selling tubes. *The Dial*, a first rate radio "fan" booklet is the hub of this plan—available in quantities, with dealer imprint, for mailing campaigns.

ATWATER KENT . . . "traces the progressive strides made by radio in education" by means of a new 16 page booklet. Along about page 12 it tells about the AK multiple speaker equipment. All excellently done and should be a big help to dealers.

CROSLY . . . outfits "100 Oklahoma City business boosters, for the first time, with a completely equipped radio train." Loudspeakers, multiple reception gadgets and public address system installed by Crosley's local distributor, W. E. Titus—back seat driver, K. G. Vaniman.

GENERAL ELECTRIC . . . was host to "50 prize winning salesmen who opened their visit to Schenectady by a sombrero-crowned, Full Rangers parade to the House of Magic." This managing editor can attest, from personal experience addressing these chaps that evening, that the affair was a knock out.

ARCTURUS . . . "After very diligent tests among numerous radio dealers . . . announces a new business-building merchandising idea—the most attractive sales-building proposition ever offered to the radio trade." The plan is based on the Arcturus tube tester—with its impressive meter and many accurate tests.

CECO . . . "has worked out a systematic and intensive business promotion service . . . pronounced the most unselfish and practical campaign exhibited at the RMA Show." Provides for dealer selling other products, once he has "made the crossing" and landed in the front parlor.

Millions Hear Sound of Dropping Electron

An electron, a unit so tiny that it takes billions upon billions of them to weigh an ounce, was dropped Wednesday night, June 24, and the sound so amplified that it was heard by radio listeners all over the country. The electron dropping experiment and the talk accompanying it was made by Orestes H. Caldwell, editor of *RADIO RETAILING*, who, several months ago during a radio talk, dropped a pin which was heard by millions of radio listeners.

This latest experiment was carried out over the National Broadcasting Company's network under the auspices of the electrical engineering division of the National Research Council, Science Advisory Committee to the Century of

Progress International Exposition, Chicago, 1933, of which Mr. Caldwell is a member.

The electron-dropping experiment was carried out by using a Geiger counter, a device that is employed to detect the amount of radio-active substances in ores.

This talk was but one of a series, over extensive hook-ups, which the editor of this magazine has given in the interest of educating the public in the fundamentals of radio science and of the need for obtaining the best reception possible by buying tone quality sets.

Where to Send Obsolete Sets for the Blind

An appeal for obsolete, but serviceable radio receivers for use by people who cannot see, was broadcast to the nation on Tuesday, June 23, during the Philco Hour by the New York Association for the Blind. Listeners desiring to dispose of their sets in this manner were advised to write to the sponsor of the radio hour, who in turn promised to make arrangements to have the receivers picked up and delivered to worthy parties. "The serious depression of spirit that follows blindness can be alleviated by installing radios in the homes of these blind people," the Association representative pointed out upon beginning his address.

Recent Manufacturer-Jobber Affiliations

Lewis Radio Company, Inc.—Crosley—Territory, eastern Pennsylvania and southern Jersey.

Esenbe Company—General Motors—Territory, Pittsburg tri-state.

George Collins Company—Crosley—Territory, Boston and trading area about Quincy, Brockton and Lynn.

Radio West Coast Company—Colonial—Territory, San Francisco and much of Pacific Coast.

Hudson - Ross Company — General Motors—Territory, Chicago district. To help swing this franchise D. A. Packard has been made sales manager.

Coast Radio Supply Company—Sparton—Territory, No. California and Nevada.

They All Agree



No altercations between passengers as to what program to play have been reported to date. During tests of this Philco installation it was found that reception was good and distinctly audible up to a height of two miles.

SPARTON BACKS HOME TALKIES

To Make and Distribute Visionola Projectors in U. S. and Canada

The first official stamp of approval and the first close identification of the radio industry with the future of home talking movies comes from Jackson, Mich.

Immediate quantity production of a combined talking-picture projector, radio set and phonograph for home use was announced, June 5, by the Sparks-Withington Company, makers of Sparton sets. The new product is to be known as the Sparton Visionola, and will retail at a price that puts it within the means of the average home.

Under the terms of a special, three-year contract Sparks-Withington obtains the exclusive right to manufacture and sell Visionola in the United States and Canada. The Visionola Corporation will, however, retain its corporate identity for patent protection purposes and will exploit the export market.

For ordinary use the Visionola projects a picture on a screen that is formed by the under side of the hinged top. The pictures, however, are sufficiently brilliant to be thrown on a screen six by eight feet if desired. Films taken by the owner with home movie cameras but without sound effects can be projected alone. The 10 tube super-heterodyne radio set can also be used alone, as can the phonograph with ordinary records.

In announcing the Visionola, Capt. William Sparks stated that it had been under development for three and a half years, and that approximately \$700,000 had been expended on it prior to its acquisition. Within two weeks production will be under way.

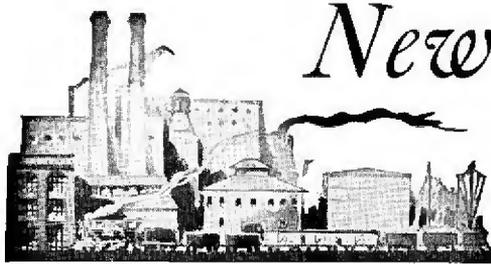
Dealers to Have Sales Space at Madison Square Garden and Coliseum

A plan for providing immediate buying contact for the half million prospects who will attend the Radio-Electrical World's Fair, Madison Square Garden, New York City, in September, and the Chicago Radio-Electrical Show, in the Coliseum, in October, has been announced by G. Clayton Irwin, Jr., general manager.

The plan is distinctly a merchandising, "point of sale" idea, developed to take advantage of the interest in radio and household electrical products which will be generated by the expositions.

Key dealers in the New York and Chicago areas may have assigned to them sales offices within Madison Square Garden or the Coliseum. Prospects attracted by a manufacturer's exhibits will be received courteously by the booth attendants and turned over to the proper dealer handling that line. All negotiations thereafter will be between the dealer and the prospect and carried on in the dealer's own space.

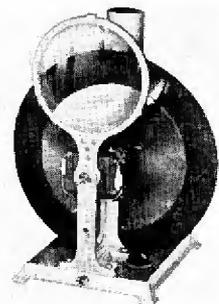
The invitations to buy will thus be extended by men whose daily contact with the consuming public has developed a technique for closing sales.



New

Products for

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



Assembled Telescanner

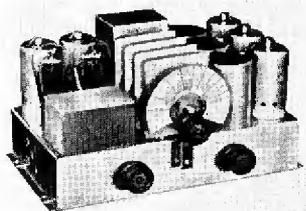
Freed-Eisemann Television Apparatus

A COMPLETE short wave receiver kit for television reception and a complete telescanner for home assembly may be obtained from the Freed Television and Radio Corp., 22-19 Wilbur Ave., Long Island City, N. Y.

The former has everything needed to build a short wave receiver to operate the scanning apparatus. Steel chassis frame and all parts are included, drilled and fitted so that actual assembly is simplified. Price, complete with tubes, \$84.

The kit for building the scanning apparatus, including the neon tube and lens, is \$56, complete.

The illustrations show how the apparatus looks when assembled.—*Radio Retailing*, July, 1931.



Assembled Television Receiver

Pilot Battery Midget Set

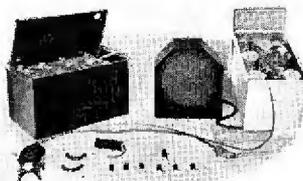
A BATTERY-OPERATED superheterodyne set of the midget type, with chassis and speaker built into a cabinet of modified Gothic design, has been brought out by the Pilot Radio & Tube Corp., Lawrence, Mass. It is a 7-tube set, using three 235's, two 237's, and two 233's. Features such as illuminated, full-vision station selector, tone control and phonograph connection are included.

For source of power, a standard six-volt storage A-battery, three 45-volt B-batteries, and a small 22½ volt C-battery are required. The price, with tubes but less batteries, is \$65.—*Radio Retailing*, July, 1931.

"Motor Majestic" Auto-Radio Set

"MOTOR Majestic" is the trade name of the new auto radio set which the Grigsby-Crunow Co., 5801 Dickens Ave., Chicago, has been working on for the past few months, now ready for market.

It is designed so that the receiver proper can be mounted under the seat or floorboard, away from the motor, to reduce motor interference to a minimum. Tuning is done on a



small control clamped to the steering column just below the wheel. The speaker is of the dynamic type, and can be mounted in back of the dash, or elsewhere to suit the owner.

Three 36's, two 37's, and two of the new '38 Pentodes make up the tube equipment. The tubes of the set are lighted from the storage battery of the car, while B current is obtained from four large dry B batteries. The price complete is \$59.50.—*Radio Retailing*, July, 1931.

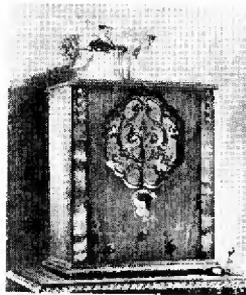
Little Giant Midget

"LITTLE GIANT," Model 400, a mantel type radio receiver, a product of the High Frequency Laboratories, 3900 N. Claremont Ave., Chicago, is 13 in. high by 9½ in. wide. The cabinet is walnut-finish with overlays of satinwood. The tube equipment includes one each of the following tubes: 551, Pentode, 224 and 280. The speaker is a Utah dynamic, and the list price complete is \$25.

The High Frequency Laboratories are also manufacturing, principally for private brand use, two superheterodyne chassis, eight and nine tube jobs designed for mantel and console cabinets. Both use variable- μ and Pentode tubes. For the eight-tube chassis a compact console is offered and for the nine-tube chassis, a full console.—*Radio Retailing*, July, 1931.

General Electric D.C. Sets

JUNIOR and Junior Console models made by the General Electric Co., Bridgeport, Conn., may now be had for 110-volt d.c. operation.—*Radio Retailing*, July, 1931.



Kolster K-60

New Kolster Line

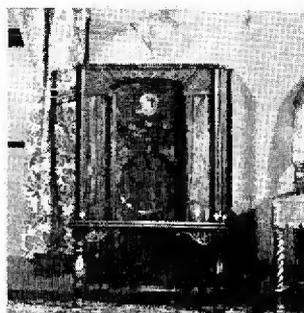
MANUFACTURE of a new line of "Kolster International" superheterodyne radios is now underway at the factory of Kolster Radio, Inc., 360 Thomas St., Newark, N. J. Model K-60, is a seven tube midget (2-35's, 1-27 2-24's



Kolster K-80

1-47 and 1-80). It has pre-selection and one untuned r.f. stage, \$69.50, complete.

Model K-70 is the same as K-60 but with automatic volume



Kolster K-70

control, a larger speaker, and an additional 24 tube. The cabinet is a lowboy, \$99.50, complete.

Model K-80 is a nine tube job with the same features plus push-pull Pentodes. It is housed in an open face highboy, \$129.50, complete.

Model K-90, a ten tube con-

sole using two 27's, three 35's, two 24's, two Pentodes and an 80, has double band pass filter. \$149.50, complete.—*Radio Retailing*, July, 1931.

Shortwave Receiver

TWO stages of t.r.f., a regenerative detector and two stages of audio with a 245 tube in the last or power stage are included in the new shortwave receiver of the Shortwave & Television Corp., 70 Brookline Ave., Boston, Mass. The chassis closely resembles a broadcast receiver chassis, with a three gang condenser operated by a single tuning dial running down the center, with the associated apparatus on either side, the power pack being completely incorporated on the receiver chassis. The audio end uses resistance coupling.

The coils provided with this set permit regular broadcast reception, which, while not quite as clear as with regular broadcast set is of good quality.—*Radio Retailing*, July, 1931.

Eveready Dry Cell Battery

NATIONAL CARBON CO., 30 E. 42nd St., N. Y. C., has announced a revolutionary change in construction of all Eveready flashlight unit cells and its Eveready six-inch dry cell batteries. The new construction is said to increase materially the shelf life of the cells, in addition to increasing their service life. The new development is a substitution of a crimped metal top instead of the conventional sealing compound top, eliminating the possibility of cracks in the battery's top. It has also been found that the metal top is more effective in conserving the moisture in the mix.—*Radio Retailing*, July, 1931.

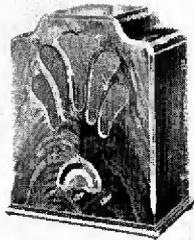
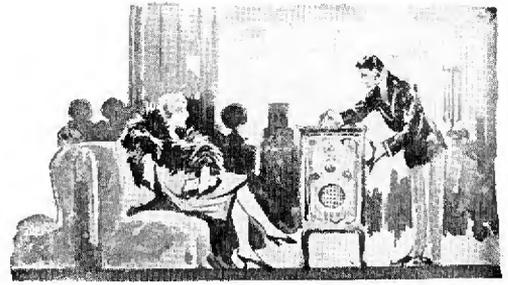
Universal Microphones

UNIVERSAL Microphone, Ltd., 1163 Hyde Park Blvd., Inglewood, Calif., has just made five additions to its line.

Model QRQ single-button 200-ohm microphone, \$5; Model QREX, a single-button QRQ microphone mounted directly on a junior input stage, with a 25 ft. cord for connection to phonograph jack on radio or amplifier, \$12; double-button "Handi-Mike", which is similar to the single-button "Handi-Mike" except that a three conductor cord is used and the switch breaks the circuit in the center conductor, \$15; remote control panel, consisting of a one-stage microphone amplifier, phonograph mixer and tone control, \$60; and a tone control for microphone, so that a person with a high-pitched voice may be toned down to normal, and likewise deep voices toned to a more pleasing position in the voice frequency, \$8.—*Radio Retailing*, July, 1931.

Dealers to SELL

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



Sparton 10

Sparton Line

SOME of the new developments to be found in the 1932 Sparton line include Super-sonne modification of the superheterodyne circuit, Lafoy automatic volume control, improvements in tone control, and Gyro speed regulator for radio-phonograph combinations.

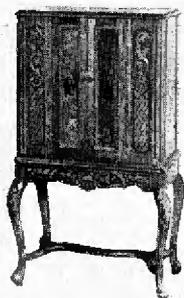
Sparton has acquired the Visionola home talking movie apparatus and this is now part of its line, going under the name of Sparton Visionola.

The eight new models introduced, exclusive of the Visionola and an automobile radio set, are Model 5, \$45 complete, and Model 9, \$62.50, complete, each making use of the t.r.f. circuit.

Model 10, a table set, \$69.50 complete, and Model 15, a console with carved panels, are superheterodynes.

Models 25 and 26, priced at \$135 and \$165 respectively, employ the Super-sonne principle.

Two combination radio-phonographs are offered in Model 30, listing at \$235, and Model 35. Model 30 automatically changes



Sparton 26

13 records, either 10 or 12 in., regardless of the order in which they are arranged. Model 35 has a capacity of 25 records. The radio chassis employs the Super-sonne principle. — *Radio Retailing*, July, 1931.

Rug Antenna

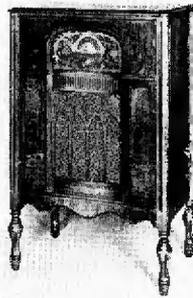
THE "Magic Rug Antenna" of the Radio Accessories Co., 4354 Warne Ave., St. Louis, Mo., meeting a popular demand for an indoor antenna that can be installed readily. — *Radio Retailing*, July, 1931.

AK Models 84, 85 and 84-Q

MODEL 84 Compact put out by the Atwater Kent Mfg. Co., Philadelphia, Pa., and shown in Chicago last month, now includes variable-mu tubes as well as the Pentode, and has a tone control and combination on-and-off switch and volume control. The cabinet design has been changed slightly.

Model 85, a new superheterodyne lowboy, employs two '24s, two variable-mu's, one '27, a Pentode and an '30. This set has automatic volume control, tone control, quick vision dial and antenna adjuster.

Model 84-Q Compact battery set employs four '32s, two of the 2-volt '30 type and one Pentode

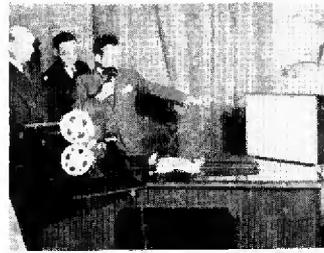
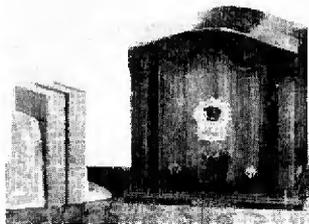


Atwater Kent 85

'33 type. It uses the air-cell battery and has new permanent-magnet electro-dynamic speaker with a moving coil, which takes no power from the batteries. This set is a superheterodyne with tone control. It is housed in the same cabinet as Model 84. The price, complete with batteries and tubes, is \$94.50. — *Radio Retailing*, July, 1931.

Mission Converter

SELF-CONTAINED in an attractive cabinet which looks like a midget radio, the Consolidated Radio Mfg. Company, 1455 Venice Blvd., Los Angeles, Calif., has placed on the market the "Mission" converter to transform any standard a.c. or d.c. set into a low-wave receiver. Two simple wire connections and it is ready for use. The price complete is \$49.50. — *Radio Retailing*, July, 1931.



Cosmotone

A PORTABLE "electrical entertainer," installed in a suitcase, consisting of a talking motion picture projector, radio receiver, phonograph, and microphone announcing system, to be known as the "Cosmotone," has just been put on the market by a New York concern, Cosmotone, Inc., 1540 Broadway.

Pictures may be shown on the screen built in the case or pictures as large as the side of an ordinary room, accompanied by sound, are available. At the turn of a switch, broadcast programs can be tuned in and reproduced on the dynamic speaker. Phonograph records also can be played. If desired, the operator can make his own announcements through a small microphone which is plugged in. For ordinary reception, no outside antenna connection is necessary, the radio waves coming through the receiver by way of the lighting wires.

The entire unit and case weighs about 50 lb., and is fitted with handles for carrying.

The 7-tube set employs variable-mu and Pentode tubes with a push-pull Pentode stage feeding the speaker.

The prices are: Cosmotone, complete, \$295; less microphone \$275, and less radio \$230. — *Radio Retailing*, July, 1931.



Aztec Superhet

A 9-TUBE midget superheterodyne with Pentode and three variable-mu tubes is being made by the Aztec Radio Co., Atchison, Kan. This set has automatic volume control, tone control and Magnavox dynamic speaker. Price is \$69.50.

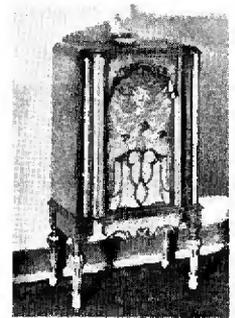
Model 250, a lowboy console with the same chassis and also carrying the trade name "Aztec" is priced at \$84.50 complete. — *Radio Retailing*, July, 1931.

Steinite Sets

MODEL 700 midget, just brought out by the Steinite Mfg. Co., Fort Wayne, Ind., is a 6-tube superhet with double variable-mu and Pentode combination. The cabinet is 19½ in. high by 16½ in. wide, and is made of veneered woods with overlay of maple burl. The tentative price is \$67.50, complete.

Model 707 is a lowboy of walnut and maple standing 38½ in. high. It has a 6-tube Pentode superheterodyne chassis, and also uses the variable-mu and Pentode tubes. \$79.50 complete.

Model 712 is an 8-tube set, with two variable-mu and a Pentode, and a 12-inch dynamic speaker. It is built along the same lines as the Model 707, but is 40 in. high and 23½ in. wide. \$89.50, complete. — *Radio Retailing*, July, 1931.



Steinite 707

Cabinets

DEALERS who have calls for the better cabinets of unusual design will be interested in the line made by the Radio Master Corp., Bay City, Mich.

The illustrated Model 179 is an authentic Louis XV model made of figured walnut with the radio set behind the false drawers below the sliding writing panel. The list price is \$100.

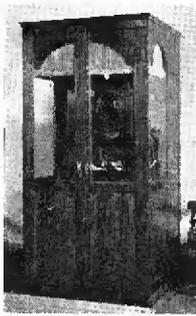
Radio Master also offers a wide variety of the conventional lowboy and highboy cabinets, as well as chests, secretaries, Grandfather clock models, and all the popular period designs. The list prices range from \$43.50 for a French Provincial set to \$215 for a Governor Winthrop secretary. — *Radio Retailing*, July, 1931.





Columaire Jr.

THE same type of space-saving cabinet and air column reproduction has been retained in the new "Columaire Junior" announced by the Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. The cabinet measures approximately 3½x13 in. at the base, and is 4 ft. 6 in. high. The speaker is mounted at the top, facing the ceiling. The controls are located at a convenient height. An eight tube super-heterodyne chassis, designed to use two of the new exponential tubes, is incorporated. The Columaire Junior will sell for \$88.50, complete. — *Radio Retailing*, July, 1931.



Speak-A-Disc

AN AUTOMATIC, coin-controlled voice-recording machine, the invention of J. E. Byrnes, is being made by the Speak-A-Disc Corp., 46 E. South Water St., Chicago, Ill. This machine is made to be placed in hotel lobbies, railroad depots, steamships, amusement parks, etc. It dispenses a six in. Remsen disc in a mailing carton. The Speak-A-Disc comes with or without booth and a playback machine which allows customers to hear just what they have recorded before they mail the record. — *Radio Retailing*, July, 1931.

LeBourg Aerial Towers

EASILY installed in a few minutes, the aerial towers made by A. LeBourg, Gadsden, Ala., are adaptable to any type of roof. They are 5½ ft. high, and retail for \$1.50 a pair. — *Radio Retailing*, July, 1931.

Gibson Price Changes

GIBSON Electric Refrigerator Corp., Greenville, Mich., announces the following revised prices on the models described in the June issue. The new prices are: \$187.50 for the small size, \$255.22 for the medium size and \$333.50 for the large cabinet. — *Radio Retailing*, July, 1931.

Television Receiver Kit

COMPLETE information for assembling a standard 6-tube set designed especially for television, together with a list of necessary parts, may be obtained from the Allied Engineering Institute, 98 Park Place, New York City. This set works especially well, it is said, with the Jenkins Radiovisor, which may also be obtained in kit form. — *Radio Retailing*, July, 1931.

Banks Variable Antenna

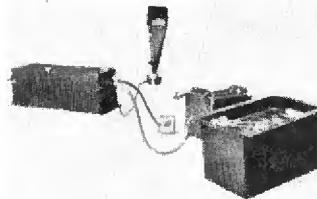
A VARIABLE antenna easily attached to any set and enclosed in a Bakelite case has been placed on the market by the Banks Indoor Antenna Co., 408 Boggs St., Higginsville, Mo. It is not a light socket device, and gives an antenna from 1 to 100 ft. long, just by turning a knob. — *Radio Retailing*, July, 1931.

Delco Sets for Police Work

TWO new radio receivers, designed especially for police work, have just been placed on the market by the Delco Radio Corp., Dayton, Ohio. One is of the automotive type, using the Pentode tube, and the other set is for police station use. The latter can be locked on one wave length or may take in the entire broadcast range of police stations.

The auto-radio set has been built especially strong for constant operation. It comprises three tuned r.f. circuits with three 224's, a tuned power detector stage using a 12-A, and a transformer-coupled Pentode output tube. The drain on the battery amounts to about 24 amps. Three 45 volt B-batteries and two C-batteries of 7½ volts each are used.

The station set is housed in a cabinet practically the same as the General Motors "Little General," and the receiver can be tuned or locked on any station between 1,500 and 2,600 kilocycles. — *Radio Retailing*, July, 1931.



Motorola

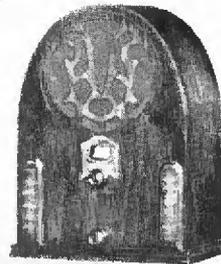
A NEW model "Motorola" automobile radio-set has been brought out by the Galvut Mfg. Corp., 847 W. Harrison St., Chicago, Ill. The control panel is designed to attach to the steering post, just below the wheel, within easy reach of the driver. It uses six tubes: 3-224's, 2-112A's, and a 201-A, and has a dynamic speaker. The A power is obtained from the storage battery of the car, and the B power from the B-batteries encased in a specially-designed container. No C power is required as automatic C bias is incorporated in the chassis. The price is \$84.50, less installation. — *Radio Retailing*, July, 1931.



Freed-Eisemann Midget

BOTH a.c. and d.c. models may be had of the mantel set being made by the Freed Television and Radio Corp., 22-19 Wilbur Ave., Long Island City, N. Y. Both are 8-tube jobs—the a.c. type taking two variable-mu's and two Pentodes; the d.c. set using four '36's and four '38 Pentodes.

Model FE-98, a.c., is \$64.50, complete, and FE-97, d.c., is \$69.50, complete. — *Radio Retailing*, July, 1931.



United Receivers

UNITED Engine Co., Lansing, Mich., brought out at the show a small midget set using a Pentode, a variable-mu, a 224 and a 280, retailing at \$21.95 complete. It is 12 in. high by 2½ in. wide.

This company also equips the Model P chassis with Dynatone speaker and a midget cabinet, to retail at \$39.50, to replace its present No. 5, which is in a steel cabinet. Model P-75 console of walnut veneer lists at \$51, complete.

Model 8-211 console, a super-heterodyne with the variable-mu and Pentode tubes, is \$79.50, complete; Model 8-31, Italian Renaissance cabinet, is \$82.50, complete, and Model 8-181, a highboy with doors, is \$89.50 complete.

A Colonial grandfather clock model, with space for books and knick-knacks, is also part of the line. It has the No. 8 chassis, (two 551's, one 224, two 227's, two 247's and a 280). It is 74 in. high, and lists at \$119.50 complete. — *Radio Retailing*, July, 1931.

Oil Transmitting Condenser

A NEW line of high voltage, oil impregnated, oil filled and tank constructed condensers, is being made by the Tobe Deutschmann Corp., Canton, Mass. It includes condensers to operate from 3,500 to 15,000 volts, continuously. They are guaranteed for two years. — *Radio Retailing*, July, 1931.

Stromberg Program Service System

A PROGRAM service system, the No. 2, for use in hotels, schools, hospitals, etc., may be obtained from the Stromberg-Carlson Telephone Mfg. Company, Rochester, N. Y. The system which is designed for use in connection with speakers in each room, consists of individual units grouped together on one rack, forming a complete and



compact single channel system. It is capable of distributing radio, phonograph or announcing microphone programs with facilities for mixing the microphone program with either the radio or phonograph programs. A metal indicator is mounted at the top of each panel, so that the volume may be adjusted to the proper level.

The radio receiver takes 3-224's in the r.f. amplifier stages, and a 227 for the detector.

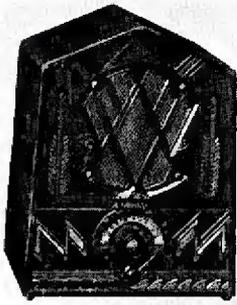
Several different types of speakers may be used with this system, and three types of phonographs are available, including the S-C automatic record-changing unit in a cabinet, a manual changing unit with cabinet, and manual changing unit for mounting in the program service panel. — *Radio Retailing*, July, 1931.



Synchronous Motor for Television

THE increased interest in television has been one of the factors that has caused the Baldor Electric Co., St. Louis, Mo., to develop a synchronous condenser type motor that will operate the disc or drum exactly in step with the sending station. It is some times difficult for the synchronous motor to pull a heavy disc or drum into step, so a special starting hook-up has been devised which operates with a push button to bring the heavy disc into synchronism.

Most of the manufacturers developing sets today are beginning to standardize a 1,200 r.p.m. motor. Baldor makes both a vertical and a horizontal type motor built for 110 volt, 60 cycle to operate at 1,200 r.p.m. The motor is fitted with ball bearings so the motor may be operated in any position and with little attention to lubrication. The motor is dynamically balanced and has no intricate centrifugal switch. — *Radio Retailing*, July, 1931.



Audiola Midget

AN EMBOSSED leatherette cabinet with colored high-lights houses the new model 416 midget set of the Audiola Radio Co., 430 S. Green St., Chicago, Ill. One of the color combinations available is walnut, decorated in deep red and gold. This set uses a 235, a 224, one pentode and a 280. It has full vision dial and spot tuning. \$37.50 complete.

Audiola also announces new prices on its models. They are, complete, 416, \$37.50; 610, \$49.95; 810, \$65; 612, \$65; 812, \$79; and 814, \$89.—*Radio Retailing*, July, 1931.

Automobile Aerial

FIFTY ft. of super aerial wire, 14 gauge, comprising a soft copper core, a layer of silver over the core, and a protective covering of 24 K. gold, is used for the new automobile aerial of the Gosileo Radio Products Co., 320 Marbrisa Ave., Huntington Park, Calif. It is in coil spring form, 7 ft. in length, is installed by suspending from chassis in horizontal position. \$4.50.—*Radio Retailing*, July, 1931.

Eagle Cigar-Lighter

EAGLE Electric Mfg. Co., Inc., 59 Hall St., Brooklyn, N. Y., is offering a side-line suggestion in the form of a "Lift-A-Lite" cigar lighter made of various colored glass in crystal, pink, jade, amber, black, lavender and Chinese red. The price is 75c.—*Radio Retailing*, July, 1931.

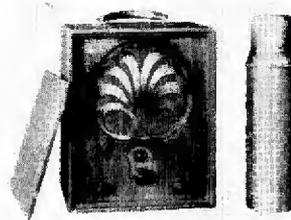
Spark Plug with Built-In Resistor

EXTERNAL devices are not needed to suppress interference if the new spark plug developed by the AC Spark Plug Co., Flint, Mich., is used. It is designed to improve radio reception in automobiles and motorboats, and to increase the efficiency of police radio systems.—*Radio Retailing*, July, 1931.



Screw-Holding Screw-Driver

TO hold screws in places where it is impossible to get with the fingers, Rossiter & Co., Inc., 23 Warren St., New York City, has placed on the market a screw-holding screw-driver. It comes in two sizes, 8 and 10 in., \$1.50 and \$2, each.—*Radio Retailing*, July, 1931.



Radiette

THE accompanying illustration shows a timely model just brought out by the Keller-Fuller Mfg. Co., Ltd., 1573 W. Jefferson Blvd., Los Angeles, Calif. It is built into a brown leatherette-covered case, with convenient carrying handle, and uses five tubes (3-224's, a 245 and a 280). It has tone control and phonograph jack. The price is \$49.50.—*Radio Retailing*, July, 1931.

Pick-up and Arm

ORO-TONE Co., 1010 George St., Chicago, is announcing a new and radically different type of pick-up and arm. This equipment is designed to secure reproduction almost identical with the original recording. By the needle traveling in a radial line across the record it follows the same path as the original recording needle when the record is made.

The pick-up, itself, lies parallel to the face of the record but the needle point is always visible and the body can be turned to a vertical position so the needle can be easily changed.—*Radio Retailing*, July, 1931.

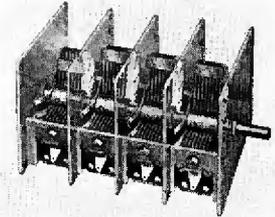
DeJur-Amsco Products

DEJUR-AMSCO Corp., 95 Morton St., New York City, has just brought out a special tracking condenser for superheterodynes, designed to eliminate padding arrangements and from two to five extra parts in superheterodyne construction. They are available in two, three and four gang units, comprising one special oscillator section and standard tuning sections.

An intermediate frequency

amplifying transformer, the "Transitor," is made in three standard broadcast types: a sharply tuned filter stage, a standard type, and a very broadly tuned unit especially engineered for use in Stenode receivers.

A complete line of tuning accessories, including dials, dial-lights and escutcheons is also being made.—*Radio Retailing*, July, 1931.



DayraD Tube Checker

A COMPACT tube checker which will test all the new types of tubes, including the Pentode, 2-volt, 6-volt, as well as all other current types of radio receiving tubes, is now a part of the line of the Radio Products Co., Dayton, Ohio. The six sockets are conveniently marked, and tests are made by means of four colored test buttons. As is the case with previous models of DayraD tube checkers, it tests for end of life, short circuits, open circuits, etc. The dealer's price is \$27.50.—*Radio Retailing*, July, 1931.



The Show (Continued from page 11)

HOME TALKING MOVIES—a significant, and unexpected, news development was sprung at Chicago by the announcement of a well known and substantial manufacturer of radio sets that it had purchased the name, business and assets of one of the largest makers of 16 mm. home talking motion picture apparatus in the country. Thus has the radio industry placed its official stamp of confidence on the future of H T M.

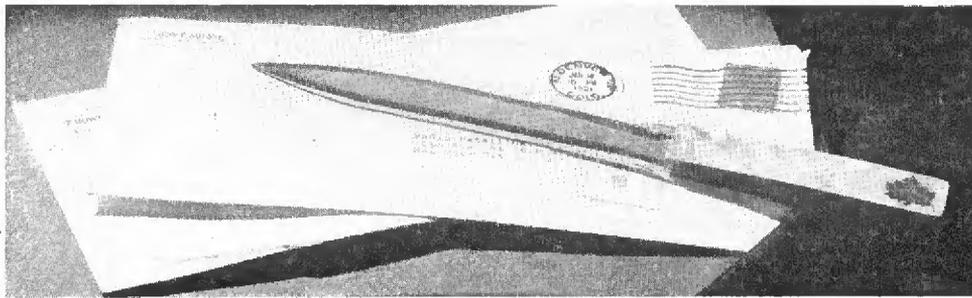
Further, another mid-western radio outfit, reputed to be even larger, was demonstrating another sound and film device in its plant to the trade during show week. And it reported to be considering an affiliation arrangement with, this picture company.

Home talking movies are coming into their own. The seven demonstrations at Chicago were constantly surrounded by dealers seriously interested. The pictures were large and clear and the synchronous sound effects entirely satisfactory in most instances. Further inventions and improvements, and the completion of plans for

making available, at "point of use," an extensive variety of modern film subjects at reasonable rental prices, will be developments of the immediate future. Thus the outlook for "visual entertainment" on a going merchandising basis, seems assured.

TUBE TESTERS—A decisive move for increasing the volume of tube replacement business is well under way. Elaborate, factory-made tube testers blossomed out like roses at the Trade Show. They attracted wide attention. Those tube concerns not yet in a position to supply them to dealers—generally on a tube contract basis—are tooling up.

One constructive feature of this idea was that the use of such testers was tied in with a definite and complete sales promotional plan. How to get in touch with tube prospects, the proper way to explain the meaning of the tests to the customer—and to follow through with the sales punch—were well covered by lecture, demonstration and printed matter.



V OICES FROM THE MARKET PLACE

Heh! Heh!

Mr. Caldwell, *Editor*:

THE Radio Industry. Heh! Heh! Heh! My business is primarily radio service. I have gone out of the active selling of sets because of existing conditions.

Listen! Here is a solution. If about six of the major manufacturers would get together in an agreement that would be gentlemanly solid—an agreement that I shall propose here—and faithfully carry it out to the bitter end, we would have one of the best radio seasons this fall we have had for many a moon, and the business would stabilize of its own accord.

Why can't the makers of radio sets agree on a policy of balanced manufacture, distribution and ultimate selling to the consumer that would be protective, cut out this nauseous run of superfluous, superlative adjectives in advertising; agree on a factory controlled price policy and credit maintenance; agree on a financing arrangement, and *stick to it?*

Here is the idea summed up for all to see:

- Sane, conservative manufacture
- Sane, conservative advertising
- Supervised distribution
- Supervised retail outlet

That is all there is to it. Let them forget volume and look more to establishment of sound profits. If they will come to Dallas, I'll take 'em on for a bout.

Dallas, Tex.

PORTER T. BENNETT.

To a Tube Manufacturer With Courage

Editor, *Radio Retailing*:

HERE is a constructive idea for the tube industry that needs a manufacturer of national repute and courage to attempt it. Servicemen throughout the country will welcome the idea; dealers will profit by it.

There is not enough profit in tubes at present price levels to warrant much advertising on the part of a dealer.

To a manufacturer with courage: *Will you supply a better tube at a fifty-cent increase in retail prices over current lists?* A tube that carries a guarantee; a tube with real merit in construction and life; a tube that will actually make a set perform better than ordinary tubes; a tube that dealers can actually talk up to the trade as the best available at only fifty cents more. All you need to do is to put an extra inspector on the production line to pick the best of your current production, then give them

a distinguishing label. Have you the courage to attempt it? We dealers can sell them and advertise them for fifty cents more.

South Bend, Ind.

J. P. KENNEDY,
J. P. Kennedy's Radio Service

Let Your Dear Competitor Sell Midgets

Editor, *Voices from the Marketplace*:

IN REGARD to midget radios, I think it wise to let them continue at a low price for the public will soon find out that mantel sets should be bought only by the wealthy, as the tube replacements surely pay our overhead in these dull times. Then when the midget owners wake up they will buy a real radio and see where they were penny wise and pound foolish.

In addition, I would say this, if the dealer wants to continue in the radio field, he will be using foresight to let that dear competitor sell midgets and lose his good name, while he keep his by handling only first-class merchandise. In other words, as Abe Lincoln said "You can fool some of the people all of the time, and you can fool all of the people some of the time, but you can't fool all of the people all of the time."

Seattle, Wash.

B. H. NAZARENUS,
Lakeview Electric Co.

Magnificent Progress?

MR. CALDWELL, *Editor*:

AN OPINION, for your interesting department entitled "Voices from the Market Place." I am quite sure my opinion is shared by many fellow dealers.

Our great companies and engineers, (hurrah) have *succeeded* in giving the public *twice* as much radio for *half* the cost (noble achievement). A cautious public, becomes more deliberate with each highly touted price recession! And here come the tube manufacturers (my, what public benefactors they are) smashing tube prices almost in half (lowered manufacturing costs, y'know). Again the cautious public laughs; not "Here's where I'll buy" but "Here's where I *save*."

Certainly, price revisions are necessary from time to time, but for crying out loud, let's stop our hurried retreat; well really, it's become a disorganized rout! Ice cream cones still command a nickel, why should our industry "save" the public's millions? To spend on gas taxes, or what have you?

Kiel, Wis.

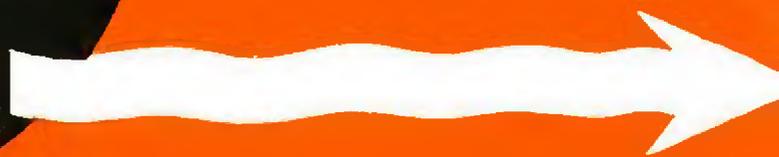
PHILLIPS MATHES.

Stop fooling yourself about radio profits!

NET profit
is all that counts...
and net profit means
what's left after paying
all costs and expenses
including service.

Right?

...all right



Every service call chisels
another chip off *your*

PROFITS!

HAVE you grown so used to heavy service expense that you take it for granted? One dealer, a month ago, assured us he had "practically no service cost," and was astounded when a peek at his books showed an average of \$8.42 per set in "no-charge" service after delivery!

Radio receivers of thoroughbred performance, which don't need any such coddling, can be built, and have been built for years by Gulbransen.

Scores of letters from Gulbransen dealers and jobbers state plainly that Gulbransen receivers need less after-installation service than any other sets they have ever handled. The "service headache" is something no Gulbransen dealer needs to worry about. Gulbransen receivers are built complete in the great Gulbransen factory, where *two out of every five workers are inspectors!*

Gulbransen's high standards of radio engineering make *impossible* the selling of a good superheterodyne for less than the price of Model 130. *And Gulbransen will not make or sell a mediocre radio receiver!* However, to offer a mantel receiver that is truly competitive, Gulbransen presents Model 330—a T. R. F. receiver which will perform as well as or better than the average medium-priced superheterodyne on the market today.

This year, as never before in history, the Gulbransen way of doing business form the industry's greatest jobber-dealer profit set-up. Write or wire for details.

GULBRANSEN COMPANY

Factory and General Offices: 816 N. Kedzie Ave.
CHICAGO, ILLINOIS

Most service calls originate
in the production line

GULBRANSEN

stops 99% of them there!



Mantel Receiver Model 130. Seven-tube Superheterodyne (two '35 Vari-mus, one '47 Pentode, two '24 screen grid, one '27 and one '80). 10-kilocycle separation. Full-floating Tuning Condenser. Completely selective, beautiful in tone. Finest cabinet work. Price, complete with tubes, \$69.50.



Mantel Receiver Model 330. Six-tube, tuned radio frequency, including four '24 screen grids, one '45 power tube. Dynamic speaker. Selective, sensitive, ample volume and pleasing tone. Price, complete with tubes, \$48.00.



Console De Luxe Model 235. 10-tube Superheterodyne (four '35 Vari-mu, two '47 Pentode in push-pull, three '27 and one '80). Compensating Dynamic Speaker. Visual Tuning meter (simplified distance tuning). Automatic and Manual Volume Controls, Tone Control, Full-floating Tuning Condenser, Power Switch. No "blasting," no fading, no "tube" noises, no cross-talk. Price, complete with tubes, \$113.50.



Console Receiver Model 135. Seven-tube Superheterodyne, same chassis as Model 130, in beautifully designed cabinet, 40 inches high. 2 to 5 micro-volt sensitivity (per meter). Tone Control. No tube noises or cross-talk. Price, complete with tubes, \$79.50.

Producing Live Leads for Cinderella Dealers



Just plug Cinderella in any electric outlet and it does the washing in a jiffy—for only one cent an hour.



Cinderella is useful for the week's wash, and for quickly needed things that are washed every day.



Cinderella is a big seller to small families—especially to families with young babies.



Cinderella is safe for the daintiest silks and laces; it has no moving parts to injure clothes.



Cinderella is just right for apartment dwellers; it can be tucked away in small space when not in use.



This glass demonstrator shows Cinderella's "Vacuum-Action" in action, and helps you make sales.



Some of the advertisements appearing each month in leading women's magazines, with a total circulation of over 8,000,000!

Cinderella \$37⁵⁰

ELECTRIC CLOTHES WASHER

CINDERELLA is a fine washer—bound to appeal to every small family, every apartment dweller, every mother with small children. Black & Decker knew that before it was placed on the market!

But Black & Decker also knows that you have to tell the world about a new product and we are telling the world about Cinderella, about its freedom from moving parts that wear and tear clothes, its economy and efficiency, its amazing "Vacuum-Action," its handy size and weight, its ease of operation.

The Ladies' Home Journal, Woman's Home Companion, Good Housekeeping, Better Homes and Gardens, and Parents' Magazine are telling the Cinderella story every month, in advertising reaching over 8,000,000 families! Some of the advertisements are reproduced above. More will follow. These advertisements are producing live leads for Cinderella dealers.

Better get aboard the bandwagon! Better get *your* share of the profits on this amazing new washing machine. Just mail the coupon now!



Black & Decker Mfg. Co.
602 E. Pennsylvania Ave.
Towson, Md.
Send me complete details of your Cinderella Clothes Washer "Sales Plan."

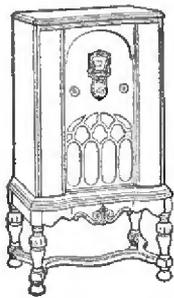
Name.....
Firm..... Street.....
City..... County..... State.....

MIGHTY MONARCH
OF THE ARCTIC



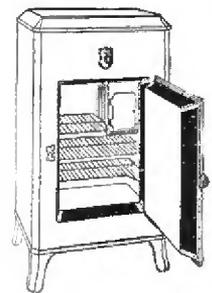
Value!

*... Secret of the
success of Majestic*



The spectacular success of Majestic in the radio set manufacturing business was based definitely upon giving the public quality of the highest type at the lowest prices at which a quality article could be produced. This Majestic accomplished by modern methods of purchase, manufacture and merchandising.

Now Majestic has brought its highly developed methods and experience to the refrigeration field and gives to the American housewife *all* essential and desirable features... with finest construction... at prices all can afford to pay. Success here has been so rapid that even Majestic's huge plants are, at the moment, oversold. Radio dealers interested in a fast-moving, very-profitable summer item should communicate with the nearest Majestic distributor.



GRIGSBY-GRUNOW COMPANY, CHICAGO, ILLINOIS

Makers of

Majestic

RADIO and REFRIGERATOR

ATWATER KENT RADIO

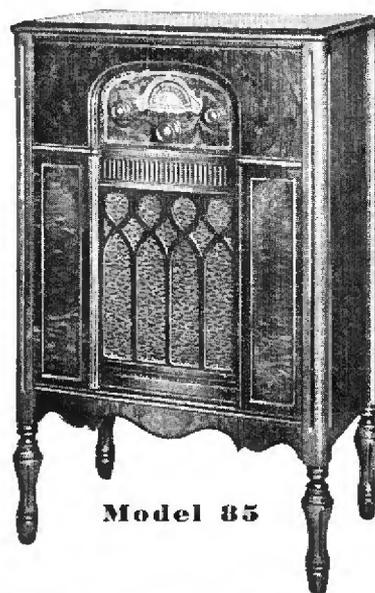
Vanguards of a Great Line

FULL-SIZE

Golden Voiced

CONSOLE

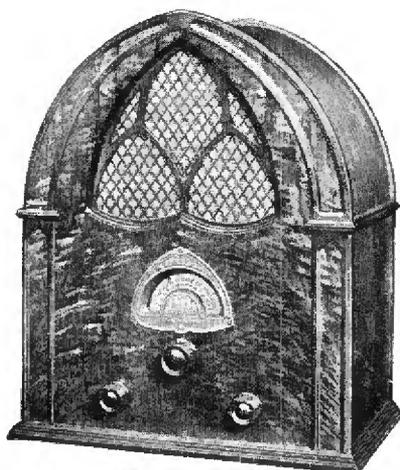
\$99 COMPLETE
with tubes



Model 85

Super-Heterodyne • Variable-Mu Tubes and Pentode • Automatic Volume Control • Tone Control and Static Reducer • Quick-Vision Dial, illuminated • Off-and-on Switch combined with Volume Control Knob • Antenna Adjuster • 10-Kilocycle Selectivity • Electro-Dynamic Speaker of advanced design • Famous Atwater Kent Workmanship • Exquisitely finished in American walnut, with matched butt walnut front panels • Ornamental Grille over duo-tone fabric • Full-size Baffle Chamber assures full Golden Voiced tonal range.

Golden Voiced COMPACT



Model 84

Improved 1932 model of the famous Atwater Kent Compact • Super-Heterodyne • Variable-Mu Tubes and Pentode • Tone Control and Static Reducer • Quick-Vision Dial, illuminated • Antenna Adjuster • Off-and-on Switch combined with Volume Control Knob • 10-Kilocycle Selectivity • Electro-Dynamic Speaker of advanced design • Matched butt walnut, Gothic design, with ornamental overlaid arch • plus many other up-to-date features.

New Battery Model 84-Q

A GOLDEN VOICED Compact, using the new 2-volt tubes and economical air-cell battery. New Atwater Kent permanent-magnet electro-dynamic speaker. Complete with tubes and batteries, \$94.50.

\$69⁵⁰

COMPLETE *with tubes*

Prices slightly higher west of Rockies and in Canada

ATWATER KENT MANUFACTURING CO. A. Atwater Kent, Pres. 4700 WISSAHICKON AVE., PHILADELPHIA, PA.

A Scientific Service that is also a . . . SELLING SERVICE

**Say SET-TESTED
and the Sale is made!**

Dealers report quick increase in tube sales, less time spent at the tube counter and greater customer satisfaction.



IN the copper-screened testing room of the Sylvania laboratory you will find Sylvania Tubes undergoing a dramatic and rigorous test.

They are being tried out in a standard set of every one of the makes listed on this advertisement. They are being passed only after meeting the highest standards of tone . . . distance . . . volume . . . sharp-tuning. This scientific set-testing service is actually a SALES SERVICE for you. It proves to your customer that the tubes you sell are right for his set. And it proves it in the easiest possible way!

Write for a copy of the new Certified Test Chart, showing the proper tube assortment for over 300 makes and models and including a signed statement by the man who directs Sylvania's skilled engineers. We want you to learn for yourself how you can join successful dealers everywhere in faster sales and quicker profits from Set-Tested Tubes. Address Dept. R-71, Sylvania Products Co., Emporium, Penna.

Apex
Atwater Kent
Audiola
Bosch
Brunswick
Clarion
Colonial
Crosley
Edison
Erla
Fada
General Electric
General Motors
Graybar
Grebe
Gulbransen
Howard
Kennedy
Kolster
Lyric
Majestic
Philco
Radiola
Silver Marshall
Sonora
Sparton
Star-Raider
Steinite
Sterling
Stewart Warner
Story & Clark
Stromberg Carlson
Victor
Westinghouse
Zaney Gill
Zenith

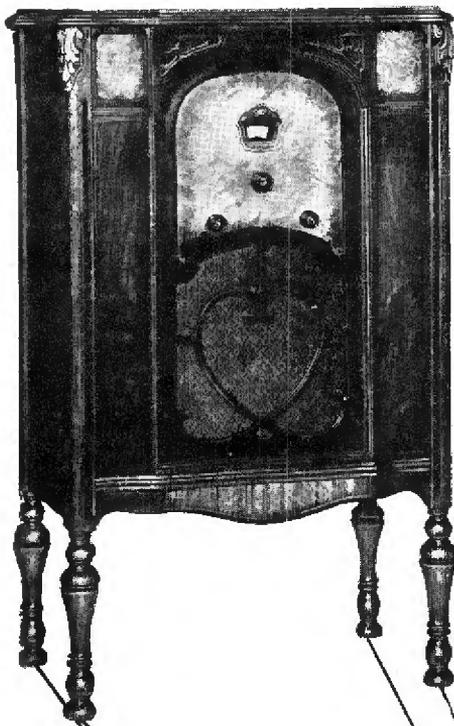
Sylvania

Reg. U.S. Pat. Off.

THE SET-TESTED TUBE



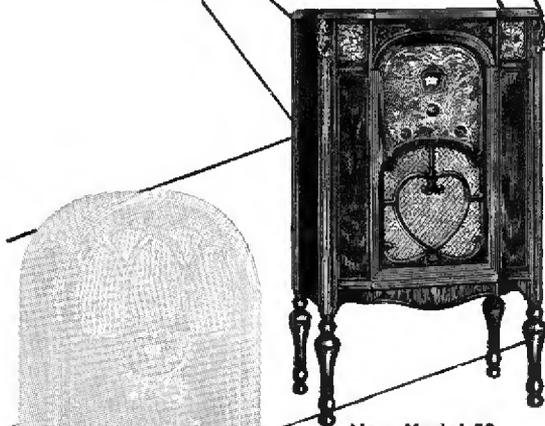
Licensed under R.C.A. Patents



Fada Rounds Out the New Line with a 7-Tube Superheterodyne Set

to sell for **\$89⁵⁰** COMPLETE WITH TUBES

Filling the Gap between **\$69⁵⁰** and **\$112⁵⁰**



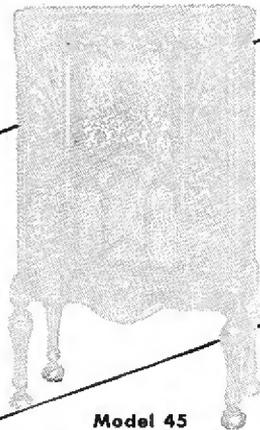
New Model 53

Lowboy Console - 37" high, 21 1/2" wide, 13" deep. Seven tubes including Pentode and Multi Mu. **\$89.50**



Model 51

7-Tube Superheterodyne with Power Pentode. Table Model, 17 3/4" high, 15 1/2" wide, 12" deep. **\$69.50**



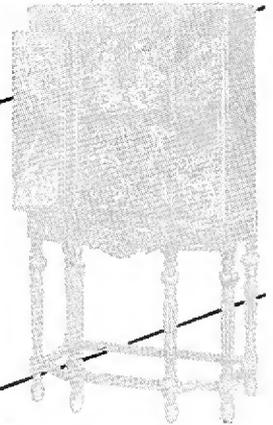
Model 45

8-Tube Superheterodyne with Push Pull Pentodes. 38 1/4" high, 22 1/2" wide, 13 3/4" deep. **\$112.50**



Model 48

10-Tube DeLuxe Superheterodyne, 41 1/2" high, 24 1/2" wide, 15 1/4" deep. **\$147.50**



Model 49

DeLuxe 10-Tube Superheterodyne, 47 1/2" high, 25 1/2" wide, 15 1/4" deep. **\$175.00**

All Prices complete with Tubes.

PRESTIGE MERCHANDISE AT POPULAR PRICES

HERE'S the line that "stole" the Chicago show! It will top the bill and play to full houses throughout the country, for it offers the biggest feature in radio today, *quality at a price!*

With the new Fada line completed now by the addition of a model to sell at \$89.50, you can make the entire market yours! You can offer a set on which the public is already sold,

a set of established reputation, carrying many new improvements, at prices that meet every level today in radio—at prices, too, that permit easy stepping up from one model to another.

The "line" of least resistance is the line to concentrate on. Fada is that!

For a sound, healthy business and a profit worthy of your labor, make Fada your line this year! *All models for 25 cycle at slightly higher prices.*

Manufactured by F. A. D. ANDREA, INC., Long Island City, New York



1920 SINCE BROADCASTING BEGAN 1931

The Greatest Values in

LOOK at
these **Low Prices**
and **Price Range**

Metropolitan Midget

Powerful new receiver with variable Mu and Pentode Tubes, as illustrated and described on opposite page. Complete with tubes, **\$34.95**

Apartment Model

6-tube Super-heterodyne. Variable Mu and Pentode Tubes, Tone Control, Electro Dynamic Reproducer. Sturdy Walnut Cabinet, 18 inches high; 11 inches wide. Complete with tubes, only **\$52.95**

Tudor Console No. 1

Super-heterodyne Circuit, Variable Mu and Pentode Tubes, Tone Control, Electro Dynamic Reproducer, Television Terminals. Beautiful Cabinet of selected Walnut, Height 39 inches. Complete with tubes, **\$65.75**

Tudor Console No. 2

Same as No. 1 Console but with built-in, Low Wave Converter. Height 39 inches. Complete with tubes, only **\$87.75**

French Console No. 1

Super-heterodyne Circuit, Variable Mu and Pentode Tubes, Electro Dynamic Reproducer, Tone Control, Television Terminals, Walnut Cabinet. Height 39 inches. Complete with tubes, only **\$71.75**

French Console No. 2

Same as No. 1 Console, but with built-in, Low Wave Converter. Complete with tubes, only **\$93.75**

Portable Console No. 1

New, novel, convenient. Can be wheeled, plugged in, anywhere. Super-heterodyne Circuit, Variable Mu and Pentode Tubes, Tone Control, Electro Dynamic Reproducer, Walnut Cabinet. Height 29 inches. Complete with tubes, only **\$67.75**

Portable Console No. 2

Same as No. 1 Portable Console but with built-in Low Wave Converter. Height 29 inches; width 14 inches; length 22 inches. Complete with tubes, only **\$90.75**

De Luxe Console No. 1

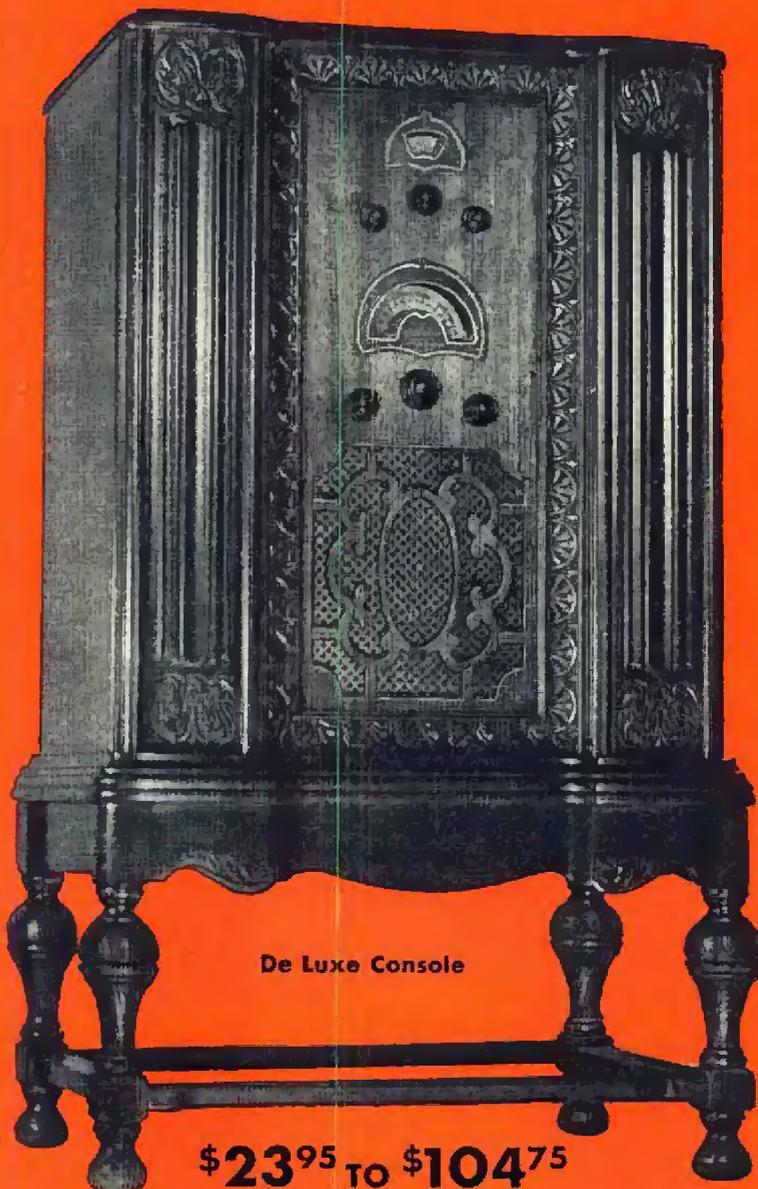
Illustrated at right. Super-heterodyne Set. Variable Mu and Pentode Tubes, Tone Control, Electro Dynamic Reproducer. Beautifully matched Walnut Cabinet with rich carving. Height 41 inches. Complete with tubes, only **\$82.75**

De Luxe Console No. 2

Same as De Luxe Console No. 1, but with built-in Short Wave Converter. Complete with tubes, only **\$104.75**

Low Wave Converter

An individual unit which adapts practically any A. C. set to low wave reception (down to about 20 meters). Brings in stations all over the world; amateur broadcasts; police signals, etc. Complete with tubes and cabinet, only **\$23.95**



De Luxe Console

\$23⁹⁵ TO \$104⁷⁵

is the price range of the 11 Super Value matched Walnut Stewart-Warner models, embracing everything from the unique Low Wave Converter to the De Luxe Console illustrated. Featured are simplified circuit with Mu and Pentode tubes, Electro Dynamic Reproducer, tone control and television terminals. Price includes tubes, and, in 5 models, built-in Low Wave Converter.

STEWART-WARNER

ALL RADIO HISTORY

HERE'S THE BIG MONEY-MAKING
LINE FOR DEALERS

STEWART-WARNER

"ALL-AROUND-THE-WORLD" RADIO

In the new Stewart-Warner Silver Jubilee Radio, is crystallized Stewart-Warner's determination to offer its dealers the GREATEST line and the most PROFITABLE line ever placed on the market.

Ten splendid Console, Portable and Apartment Models. Also a simplified Low Wave Converter, sold separately or built-in, and which adapts the sets to low-wave broadcasts, making instantly available stations all over the world.

France, England, Germany, Italy, countries of both hemispheres, to say nothing of local police, amateur, and other stations using low-wave lengths—all become instantly available at the turn of a dial, through these remarkable sets!

Another notable feature of these sets is the sensationally new simplified Super-Heterodyne circuit—equipped with Variable Mu and Pentode tubes—which removes all previous

restrictions, definitely extends range of reception, sharpens selectivity, and raises standards of performance. This circuit, complete with Low Wave Converter, tone control, attachments for television, and many other new and original features, assures the purchaser that in these Stewart-Warner sets, he is not only getting all anyone will want in radio for years to come, but the greatest values ever offered in radio.

And the price range? Only \$23.95 to \$104.75 — complete with tubes!

Only Stewart-Warner's tremendous production facilities have made such values possible. With the line goes the fairest franchise in the industry. Cash in on unbeatable Silver Jubilee values—and the powerful national advertising and other selling helps backing them. Get full details from your Stewart-Warner Distributor. Stewart-Warner Corporation, Chicago, Illinois.



Another Unbeatable
Silver Jubilee Value

The Stewart-Warner METROPOLITAN MIDGET. A powerful new receiver especially designed for reception within a 200-mile radius. Variable Mu and Pentode Tubes. Electro Dynamic Reproducer. A 4-tube set with fine walnut cabinet. Height only 14 1/2 inches; width 12 1/2 inches. Complete with tubes, only

\$34.95

LOOK at these SENSATIONAL FEATURES

Super-Heterodyne Circuit

New, powerful, keenly selective—a champion performer.

New Pentode Tubes

For maximum power amplification without distortion.

New Variable Mu Tubes

Eliminate local station interference or "cross talk."

Tone Control

Permits individual interpretation of even the life-like tone for which Stewart-Warner has always been famous.

Low Wave Converter

Permits reception of low-wave broadcasts down as low as 20 meters. Enables owners to bring in DIRECT, day and night—stations in all parts of the globe—from Siberia, Russia and Italy, to Holland, France, England and South America; amateur broadcasts; police signals, etc. Opens up a new field of fascination and interest. No bothersome interchange of coils required. Sold as a separate unit, usable with most any A.C. set—also a built-in feature on five Stewart-Warner models.

Television Terminals

Make set ready for television equipment.

Full Vision Dial

Assures quick, accurate station finding.

Electro Dynamic Reproducer

Affords maximum tonal range.

Walnut Cabinets

Of striking beauty in design, workmanship, finish.

Models for All Current

Made for 25 to 60 cycle A. C. Also for D. C. operation.

Silver Jubilee **RADIO** » » »

WEBSTER ELECTRIC CO.

WORLD'S LARGEST MANUFACTURERS OF MONEY-MAKING EQUIPMENT FOR MERCHANTS.

HOLCOMB AND HOKE
MANUFACTURING COMPANY
INDIANAPOLIS, IND.

CAPITAL INVESTED
\$2,000,000.00

ADDRESS ALL CORRESPONDENCE
TO THE COMPANY, NOT TO INDIVIDUALS

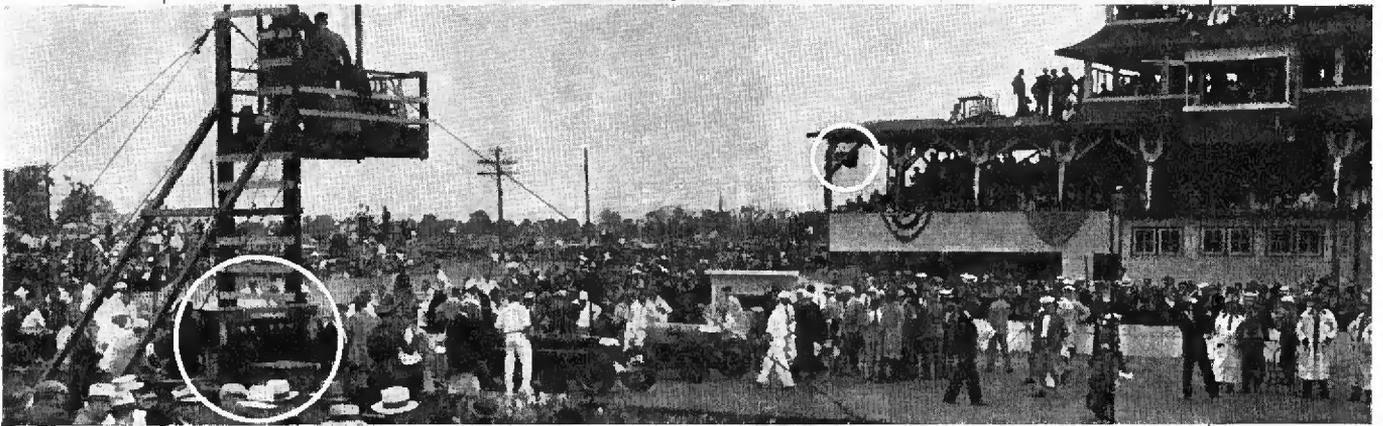
June 1, 1931

Webster Electric Company,
Racine,
Wisconsin.

Attention: Mr. R. Ferda

Dear Mr. Ferda:

Want to take this chance to tell you that the amplifiers worked splendidly during the trials and the day of the race at the Speedway.



... and I announced over the microphone three or four times, that the amplifiers were from the Webster Electric Company, Racine, Wisconsin. Inasmuch as there are estimated to be 165,000 people at that race, I think that would be worth a little.

We have received comments from broadcasting stations, such as WJZ, WLW and many others that it is the best public address system they have ever heard, and they have heard very nearly all of them. The one at Soldier Field, the one out in California, the one at Illinois University, the one at the Air Races, practically all of them, and they say no system in the country can even compare with the one we have installed at the Speedway. I thought you would like to get this information.

Yours truly,
HOLCOMB & HOKE CO.,
Raul Hoke
Chief Engineer.

FH-mr

Wherever
Sound Must
Fill Great
Spaces

Webster Electric
Power Amplifiers

FINE performance is the true measure of fine quality. The letter above cites an example of Webster performance that needs no further comment. « « « Wherever people gather—wherever sound must fill great spaces—there is sales opportunity for Webster Power Amplifiers. Well-established organizations with sales and engineering facilities should communicate with us.



Webster Electric Company
ESTABLISHED 1909
Racine Wisconsin



Webster Transformers . . . Webster Electric Pick-ups . . . Webster Power Amplifiers

THOUSANDS OF DEALERS...

have written Silver-Marshall since the radio show for full details on the new direct factory merchandising system. It features:

NO DISTRIBUTORS

DIRECT FROM THE FACTORY

MORE DEALER PROFIT

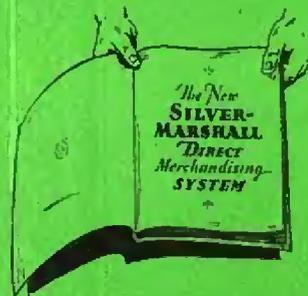
COMPELLING PRICES

FOUR VARIO-MU PENTODE SUPERHETS

UNUSUAL DISCOUNTS ON EVERY S-M PRODUCT

If you are not doing the radio business that you should, clip out the coupon, pin it to your letterhead, and you will receive your copy of the Merchandising Book, covering every detail of the system. There is no obligation.

Superheterodyne
by **SILVER-MARSHALL**



It will be well worth your time to ask for your copy of the Merchandising Book.

6 4 2 1 W E S T
6 5 t h S T R E E T
C H I C A G O , U . S . A .

1 2 2 E A S T
4 2 n d S T R E E T
N E W Y O R K C I T Y

SILVER-MARSHALL, Inc.
6421 W. 65th St., Chicago, U. S. A.

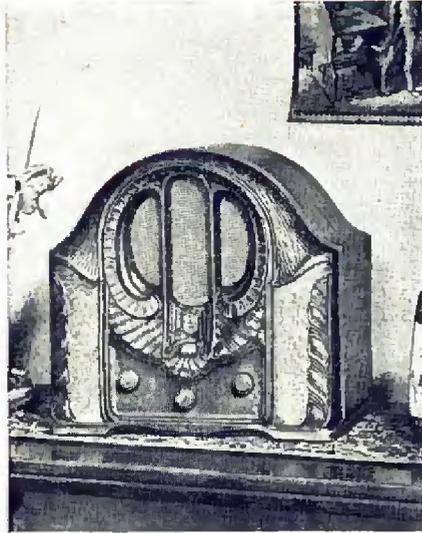
Send our FREE copy of the Silver-Marshall Merchandising Book.

Name

Address

CROSLEY

...an astonishingly **NEW** Line



The Crosley SUPER BUDDY BOY
 The biggest radio in performance ever condensed into so small a space. Incorporates Pentode Output — Exponential or variable MU tubes — \$65.00
 Dynamic Speaker — Illuminated Angular Vision Dial. Sells at the low price of
Complete With Tubes and Tonnaboard
Also made for Direct Current

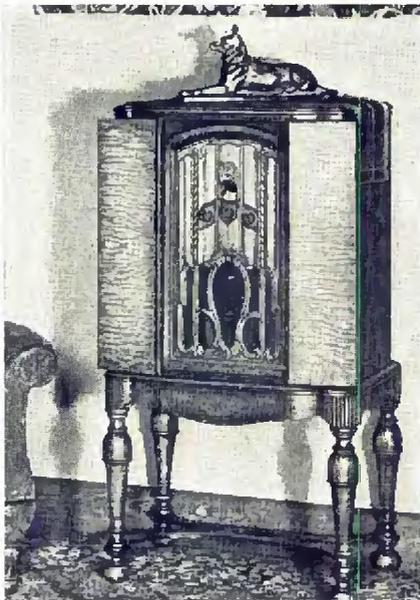


The Crosley SONGSTER
 An exquisitely designed console model. Same type chassis as The SUPER BUDDY BOY. \$79.50
 Finished in genuine Walnut and hand carved effect. Amazingly low priced at...
Complete With Tubes and Tonnaboard
Also made for Direct Current

Never has there been a line of Radio Receivers So Complete . . . So Exquisitely Beautiful . . . So Utterly Superlative in Performance . . . So Low-Priced, as the Sensational **NEW** Crosley Line.



The Crosley MUSIGALE
 A console model incorporating all The Crosley SUPER BUDDY BOY Pentode Superheterodyne features plus auditorium type speaker. Sells at \$94.50
Complete With Tubes and Tonnaboard



The Crosley MINSTREL
 A 10-tube Superheterodyne housed in an exquisitely beautiful cabinet. The top and sides are of walnut veneer. Pilasters and legs are of walnut — the doors are of bird's-eye maple. \$129.50
 Sells at...
Complete With Tubes and Tonnaboard



The Crosley TROUBADOUR
 Bears the title "the most beautiful radio ever built." Incorporates the same 10-tube Superheterodyne chassis as The MINSTREL. Can be equipped with electric phonograph at a slight additional cost. Astonishingly low priced at... \$169.50
Complete With Tubes and Tonnaboard

YOU'RE THERE WITH A CROSLEY

CROSLEY RADIO

Introduces

incorporating ALL the newest and many Entirely Exclusive Features

PENTODE tubes — Exponential or Variable MU tubes — Superheterodyne Circuit — Heterotonal Response (Static and Tone Control) — Illuminated Angular Vision Dial — exquisitely beautiful, newly designed cabinets — they're all found in this utterly beautiful and sensational new Crosley line. This marvelous line not only includes each and every one of the very latest refinements of modern radio but it also incorporates many features exclusive to Crosley and available only in the Crosley line. Small size sets — larger sets — a clock model — round out this line to make it the most complete and satisfying that radio has ever known. And yet every one of these amazing radio receivers, in spite

of its superlative performance and exquisite beauty, is sensationally low priced. They are "Built only as Crosley can build them" — "Priced only as Crosley can price them." Never has there been a line of radio receivers which so completely matched the needs and requirements of the radio-buying public. It is destined to "go over with a bang" and reap greater profits for the Crosley dealer. Get in touch with your Crosley distributor for complete information about these sensational radio receivers.



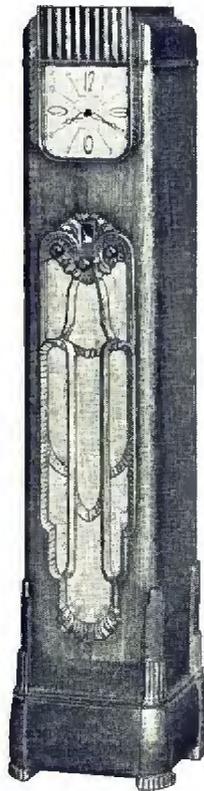
The Crosley SHOW BOY

A radio receiver of distinctly individual beauty and superlative performance. Incorporates Screen Grid tubes — Pentode Output — Exponential or Variable MU tubes — Dynamic Speaker — Illuminated Angular Vision Dial — One-piece Cabinet — \$39⁷⁵ and many other amazing features. Sensationally low priced at

Complete With Tubes and Tonnaboard

Also made for Direct Current

The Crosley BATTERY SHOW BOY sells for \$47.50, complete with tubes, less batteries.



The Crosley ORACLE

A graceful, appealing and splendid clock model radio receiver finished in five-ply walnut veneer. The synchronous electric clock is the finest available. The chassis and the speaker are the same as in The SHOW BOY. Sells at the unbelievably low price of

\$99⁵⁰

Complete With Tubes and Tonnaboard



The Crosley SONNETEER

An exquisite console model incorporating the same chassis as The SHOW BOY. The posts, stretchers and apron are of walnut. Sides and top are of genuine walnut veneer. The marvelously designed front is in beautiful hand carved effect. Extremely low priced at

\$54⁷⁵

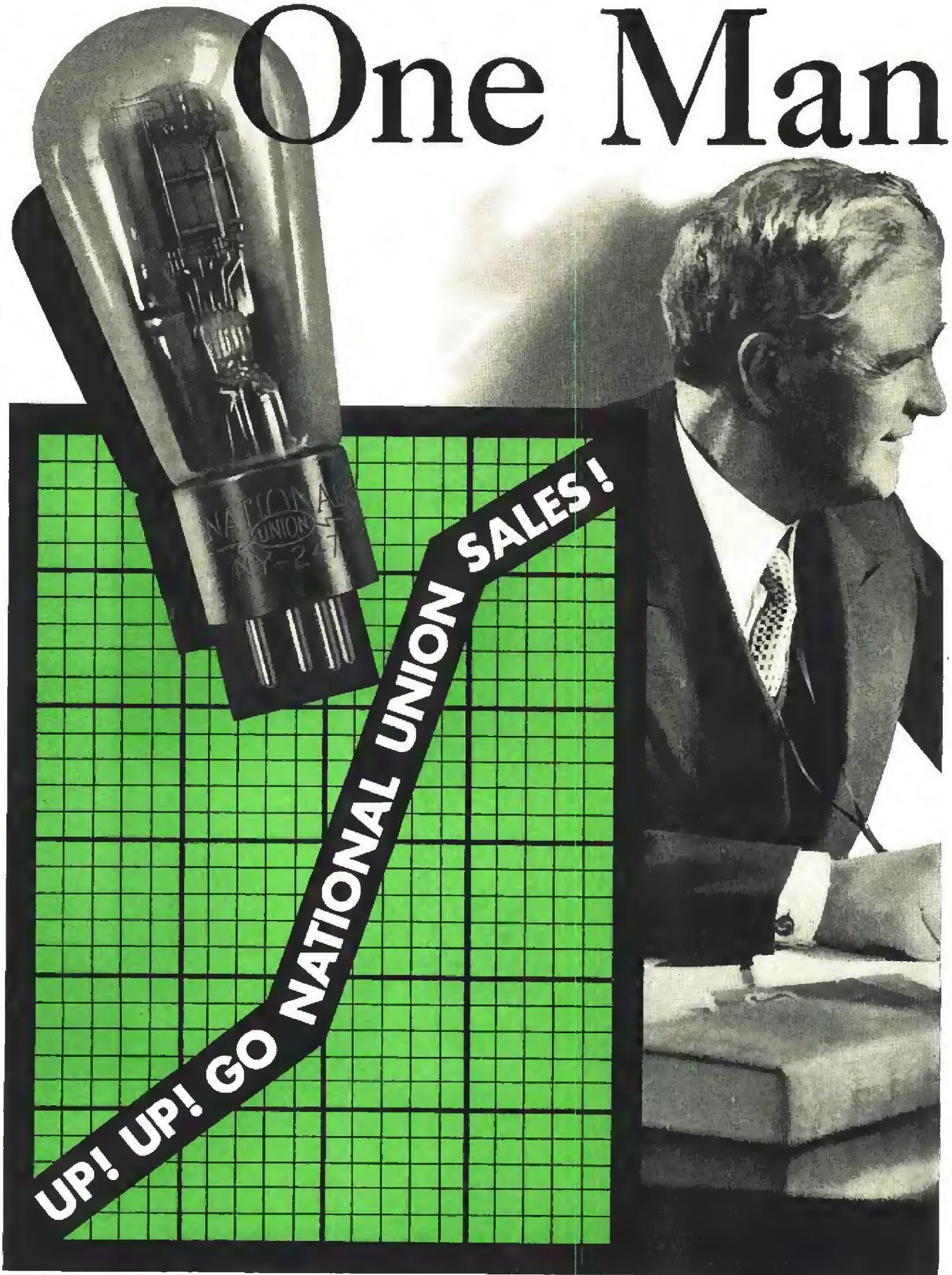
Complete With Tubes and Tonnaboard

Also made for Direct Current

YOU'RE THERE WITH A CROSLLEY

CROSLLEY RADIO

One Man



NATIONAL UNION RADIO CORPORATION

told Another

and National Union sales increased 50% during the hardest year known to radio!



GOSSIP AT R.M.A. SHOW

"I've been hearing some mighty nice things about the tube Dr. Myers is making. Who is your jobber in Seattle? I want to talk with some one here about them. It sounds good to me."

A dealer in Seattle, Wash.

"I want to congratulate your company. National Union has cut tube shrinkage in my store. I've only had three bad tubes in 8 months."

A dealer in Binghamton, N. Y.

"I put a few of your National Union tubes in just for a trial. Your merchandising set-up is the aid we dealers have always looked for but never found. I like it. It sells tubes and I've decided to keep National Union and one other tube and chuck the rest out."

A dealer in Philadelphia, Pa.

"National Union has one of the cleanest records of any tube company I've ever bought from . . . you're making a great tube and I like the way you handle your dealers."

A dealer in Butte, Montana

"That certainly is a dandy coil winder. But I've gotten over being surprised at Doctor Myers. That man is certainly a radio genius."

A set engineer (home in New York)

Little whispers . . . gossip . . . good news . . . friendly tips . . . and National Union sales have boomed on the crest of good will. One man tells another of his success. He accepts the tips. And another dealer is handling and selling the finest quality tubes made today.

If you have never sold National Union Tubes we shall be pleased to tell you about them in detail. And also about the National Union Electronic Analyzer, a tube tester that shows your customers with their own eyes the true condition of their tubes. This Electronic Analyzer, coupled with our merchandising plan, sells tubes and sells them fast! Write to us at 400 Madison Avenue, New York.

400 MADISON AVENUE · NEW YORK CITY

it IS a BIG YEAR with NORGE more Norge Electric Refrigerators were Sold in May than in all of 1930

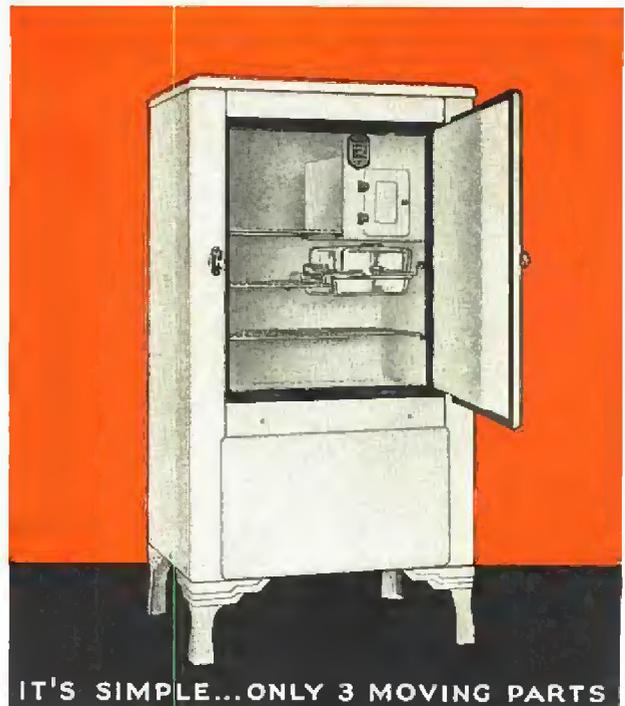
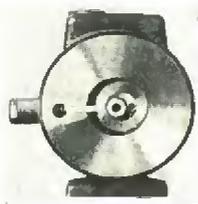


Last February we promised this would be a "Big Year with Norge." So far it's been even bigger than we expected. And gets bigger every day!

Shipments in May were greater than during all of last year. Retail orders absorb shipments as rapidly as they arrive in the dealer's hands.

Norge has the simplest refrigerating mechanism, the Rollator. With only three moving parts, almost everlasting, it makes the Norge a service free line for the dealer. And Norge is package merchandise, a short line, with a live, powerful sales and advertising plan assuring rapid turnover. Discounts are good.

THE ROLLATOR



IT'S SIMPLE... ONLY 3 MOVING PARTS

Hundreds of new dealers joined the ranks of Norge Profit Makers this year but some desirable locations are still available to the right men. The coupon will bring details.

NORGE CORPORATION Division of Borg-Warner
654 EAST WOODBRIDGE ST., DETROIT, MICH.

IN CANADA
NORGE CORPORATION OF CANADA, LTD.
235 Carlaw Ave., + + + + Toronto, Ont., Canada

Norge Corporation,
654 E. Woodbridge St., Detroit, Mich.

Gentlemen:

Please send me Norge Dealership information.

Name

Address

City State

NORGE
WITH ROLLATOR

Radio Dealers! Get Ready

NOW

for a Big Profitable Business on the New Stewart-Warner Home Movie Camera



HOLLYWOOD MODEL

Complete with leather-bound, waterproof, slide fastener carrying Case of smart new design—and with every essential for taking perfect pictures — only . . .

\$50

All These Big Features

So simple that anyone can operate it.
Lightest weight—only 2 lbs. 10 oz., loaded.
Jam-proof and Trouble-proof.
Compact—9 in. long, 5 in. wide, 2 in. thick.
Easiest to load, unload and handle.
Daylight loading without injury to film.
Accurate Full-vision View Finder.
Equipped with standard f 3.5 lens.
Simplest lens adjustment.
Interchangeable lens mount.
4 speeds—normal, low, slow motion, sound.
Uses standard 16 mm. movie film.
50 or 100-foot film capacity.
Audible film footage counter.
Spring-driven motor—no cranking.
Permanently beautiful grain-like finish.
Built to Stewart-Warner's traditional standard of quality.

Used and Recommended by Leading Hollywood Cameramen

Says one of them, Mr. Robert C. Bruce of Outdoor Talking Pictures, Inc., Metro Sound Studios, Inc.:

"Incorporating all the necessary refinements found in all 16 mm. cameras, the Hollywood Model is certainly a revelation, not only in ease of operation . . . but . . . in the fact that with it anyone can take good pictures. I do not see how you can inject all of this quality at the price . . . You are to be congratulated."

Here is an ideal new line that without disturbing in any way your present "set up" brings big extra profit. It has a new appeal for your old customers—and brings in new customers too. It will help you build an increasingly prosperous year-around business without increasing overhead.

Thousands who don't have a home movie camera now, would like to own and enjoy one—especially parents. Prohibitive prices—and operation too complicated for the average person, is all that has, up to this time, prevented *volume sales*.

But, now, and for the first time—comes a *real* home movie camera that *can* be and *will* be bought by the masses . . . the new Stewart-Warner Home Movie Camera. It is so *simple* that it makes movie-taking actually *easier* than taking

snapshots; so marvelously built that it takes motion pictures of professional clearness and brilliancy. And all it costs is \$50.00!

This camera heads the new line of Stewart-Warner Home Entertainment Equipment—Projectors, Supplies, etc. Designed for amateurs by professional Hollywood Cameramen, under Stewart-Warner supervision, it includes every essential for the taking of perfect motion pictures—affords quality never before approached at the price.

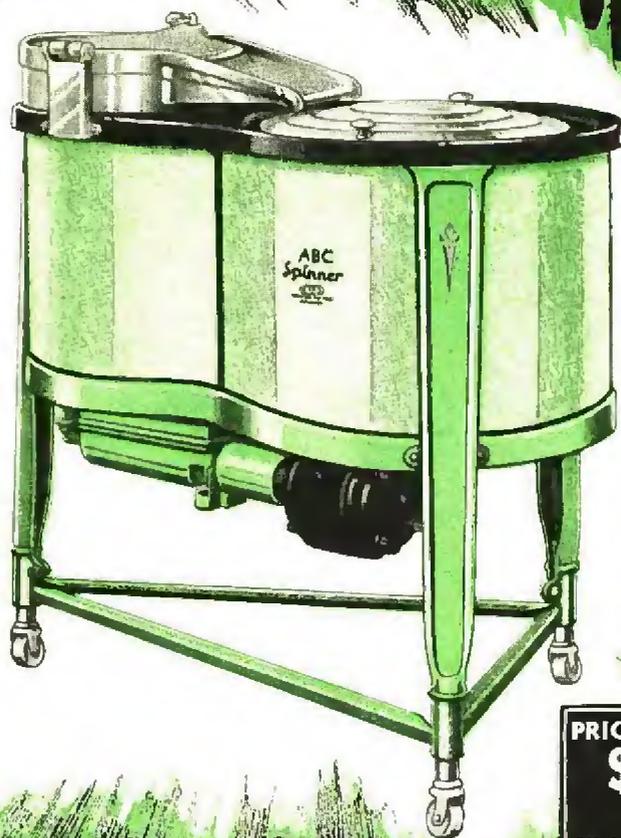
Smashing big profits on sales of camera, projector and supplies. No servicing. Backed by heaviest of all home-movie national advertising campaigns. Carries a highly attractive franchise. Ask your Stewart-Warner distributor for full details. Stewart-Warner Corporation, Chicago, U. S. A.

STEWART-WARNER Home Movie Camera

HERE'S
THE WASHER
that knocked their eyes out
at the R.M.A. Convention
at **CHICAGO**

**A COMPLETELY NEW --
BEAUTIFUL CENTRIFUGAL
DRYER WASHER SENSATIONALLY LOW PRICED.
NON-COMPETITIVE -- AN
UNEQUALLED DEALER
PROFIT OPPORTUNITY.**

the New **LOW PRICED**
ABC Spinner
 Model **77**



PRICED TO RETAIL FOR
\$129⁵⁰
 Slightly higher in and West
 of the Rocky Mountains

RINSES, BLUES, STARCHES and DRIES FOR THE LINE

WRITE—WIRE—OR TELEPHONE
FOR DETAILS — — — HERE'S A
WONDER THAT SELLS ITSELF
—WE HAVE PROVED IT!

ALTORFER BROS.
COMPANY

Est. 1909 Peoria, Ill.

Send facts right away

Name.....

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

RRJ

Exceptional Offer
for Progressive
Radio Dealers...



...GET THIS UP-TO-DATE **TEST BOARD**

Records Prove it often DOUBLES and TRIPLES Tube Sales; Brings New Customers into your Store; Creates Live Prospects for Radio Sets as well as Tubes; Establishes your Store as the Local Radio Headquarters.

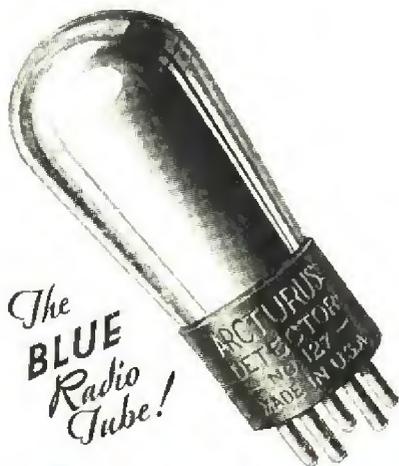
These vital advantages are the result of testing tubes, *free of charge*, in a manner that is easily understood, obviously correct, and convincing to any radio set owner.

Get This Test Board Now

Testing equipment such as this is often sold at \$150.00 to \$200.00, or more. Yet Arcturus now helps any progressive radio dealer get a Test Board, and many Arcturus jobbers have a plan enabling dealers to *earn* one by tube purchases. You can have one of these business-building Tube Testers working for you *next week*, bringing you new business and extra profits.

Naturally we can furnish these Test Boards to a limited number of dealers only. If you want one, **ACT TODAY**. Tear out this coupon now, and send it to us with your business letterhead. It will bring you all the facts about the most profitable selling help you have ever had in your store.

Arcturus Radio
Tube Co.
Newark, N.J.



Here is the latest and best way of boosting your tube sales and bringing new pep to your business every month in the year—an accurate and easily operated TUBE TEST BOARD that clearly shows the difference between fresh and weak tubes.

A Sure-Fire Sales Builder

Radio dealers who have installed this Test Board and used the simplified sales plan we furnish with it, report remarkable results. They have learned that a list of old customers can be turned into a gold mine of new tube profits. They have secured dozens of new customers at small expense and turned many of these into radio set buyers. They have established their stores as the radio center of their community—the place to get expert radio service at no extra cost.

ARCTURUS

"The TUBE with the LIFELIKE Tone"

CLIP and MAIL this COUPON NOW!

ARCTURUS RADIO TUBE CO., 720 Frelinghuysen Avenue, Newark, N. J.

I am interested in your plan for selling more tubes with your Tube Test Board. Tell me how I can get one of these Test Boards, and use it to best advantage.

Name _____
Address _____
City _____
State _____



Making Good Products Better!

Get this Handy Service Kit Now!

Here is a handy kit of Shakeproof Lock Washers and Shakeproof Locking Terminals that is just what you need. It contains an ample supply of many types and sizes, neatly arranged in this special box. It makes a very convenient assortment for the shop and can be easily tucked in the tool bag. Mail the coupon below for free samples and complete information on how you can secure a Shakeproof Service Kit.



PROGRESSIVE manufacturers are building extra years of perfect performance into their products by the use of Shakeproof Lock Washers. This patented locking method keeps every nut and screw absolutely tight. The twisted steel teeth bite into both the nut and work surface and positively resist any movement of the nut. This prevents loose connections which are the greatest cause of trouble and serious complaints.

Be sure the products you handle are Shakeproof equipped. It will mean lower service costs to you and more contented customers. You can prove this by using Shakeproof in your own shop or on your next service job. We will gladly furnish free samples for any test you care to make—send the coupon for a supply, today!

SHAKEPROOF



Type 12. Internal For S. A. E. and Standard Machine Screws
 Type 11. External For Standard Bolts and Nuts
 Type 15. Countersunk For all Countersunk Screws
 Type 20. Locking Terminals For Radio and Electrical Work

Shakeproof representatives are located in the following cities

- | | | | | | |
|---------------|--------------|---------------|--------------------------|---------------|-----------|
| New York City | Philadelphia | Boston | Pittsburgh | Schenectady | Cleveland |
| Detroit | Toledo | Cincinnati | Birmingham, Ala. | Dallas, Texas | Milwaukee |
| Los Angeles | Seattle | San Francisco | Toronto, Ontario, Canada | | |

COUPON

Shakeproof Lock Washer Co.
 (Division of Illinois Tool Works)
 2551 N. Keeler Ave., Chicago, Ill.

Gentlemen: Please send us free samples of Shakeproof Lock Washers and Shakeproof Locking Terminals. Also, tell us more about your special offer on the Shakeproof Service Kit.

Firm Name _____
 Address _____
 City _____ State _____
 By _____ Title _____



GENERAL MOTORS RADIO CORPORATION

*takes pleasure in announcing the appointment
of the following distributors**

EASTERN REGION

L. W. Cleveland Co. Portland, Maine
Linscott Supply Co. Boston, Mass.
Tarbell-Watters Co. Springfield, Mass.
Geo. H. Wahn Co. Boston, Mass.
Post & Lester Co. Providence, R. I.
Post & Lester Co. Bridgeport, Conn.
The Hartford Elec. Supply Hartford, Conn.
Elliott-Lewis Electric Co. Philadelphia, Pa.
Shapiro Sporting Goods Co. Newburgh, N. Y.
E. S. & E. Co. Albany, N. Y.
Jos. M. Zamoiski Baltimore, Md.
Jos. M. Zamoiski Harrisburg, Pa.
Esenbe Co. Pittsburgh, Pa.
Electric Supply Co. Tampa, Fla.
General Motors Radio Corp. New York, N. Y.
Glasgow-Stewart Co. Charlotte, N. C.

CENTRAL REGION

Midland Radio Corp. Cleveland, Ohio
J. H. & F. A. Sells Co. Columbus, Ohio
The Commercial Elec. Co. Toledo, Ohio
General Motors Radio Corp. Detroit, Michigan
Morley Brothers Grand Rapids, Mich.
Morley Brothers Saginaw, Mich.
Shadbolt & Boyd Co. Milwaukee, Wisc.
Kelley-How-Thomson Co. Duluth, Minn.
Janney-Semple-Hill Co. Minneapolis, Minn.
Brown-Camp Hardware Co. Des Moines, Iowa
Harbison Manufacturing Co. Kansas City, Mo.
Beck-Corbitt Co. St. Louis, Mo.

CENTRAL REGION *continued*

Isaac Walker Hardware Co. Peoria, Ill.
Hudson-Ross, Inc. Chicago, Ill.
The Gibson Co. Indianapolis, Ind.
The Gibson Co. South Bend, Ind.
Mossman-Yarnelle Co. Ft. Wayne, Ind.
General Motors Radio Corp. Dayton, Ohio
C. & D. Auto Supply & Radio Co., Cincinnati, Ohio
Bluefield Furniture Co. Bluefield, W. Va.
R. T. Clapp Co. Knoxville, Tenn.
Orgill Brothers Memphis, Tenn.
Orgill Brothers Jackson, Miss.
Interstate Elec. Co. New Orleans, La.
Johnson Tire & Supply Co. Montgomery, Ala.
Claude P. Street Piano Co. Nashville, Tenn.
Stratton-Terstegge Co. Louisville, Ky.

WESTERN REGION

American Electric Co. Wichita, Kans.
Texas Radio Sales Dallas, Texas
Straus-Bodenheimer Co. Houston, Texas
Straus-Bodenheimer Co. San Antonio, Texas
Casner Brothers El Paso, Texas
B. K. Sweeney Co. Denver, Colo.
Geo. A. Lowe Co. Ogden, Utah
Geo. A. Lowe Co. Salt Lake City, Utah
Schwabacher Hardware Co. Seattle, Wash.
Stubbs Electric Co. Portland, Ore.
W. H. Collins Corp. Ltd. Los Angeles, Calif.
H. R. Curtis Co. San Francisco, Calif.
Nunn Electric Co. Amarillo, Texas

General Motors Radio offers the Improved Super-heterodyne—in a complete line of seven standard receivers and eight fine custom-built models in handsome period furniture cabinets—a radio for every purse and preference. We invite dealers to write the nearest Distributor for full information on the new series General Motors Radio franchise.

GENERAL MOTORS RADIO CORPORATION, DAYTON, OHIO

*DISTRIBUTOR APPOINTMENTS UP TO AND INCLUDING JUNE 15TH

THE BEST NEWS OF THE YEAR

At the Chicago Radio Show, Pacent Home Talkie consolette and portable models were received enthusiastically by dealers and jobbers alike. Not a single breakdown in more than two hundred demonstrations given in five days.

The PACENT Home Talkie Consolette

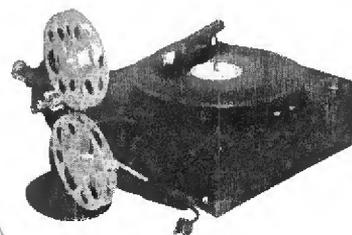


Complete equipment as shown lists for ONLY **\$225.00** less tubes and screen.

You can have a sound picture performance when showing any silent film on Pacent Home Talkie models. Write for literature.

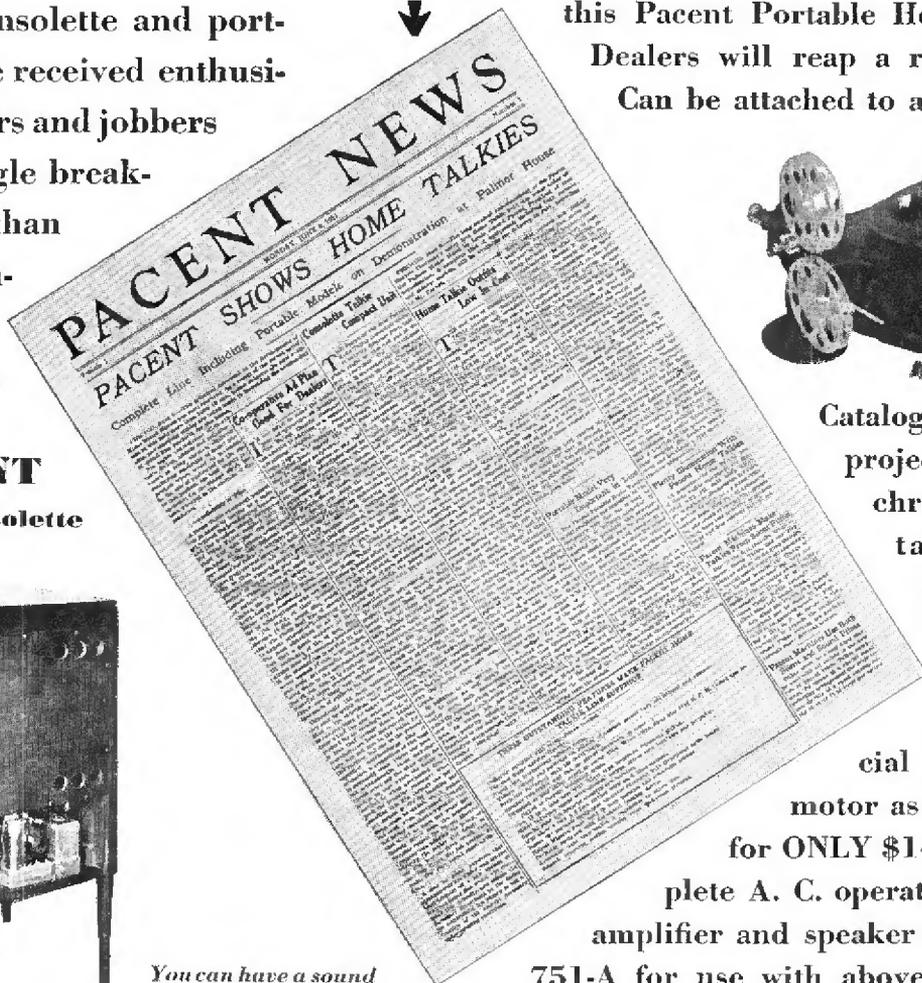
Here is the big item that will drag dollars into your store. A model of distinctive design folds up into a most compact and useful piece of furniture. Sturdy, well-built and housed in an attractive walnut cabinet. Speaker concealed underneath cabinet but may be removed for across-the-room projection. Pacent dealers will have the ONLY real money maker this season. Home Talkies were heralded at the Chicago show as the only new development offered this season. The market is ready and waiting for a new form of home entertainment. Pacent equipment is designed by a manufacturer with more than twenty years' experience in electrical reproduction

of sound. Every radio set owner will want this Pacent Portable Home Talkie. Dealers will reap a rich harvest. Can be attached to any receiver:



Catalog No. 751-B projector and synchronous turntable, complete with new Phonovox pick-up and special high-torque motor as shown, lists for ONLY \$145.00. Complete A. C. operated portable amplifier and speaker catalog No.

751-A for use with above equipment where radio set is not available lists for ONLY \$55.00 less tubes.



FILMS AVAILABLE

Lack of film product is no longer a deterrent to the development of the Home Talkie market. Steady, comfortable profits will be realized through rentals by wide awake dealers who are now establishing suitable film libraries. Rentals now average \$1.00 to \$1.25 per night, per reel, assuring full payment of the cost of film in less than a month. Write for complete list of films now available.

PACENT ELECTRIC CO., INC. 91 Seventh Avenue New York City

PACENT ELECTRIC COMPANY, INC.
91 Seventh Avenue, N. Y. C.
Gentlemen: I am interested in handling the Pacent Home Talkie line. Please send literature and complete information on your cooperative dealer advertising campaign.

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



on Exhibition in every Radio set

Just as CENTRALAB is on exhibition at the R. M. A. Show, so every CENTRALAB Volume Control is CONSTANTLY on exhibition in every radio set into which it is built.

The moment you turn the volume control, smooth, noiseless performance demonstrates careful, scientific construction.

No wonder more than twenty million CENTRALAB Volume Controls have already been sold.

Manufacturers everywhere have discovered that their sets when "CENTRALAB equipped" find a more responsive acceptance among "radio wise" dealers.

The 2nd edition of the new Volume Control Guide is just off the press—send for it today.

Centralab

CENTRAL RADIO  LABORATORIES

MAIL COUPON NOW

CENTRAL RADIO LABORATORIES
920 Keefe Ave., Milwaukee, Wis.

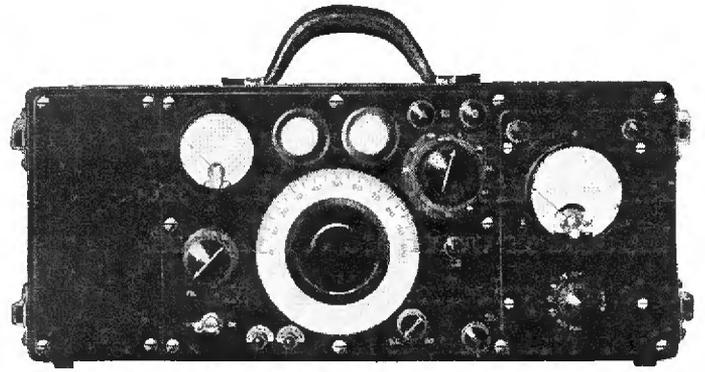
Enclosed find 25c. for which send me your new
VOLUME CONTROL GUIDE.

Name

Address

City State

Rad. Ret.



WESTON Announces.. the Complete OSCILLATOR

- The new Weston Model 590 I.F. and R.F. Oscillator is extremely practical and unusually complete. It is invaluable for aligning I.F. stages and gang condensers, in determining the sensitivity of receivers, in making selectivity tests, for checking R.F. transformers and condensers and the oscillator stage of radio receivers.

- Model 590 covers the broadcast band of 550 to 1500 kilocycles and the intermediate frequency band of 110 to 200 kilocycles. Frequencies between 200 and 550 and above 1500 kilocycles may be obtained by means of harmonics. As a result, *Model 590 may be used in testing short-wave converters and receivers.*

Features of Model 590

GRID DIP MILLIAMMETER—mounted on Oscillator panel. Also serves as filament and plate voltmeter. Definitely indicates that Oscillator is operating. Enables each R.F. stage to be individually tested. Determines resonance point of any coil and condenser circuit within Oscillator range.

ATTENUATOR—specially and uniquely designed to permit an unusually smooth, gradual adjustment of output over the entire range.

TWO TYPE '30 TUBES—one for the R.F. and the other to modulate the R.F. (30% at 400 cycles).

SELF-CONTAINED BATTERIES—four 1½-volt flashlight unit cells, automatically connected when inserted in Oscillator and one 22½-volt "B" battery.

COMPLETELY SHIELDED. The entire Oscillator is effectively shielded by a very carefully constructed partitioned cast aluminum case. The batteries are contained in one section.

OUTPUT METER. A compartment is provided in the Oscillator for an output meter which is a necessary accessory for this instrument.

CONSTRUCTION. Finely designed, ruggedly built, typical, in its accurate and reliable operation, of all Weston instruments.

Write for Details

WESTON

ELECTRICAL INSTRUMENT CORPORATION

581 Frelinghuysen Avenue

Newark, N. J.

Announcing the NEW SPARTONS



"Radio's Richest Voice"

Model 30

Sparton's newest automatic radio-phonograph. A new principle insures absolutely constant motor speed, giving exact reproduction of records as recorded. The radio employs the new Super-sonne application with Superheterodyne.

\$235 Complete

Model 5

A dependable general utility Sparton with the true Sparton tone for use in office, bedroom or study.

\$45 Complete

Model 10

The new Sparton Superheterodyne using Exponential and Pentode tubes—an original chassis design with hairline selectivity.

\$69⁵⁰ Complete

Model 15

A Sparton Superheterodyne console. But walnut veneers with curved solid panels make this model at home among the finest surroundings.

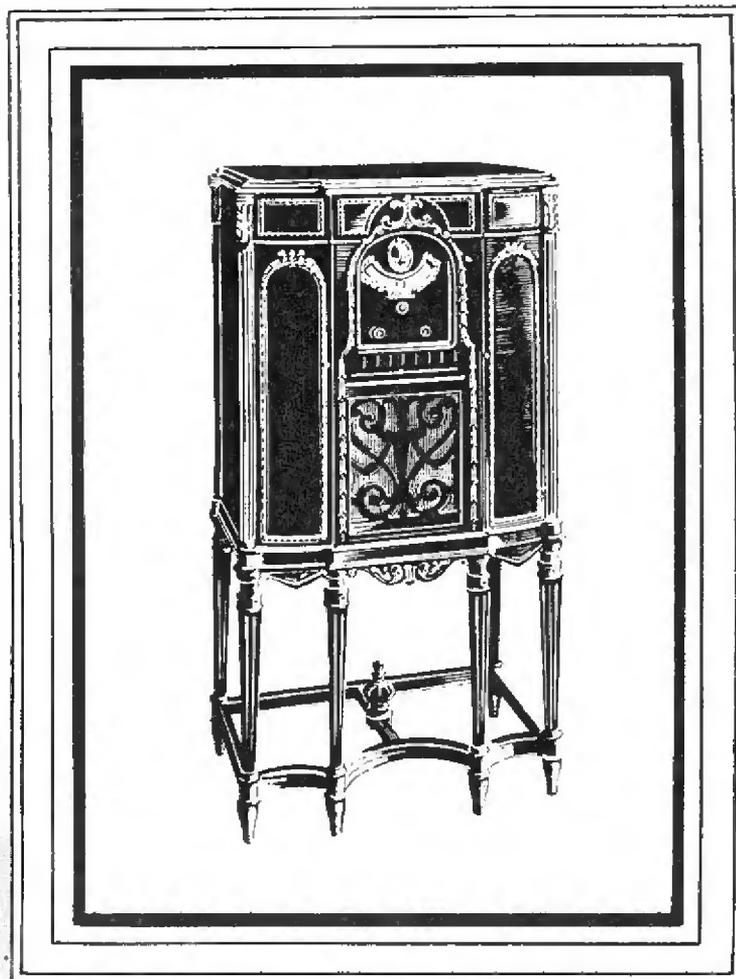
\$99⁵⁰ Complete

(645)

IN ADDITION to the remarkable and entirely new Super-sonne circuit application with Superheterodyne, Sparton presents in these new instruments a number of noteworthy new features. Among them are full vision dial and Pentode and Exponential tubes made easily usable by Tone Control of Radio's Richest Voice. These new Spartons, with other models to meet every desire or condition, represent the greatest values by far that we have ever offered.

ZENITH

again the outstanding **LEADER!**



14-Tube

NEW 1932

HYPER-HETERODYNE
Model 103—Magnificent high-boy console. Complete, with Zenith Quality Tubes, \$290.

Highspots

OF THE NEW 1932 ZENITH RECEIVERS

- 10-tube Super-Heterodyne
- 14-tube Hyper-Heterodyne
- Automatic Volume Control
- Automatic Line Voltage Regulator
- Automatic Tuning
- Tuning Meter
- Antenna Balancer
- Light-Focus Dialing
- Multi-Mu Tubes
- Between-Station Silencer

Leadership... THAT MAKES EVERY ZENITH DEALER THE OUTSTANDING LEADER AMONG HIS COMPETITORS

In all its triumphant history, Zenith NEVER has offered a line like this.

The NEW sets for 1932... two 10-tube Super-Heterodynes and a 14-tube Hyper-Heterodyne... typify the never-flinching Zenith policy... the best that can be built.

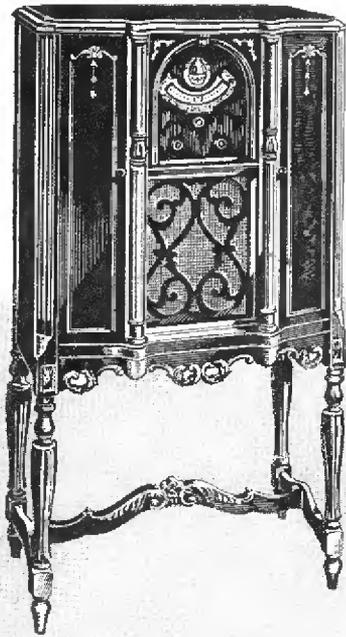
Every previous Zenith has been the premier radio of its time. Every one has excelled in beauty, tone and distance. The NEW 1932 line

eclipses everything that EVER has been done.

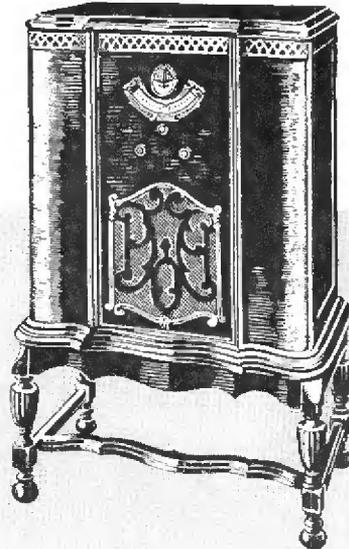
You can sell Zenith without effort. Powerful advertising, merchandising and a dealer-protective policy insure profits. Zenith is never overproduced; nor dumped; nor cut in price.

Go where you will, you can find no cleaner, finer, more profitable business anywhere. Write to your nearest Zenith distributor about obtaining the Zenith franchise.

ZENITH RADIO CORPORATION, CHICAGO, ILL.



Prices slightly higher in Far West



MODEL 92

10-tube advanced Super-Heterodyne in exquisite highboy console. Complete, with Zenith Quality Tubes, \$195.

HYPER-HETERODYNE

MODEL 91

10-tube advanced Super-Heterodyne in beautiful lowboy console. Complete, with Zenith Quality Tubes, \$155.

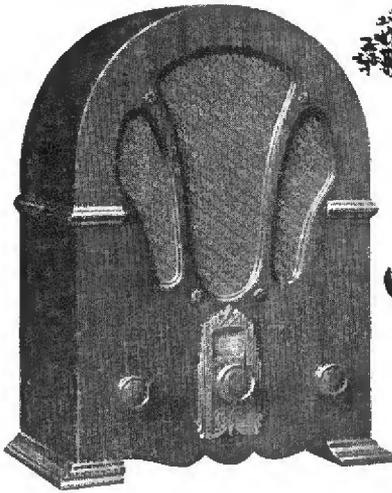
SUPER-HETERODYNE

New 1932



"RADIO HEADQUARTERS" offers 3 hot numbers

... for your
summer trade

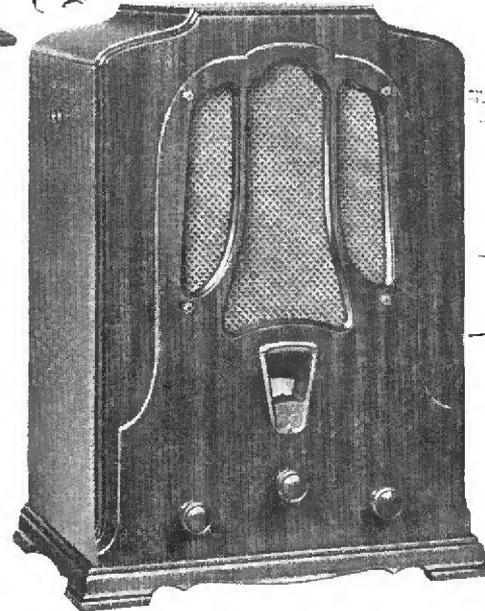


RCA Victor's greatest value—the new RADIOLETTE ... a husky radio in a tiny cabinet ... only 15 inches high ... weighs only 16 pounds ... 4 tubes including an RCA Pentode ... only \$37.50 list complete.

\$37⁵⁰

The hit of the season—the new RCA Victor Superette ... the smallest BIG radio ever built ... a powerful 8-tube Super-Heterodyne ... only \$69.50 list complete.

\$69⁵⁰



The best portable phonograph ever built—with automatic start and stop device ... wonderful tone ... beautifully finished ... carries 10 extra records safely ... only \$35.

\$35⁰⁰

HERE are three chances to make additional sales outside of your regular run of home business. Your customers all want *music* on their vacations ... and that leaves the door wide open for you to sell them light instruments that can be easily carried from one place to another. At the prices now offered on these new RCA Victor instruments, almost *everyone* can afford one in addition to their large radio set. Get in touch with your RCA Victor jobber today.

RCA Victor Company, Inc.

Camden, N. J., U. S. A.

A Radio Corporation of America Subsidiary



MASTER BUILDERS OF RADIO

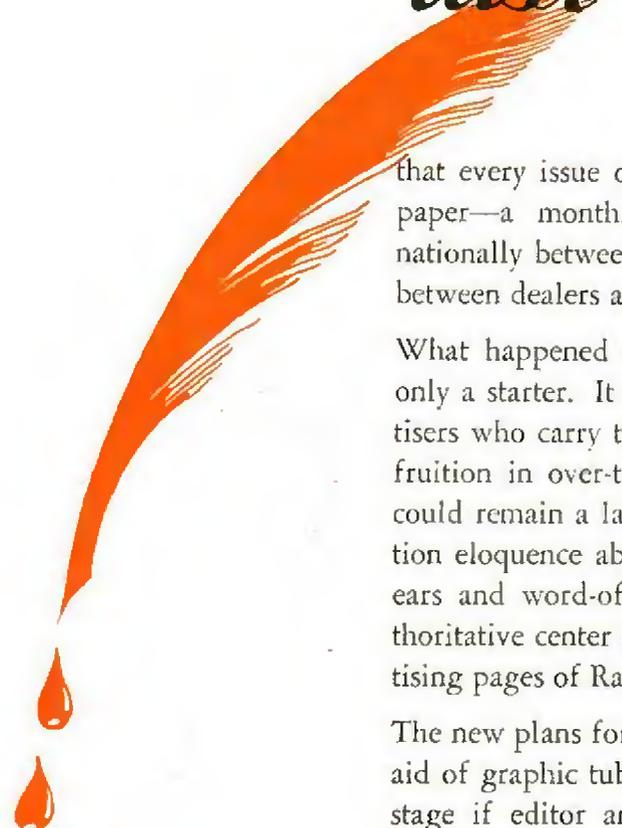
Here's what happened in **CHICAGO** last month . . .

BUT did it ever occur to you that every issue of Radio Retailing is a trade show on paper—a monthly recording of what is going on nationally between radio manufacturers and dealers and between dealers and consumers?

What happened at the two Chicago Conventions was only a starter. It is Radio Retailing's editors and advertisers who carry the forecast plans and developments to fruition in over-the-counter transactions. Home talkies could remain a laboratory experiment if all the convention eloquence about them was restricted to convention ears and word-of-mouth exploitation. What more authoritative center to turn to than the editorial and advertising pages of Radio Retailing?

The new plans for selling replacement tubes through the aid of graphic tube testers could easily stay in the plans stage if editor and manufacturer did nothing to perpetuate convention discussion. That manufacturers are spending tens of thousands of dollars to double and triple tube sales is interesting only in how their plans affect your own turnover in tubes.

All these are jobs for editors and advertisers to tackle in coming issues of Radio Retailing. Don't let any issue slip out of your hands unread.



all
between
two covers
for permanent
reference

ABC

A McGraw-Hill Publication

Radio Retailing

TENTH AVENUE AT 36th STREET

ABP

NEW YORK



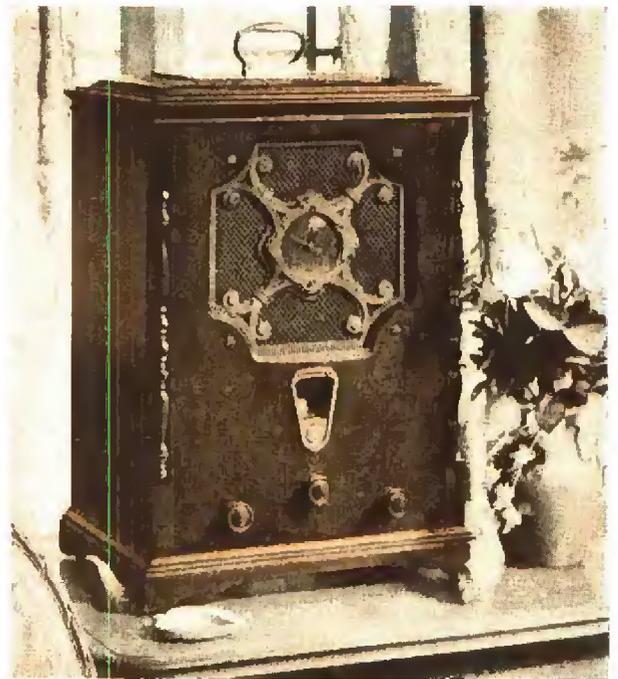
It's a bird

MAKE MONEY NOW WITH

SELL radios in summer? You bet your sweet life you can! These General Electric sets have as many summer talking points as ice cubes. What if the customers don't come walking in the door. Go to them! Go to them with G-E's smart summer line!

You'll find plenty of prospects. People who are going away, people who are staying at home—they're all prospects. They need radios for summer hotel rooms, for summer camps, for the front porch.

And there's a G-E set for every one of these prospects. A set that's good to look at and marvelous to listen to. That's up to G-E's standards in quality and down to bedrock in price. That's a great value for the money! Call your G-E Radio Distributor, or write to Section R-687, Merchandise Department, General Electric Co., Bridgeport, Conn.



THE JUNIOR WITH CLOCK *only* \$8450
complete with tubes

A handsome set equipped with electric clock which keeps perfect time and helps the listener get the program he wants when he wants it. 8-tube, screen grid super-heterodyne. Walnut cabinet. Bronze handle for carrying.

THE JUNIOR (WITHOUT CLOCK) \$7250
complete with tubes

GENERAL  ELECTRIC

in the hand, men!

GENERAL ELECTRIC'S SUMMER SALES-WINNERS!



THE MIDGET *only* \$3750
complete with tubes

G-E's newest! Unsurpassed in value by any small radio ever offered! Four tubes—including Pentode tube for high output. Tuned radio frequency set. Shielded chassis. Dynamic speaker. Attractive cabinet. Tone quality above its price class. A wonderful set for summer sales!

THE JUNIOR CONSOLE
only \$8950
complete with tubes

A superb set for those who prefer the console type of cabinet. Done in beautiful, richly grained walnut. Takes up little space. An attractive addition to any home or apartment. 8-tube screen grid superheterodyne. Full size 8-inch dynamic speaker.

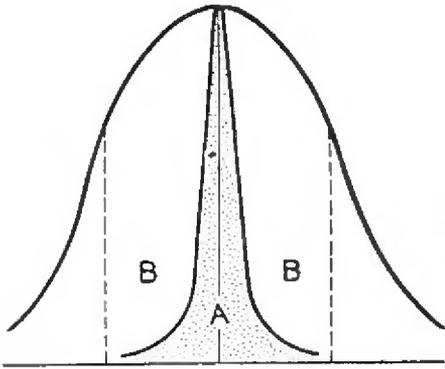


**THE END TABLE
PHONOGRAPH**
only \$6450

What family wouldn't like to have a phonograph this summer? Sell them this G-E End Table Phonograph. Connects with any radio—makes it a radio-phonograph combination—and is a handsome, practical piece of furniture besides.



FULL RANGE RADIO



Inner curve shows Stenode's selectivity, outer curve that of ordinary receiver. Lines BB are 5 k. c. distant from Line A. All background noise, included in the light portion between A and BB is eliminated by the Stenode.

Stenode Tubes

Until the American Tube Manufacturers licensed by the Stenode Corporation of America are in sufficient production, we can supply the rapidly growing demand of laboratories and serious investigators for:

QUARTZ CRYSTALS

Suitably Mounted in Tube Form To Fit Standard Tube Sockets

These crystals are all approved by our own laboratory after actual tests in a standard Stenode developed under the patents of Dr. James A. Robinson, M.B.E., D.Sc., Ph.D., M.I.E.E., F.Inst.P., and former Chief of Wireless Research, British Royal Air Force, by the engineers of the Stenode Corporation of America.

All crystals are ground to respond to a frequency of 175 kilocycles, which is the frequency accepted as standard in all modern superheterodynes, and are mounted in vacuum tube form.

STENODE TUBES (Standard UX Socket Base) **PRICE \$15.00**

Demand for Stenode Tubes is creating imitators. None is genuine without this signature.

James Robinson

"If it isn't a STENODE it isn't a modern receiver."

Stenode Corp. of America

(Formerly American Radiostat Corp.)

Hempstead Gardens, Long Island, N. Y.

STENODE CORP. OF AMERICA
Hempstead Gardens, Long Island, N. Y.

Enclosed find Personal Check, P. O. or Express Money Order
for which please forward me..... Stenode Tubes.
(state number)

NAME.....
STREET.....
CITY.....STATE.....

THE NEW EMC SIMPLICITY TEST PROBE

PRECISION MADE



The EMC "Simplicity Test Probe" for Service Men and Dealers fills a long-felt need for a fast and efficient testing device of vest-pocket size. Also, it is the lowest priced testing instrument of real value and quality on the market.

In receiving sets most defects are due to causes of standard nature, which the Simplicity Test Probe locates at a great saving of time and money. Given below are ten of the things it will do without disturbing a single set connection, and which are of great value to you.

1. Locates open or shorted by-pass and filter condensers.
2. Locates burned-out resistors and wiring.
3. Checks presence of filament or heater voltage.
4. Tests continuity of all low resistance windings.
5. Checks correctness of tuning coil polarity.
6. Tests for breaks in tuning-coil windings.
7. Checks shorts in variable tuning condensers.
8. Gives visual resonance indication in aligning condensers.
9. Tests for high voltage and low current with neon tube.
10. Makes a very handy radio or automobile trouble light.

The EMC Simplicity Test Probe is made of a polished red and black dielectric material, neatly engraved in gold, and looks very attractive and professional. It is a real quality product built for a lifetime of service. The size is 7/16 in. x 7 in. The Simplicity Test Probe is \$4.50 net to Service Men and Dealers, is guaranteed, and comes with standard lamp, eighteen inch cord, test clip and complete instructions.

Electrical Manufacturing Corporation
BOSTON, MASS.

If your distributor is unable to supply you order direct.

ELECTRICAL APPARATUS SALES CO. RR2
19 High St., Boston, Mass. Sole Agents.

I enclose herewith \$4.50 for which you are to send me, postpaid, one EMC Simplicity Test Probe complete.

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

New Sales Ideas For Sale At 8 Cents a Month!

Yes, *Radio Retailing*, published monthly, serves its many readers with dozens of practical sales plans, service kinks, window displays, collection and accounting plans and many other workable ideas at a cost of only 8 cents a month. One dollar a year.

This introductory offer is for cash with your order only. The regular price of *Radio Retailing* is \$2 a year. If you already subscribe to *Radio Retailing* send in your \$1 and have your present subscription extended at the reduced price.

FILL IN THE ORDER BLANK AND MAIL IT TODAY
Cash must accompany order for half price rate.

RADIO RETAILING R. R. 7
475 Tenth Ave., New York, N. Y.

Attached is \$1. Enter my order for *Radio Retailing* for one year .
Extend my present subscription for one year .

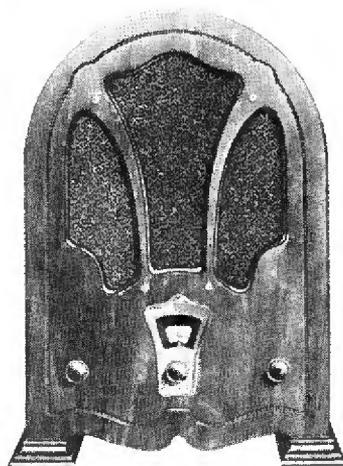
Name.....
Street.....
City.....State.....
Company.....Position.....
For Foreign Postage add \$1 extra a year.



Look
for the shield
of quality

A \$37⁵⁰ Midget*

...with the
Graybar
name!



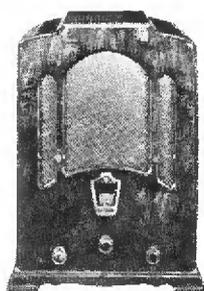
Now a midget radio at \$37.50! And dealers! This midget has the backing of the Graybar name for quality. It's called the new Graybarette . . . a little wonder for its size . . . built to suit the people who want a "good little radio." It has a circuit of the tuned radio frequency type, a new dynamic speaker, a marvel of realistic tone reproduction . . . and pleasing appearance of the all-in-one type. Arrange for your supply now!

The Graybar radio family now has six members in six different price classes, ranging from the \$37.50 Graybarette up to the recording model at \$285.00. Each model is a leader in its group and the complete Graybar line gives both dealer and customer a wide variety from which to choose.

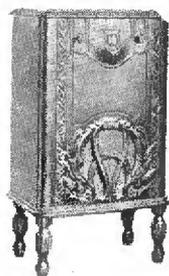
*Complete with tubes.

GraybaR

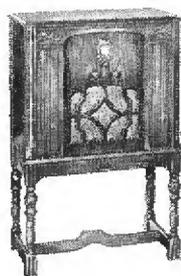
OFFICES IN 76 PRINCIPAL CITIES.
EXECUTIVE OFFICES: GRAYBAR BLDG., N. Y.



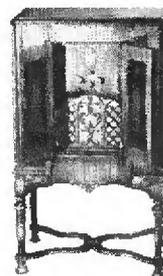
\$69.50—Super-Heterodyne Midget
(Complete with tubes)



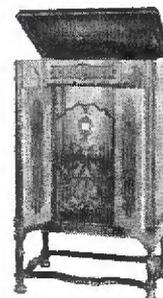
\$112.50—Tuned Radio Frequency Model
(Less tubes)



\$142.50—Super-Heterodyne Model
(Less tubes)

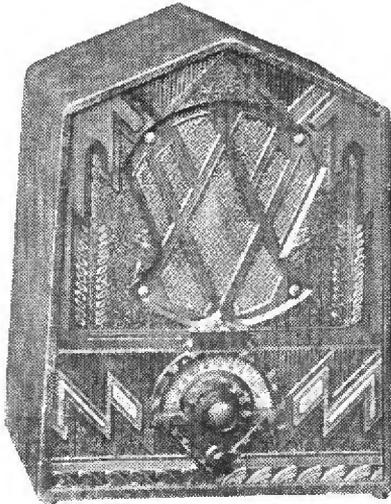


\$179.50—Tone Control Model
(Less tubes)



\$285.00—Complete Recording Model
(Less tubes)

STIMULATING SUMMER SALES



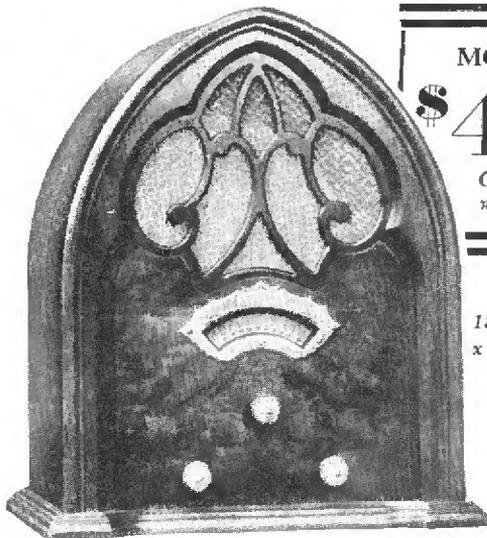
13 1/2" High
x 10" Wide

MODEL 416
\$37.50
Complete with Tubes

PENTODE—VARIABLE MU

Full Vision Dial — Spot Tuning —
Georgeous Tone—Beautiful Cabinets

Every Sales Feature to Help Sell These Sets



18" High
x 15" Wide

MODEL 610
\$49.95
Complete with Tubes

Ten years of radio receiver building has bred into Audiola, qualities that attract customers, insure sales, and bring full satisfaction to users. Audiola Radio—known for its tone—has earned a reputation that pays dividends to dealers and distributors. Audiola Radio has, since 1921, continued to win popular favor and today offers you an exceptional selling opportunity.

AUDIOLA

RADIO CO.

430 S. Green St.

CHICAGO



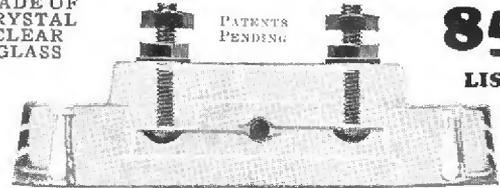
THE VISIBLE VULCAN

LIGHTNING ARRESTER

MADE OF
CRYSTAL
CLEAR
GLASS

PATENTS
PENDING

85c
LIST



POSITIVE PROTECTION

Here's the big feature of the Visible Vulcan Arrester—a "short" can be easily detected—no more blind spots in the Antenna circuit. Another feature—the Visible Vulcan not only protects the radio against lightning damage but also dissipates accumulative static charges.

Enclosed in an attractive three-color box. Packed ten to a three-color counter display carton. Order a trial carton today.

CORNISH WIRE COMPANY, INC.

28 Church St., New York City

Makers of the Famous "BRAIDITE" Hook-Up Wire



The Dayrad Direct Reading Tube Analyzer removes the mystery from radio tube checking.

It inspires customer confidence in the dealer because it tells the story in plain English.

Mail the coupon today for Bulletin, "Removing The Mystery." It points the way to replacement tube profits.

THE RADIO PRODUCTS COMPANY

5th & Norwood

Dept. R.,

Dayton, Ohio

The Radio Products Co.
Dayton, Ohio

(Coupon R)

Please mail your Bulletin, "Removing The Mystery." This entails no obligation on my part.

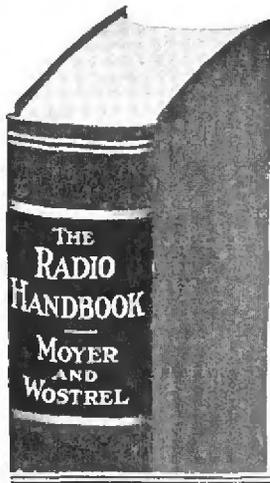
Firm Name

Attention Mr. Street

City State

WHICH SECTION of this new handbook will you use most?

It is difficult to think that any man interested in radio research, operation, installation or servicing will fail to find nearly all of the sections in Moyer and Wostrel's RADIO HANDBOOK of immediate and helpful interest. Only one consideration has guided the authors in compiling this work—to provide the latest and most useful data, grouped and indexed for quickest understanding and use. Check up for yourself to discover which of the sections will be most valuable to you. Send the coupon below for 10 days' Free Examination of:



Moyer and Wostrel's

RADIO HANDBOOK

Including Television and Sound Motion Pictures
886 pages, 5 1/2 x 8, 650 illustrations, flexible, \$5.00

HERE at last is a handbook that meets the need for a complete digest of authoritative radio data, both theoretical and practical, in one logically arranged and thoroughly indexed volume. From the fundamentals of electricity, magnetism and electron theory right down to full details on latest commercial and industrial applications, this book covers the whole field of radio, with descriptions, definitions, design data, practical methods, tables and illustrations in profusion.

Section Headings

1. Fundamental Units and Radio Glossary
2. Electricity in Radio
3. Radio Accessories and Instruments
4. Fundamentals of Radio Communication
5. Power-supply Systems and Apparatus
6. Vacuum Tubes
7. Vacuum-tube Circuits
8. Radio Receiving Sets. Broadcasting and Commercial Types
9. Transmitting Circuits
10. Broadcasting Transmitters
11. Marine Commercial Transmitters
12. Laboratory Equipment and Methods
13. Photo-electric Cells
14. Television
15. Industrial Applications of Vacuum Tubes
16. Sound Motion Pictures

Examine this book 10 days FREE
Send this coupon

MCGRAW-HILL
FREE EXAMINATION COUPON

McGraw-Hill Book Co., Inc., 370 Seventh Ave., New York, N. Y.

You may send me Moyer and Wostrel's Radio Handbook, \$5.00 postpaid, for 10 days' FREE EXAMINATION. I agree to remit for it or return it, postpaid, within 10 days of receipt.

Signed

Address

City and State

Official Position

Name of Company

(Books sent on approval to retail purchasers in the U. S. and Canada only.) R.R. 7-31



WEATHERPROOF CARRYING CASE
for all Midget Radios
Now \$2

No. 10—Midget Model Universal Cover now \$2. (\$2.50 Colorado and West) Shipped parcels post, O. D. postage paid. On open account if you have an account with us.

The Universal Midget Cover is adjustable to all table type radios. Only one strap to fasten, forming a convenient carrying handle. Made of strong, weather-proof brown drill, padded with thick layer of high grade comfort cotton—guaranteed not to separate unless actually torn.

MAISH BEDDING CO.
1501 Freeman Ave., Cincinnati, O.

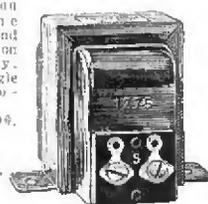
UNIVERSAL MICROPHONES 12 Types—A complete Line



"Handi-Mike"
Maximum volume. Minimum hiss. Sentiently damped. Truly natural in tone and the most rugged microphone yet devised. No delicate parts to be damaged if dropped, jarred or roughly handled. For announcing, transmitting or home recording. Our engineering department is at your service. New catalogue covers 12 models from \$5.00 up.

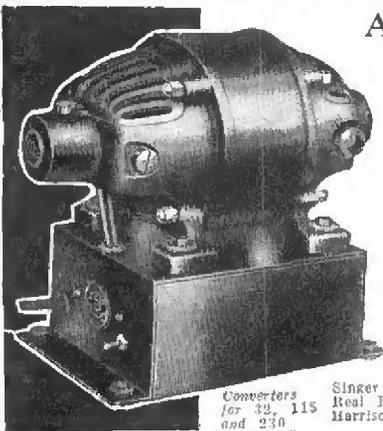
With an Outstanding **3-YEAR RECORD** FOR EVERY POSSIBLE USE Also Accessories for Every Need.

A single button microphone input transformer, 200 ohms on the primary side and 100,000 ohms on the secondary. For any single button microphone. Last price \$5.00.



Write for our complete catalog.
Universal Microphone Co., Ltd.
1163 Hyde Park Blvd.
Inglewood, Calif., U. S. A.

Only reliable Products
can be continuously
advertised



A Two-Way Profit For You

Janette Rotary Converters are priced so reasonably and operate so perfectly that many radio dealers are reaping rich rewards selling A.C. radios in D.C. districts. These converters help you sell more radios and give you a profit themselves.

Write for Bulletin 431-R
JANETTE MFG. CO.
555 West Monroe St., Chicago

Converters for 32, 115 and 230 volts D.C.
Singer Bldg., 149 Broadway, New York.
Real Estate Trust Bldg., Philadelphia.
Harrison Sales Co., 311 Ninth Ave., N., Seattle, Wash.

For ten years the McGraw-Hill radio and electrical trade publications have consistently maintained the largest paid circulation and have published the largest volume of advertising of any publication in the field. The June issue of *Radio Retailing* outstripped its nearest competitors by the greatest margin in ten years of publishing.

SEARCHLIGHT SECTION

EMPLOYMENT and BUSINESS OPPORTUNITIES—SURPLUS STOCKS—DISCONTINUED MODELS

UNDISPLAYED—RATE PER WORD:

Positions Wanted. 5 cents a word, minimum \$1.00 an insertion, payable in advance.
Positions Vacant and all other classifications, 10 cents a word, minimum charge \$2.00.
Proposals. 40 cents a line an insertion.

INFORMATION:

Box Numbers in care of any of our offices count 10 words additional in undisplayed ads.
Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

DISPLAYED—RATE PER INCH

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

POSITIONS WANTED

RADIO department manager, now employed, desires to make change. Capable taking charge sales, service and repairs. Excellent references. PW-146, Radio Retailing, Bell Telephone Bldg., St. Louis, Mo.

FREE BULLETIN

RADIO Bargain News, Vol. 2, No. 5—Summer, 1931. Just issued: 56 pages, 11x16 $\frac{1}{2}$, illustrated and with prices: cover radio sets, parts, accessories and miscellaneous items. Includes 2-page service data chart of hook-up, replacement parts and their cost on 9 standard sets. Issued by Federated Purchaser, 25 Park Place, New York.

FOR SALE

Small Active Radio Business

with a good Service following. Well located in Denver. Will take \$2,500.00 For full information write
 P. O. Box No. 2600, Denver, Colo.

SPECIAL NOTICE:

TO THE RADIO INDUSTRY

Advertising in connection with legitimate offers of surplus stocks and discontinued models of radio merchandise is acceptable in this section of "Radio Retailing."
Extreme care will be exercised by the publishers to prevent the use of advertising in the Searchlight Section to encourage price cutting on current models of merchandise or equipment. Nor will advertising which invites violation of the dealer's contract with the manufacturer be acceptable.
All merchandise offered in the Searchlight Section must be accurately and fully described and must be available on order.

Radio Dealers: Radio Service Men!

Try Grant's for Replacements, Transformers, Condensers and Resistors at regular dealers' discounts. Our stock is always complete.

We repair everything in Radio
Estimates gladly furnished

IMPORTANT

Limited supply of an up-to-the-minute catalogue just off the press. Send for one AT ONCE before quantity is depleted.

Grant Radio Laboratories
 6521 So. Halsted St., Chicago, Ill.

20,000 UY227 TUBES

First class, brand new, nationally advertised brands. Lots of 100. All defectives replaced within five (5) days after receipt. **12c. Each**

NEW JERSEY RADIO SUPPLY CO.
 58 Market St., Newark, N. J.

FEATURE STANDARD AND NATIONALLY KNOWN

VACUUM CLEANERS

REBUILT—TESTED—FULLY GUARANTEED

PREMIER BEE VAC	} \$7 ²⁵	EUREKA	} \$12 ⁵⁰	HOOVER	} \$13 ⁵⁰
ROYAL WESTERN ELEC UNIVERSAL		\$9 ⁵⁰		HAMILTON-BEACH	

Equipped with new cords, new bags and new brushes. Appearance practically like new.
 Attachments, \$3.50 per Set Hoover, \$4.50 per Set

Our cleaners are thoroughly rebuilt, carefully tested, and guaranteed to give satisfactory service.
 Sent on ten days approval.

Be convinced of these extraordinary values. Order sample now!
 20% with Order, Balance C.O.D.

Empire State Tube and Electric Co., 303 Fourth Ave., New York City

Now . . . SELL

Talkie Sound-on-Film

To Theatres, Schools, Churches, Clubs

Write for manufacturers' prices on Soundheads, Photocells, Optical Systems, Rectifiers, Amplifiers, Horns, Faders, Synchronous Motors, Projectors, Lamp-houses, Screens, Microphones, etc.

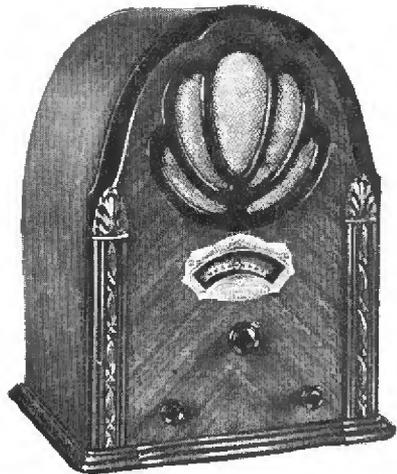
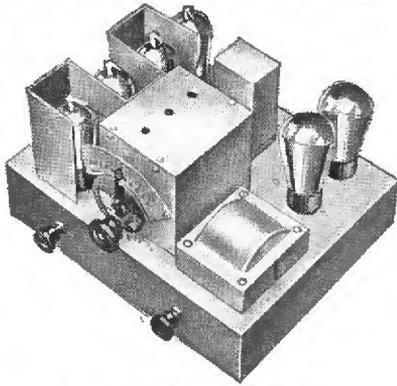
Dept. RR—S.O.S. CORP.
 1600 Broadway, New York City
 Cable Address "SOSOUND"

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"



**A RADIO CHASSIS
FOR EVERY PURPOSE**
which you can merchandise for profit

DEWALD

NEW PENTODE RADIO TRIO

LICENSED UNDER R.C.A. PATENTS

1. PENTODE SUPER-HETERODYNE.
2. PENTODE SUPER-TUNED RADIO FREQUENCY for A. C. Current.
3. PENTODE SUPER-TUNED RADIO FREQUENCY for D. C. Current.

IN CABINET OR CHASSIS FORM

Pentode Tube, Full Vision Dial, Tone Control, Four Screen Grid, Screen Grid Detection, Phonograph Pick-Up Jack, Humless Filter Circuit, High Intermediate Frequency Gain, Antenna Adjuster, Compactness. New Electro-Dynamic Speaker, which gives Smooth, Rich and Mellow Tone.

Write for Full Particulars. Some good exclusive territories still open.

PIERCE-AIRO, Inc. 510 Sixth Ave.
New York City
MANUFACTURERS OF FINE RADIO SETS FOR TEN YEARS

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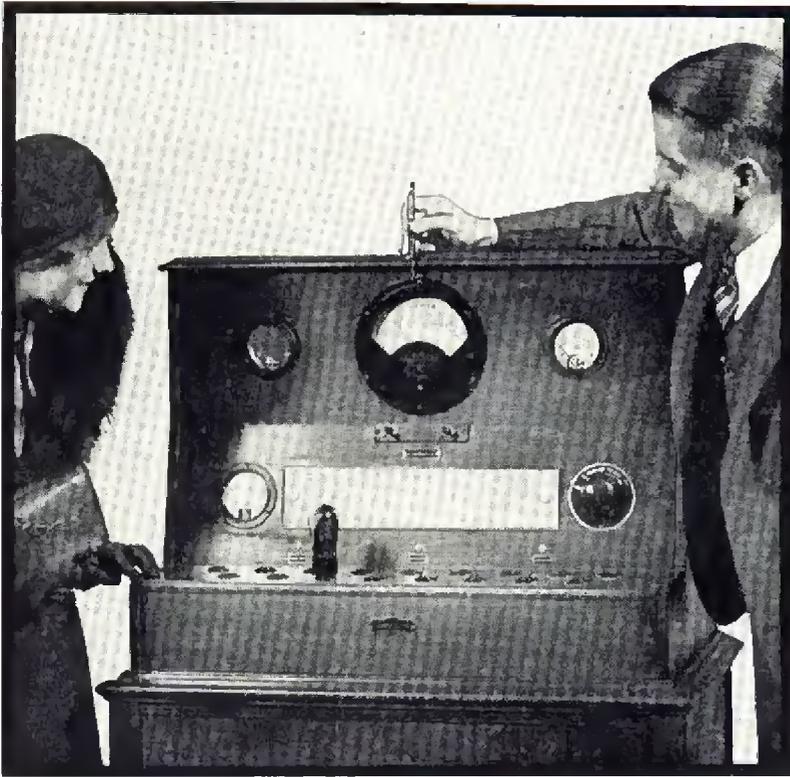
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SOLD!!!



Hundreds of dealers and distributors at the R M A Show were sold on the Ken-Rad Acrometer plan—convinced that it is the biggest sales developer that has come into the radio business.

These keen merchandising men were quick to see the unusual opportunity that this plan offered them—to greatly increase their tube business at a profit—to sell more radio sets—to reduce service costs—and to bring more people into their stores for other merchandise.

When they saw how this complete plan works, one right after another said, SOLD!!! No wonder Ken-Rad created so much comment at the Show. Full information will convince you. Mail coupon below now.

There is only one Acrometer . . . and only Ken-Rad can give you this complete and fully protected merchandising plan that has proved to be such a big success

Ken-Rad *Fine Radio Tubes*

THE KEN-RAD CORPORATION, *Incorporated*, OWENSBORO, KENTUCKY

Please send us full information on the Ken-Rad Acrometer Plan.

Name

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Are You Jeopardizing Your Reputation?



You May Be
If You Equip
Your Radio Sets
With Tubes of
Unknown Quality!

A GOOD NAME is the retailer's most valuable possession. It requires years to build—years of adherence to the highest merchandising standards, years of meticulous effort, years of patience and strict attention to business. Show us the man who would knowingly jeopardize a hard earned reputation. Yet it can be ruined in a few days by desertion of those high standards which the name has grown to represent.



Radio set buyers of today are more critical than in the days when radio was regarded as a novelty. They are thinking in terms of value—and they want full value for their money. Unknown tubes in a set require lengthy explanations and may cause undreamed of expense to you through dissatisfaction and returns. RCA Radiotrons will not only satisfy the most "finicky" customer—they will actually help sell sets!

Insist that your distributor deliver your sets with RCA Radiotrons.

RCA RADIOTRON CO., INC. — HARRISON, N. J.

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THE HEART OF YOUR RADIO