

KEEPING PACED

WITH RADIO'S SWIFT ADVANCE . . .

ARCTURUS BLUE TUBES

Throughout the radio industry Arcturus is known as a pioneer—steadily blazing the trail to new tube developments . . . always quick to offer the most advanced ideas in tubes.

Now Arcturus again demonstrates this pioneering ability by announcing two new Arcturus Tubes, that made possible marked advantages in radio set design.

Arcturus Type PZ Pentode

High mutual conductance, and exceptional sensitivity are features of this new Arcturus Tube. Because it is approximately 4 times as sensitive as a '45 power output tube it makes possible greater volume, minimizes distortion, and makes smoother reception a certainty.

Arcturus Type 551 Variable-Mu Tube

By using new principles, this Arcturus Tube eliminates the need for double pre-selectors, dual volume controls, and "local-long distance" switches. Even with signal input voltages increased 25 times, operation is free from distortion. Receiver hiss is reduced; maximum cross-talk is divided by 500. Circuits using this new tube are simpler, as well as more efficient. Arcturus' well-known quick action is an additional feature.

Leading radio set manufacturers are now designing sets using these new Arcturus Tubes. You will be selling these improved receivers soon. Many of them will come to you equipped with Arcturus *Blue Tubes* . . . the tubes that insure satisfactory service because of their dependability and *Life-Like Tone*.

ARCTURUS RADIO TUBE CO., Newark, N. J.

"THE TUBE WITH THE



LIFE-LIKE TONE"



ARCTURUS

The Talking Machine
RADIO JOURNAL

mentioned in your reply gives you a quicker answer.

Stromberg-Carlson

CERTIFICATE
OF AUTHORIZED STROMBERG-CARLSON DEALER

This is to Certify that
The Aeolian Company
Aeolian Hall, New York City, N.Y.

IS AN AUTHORIZED DEALER IN STROMBERG-CARLSON RADIO APPARATUS

ALL STROMBERG-CARLSON RADIO APPARATUS PURCHASED FROM THE DEALER TO WHOM THIS CERTIFICATE HAS BEEN ISSUED AND WHILE THE SAME CONTINUES IN FORCE IS GUARANTEED BY THE MANUFACTURER AS TO INHERENT DEFECTS IN EITHER MATERIALS OR WORKMANSHIP. THE MANUFACTURER AGREES TO REPLACE ANY OR ALL PARTS SHOWING SAID DEFECTS WITHIN ONE YEAR FROM DATE OF SHIPMENT FROM HIS FACTORY. THIS GUARANTEE DOES NOT COVER THE RETURN OF SAME TO ITS FACTORY. THE BURNING OUT OF TUBES, FOREIGN CURRENTS OR WEARING OUT OF CORDS, THE BURNING OUT OF PARTS BY LIGHTNING, THE DETERIORATION OF BATTERIES OR ANY INJURY TO PARTS BY LIGHTNING, FOREIGN CURRENTS OR FROM ANY CAUSE NOT DUE TO INHERENT DEFECTS.

THIS CERTIFICATE REMAINS THE PROPERTY OF THE STROMBERG-CARLSON TELEPHONE MANUFACTURING COMPANY AND IS ISSUED IN ACCORDANCE WITH THE EXECUTED FRANCHISE AGREEMENT

W. D. Deville
VICE-PRESIDENT

THIS CERTIFICATE IS NOT TRANSFERABLE

"There is nothing finer than a Stromberg-Carlson"

The list of outstandingly good merchants who are Stromberg-Carlson dealers, includes:—

- | | | | |
|--------------------|------------------------|---------------------------|---------------------|
| The Aeolian Co. | Heaton's Music Store | Knight-Campbell Music Co. | J. W. Greene Co. |
| Grinnell Bros. | G. A. Barlow's Son Co. | Edw. J. Walt Music Co. | Levis Music Co. |
| Sherman Clay & Co. | W. J. Dyer & Bro. | Edmund Gram | H. C. Prange Co. |
| Robelen Piano Co. | C. C. Harvey Co. | Homer L. Kitt Co. | Otto Grau Piano Co. |

Watch for other outstandingly good merchants in subsequent issues.

To secure the best service to your reply, be sure to mention

The Talking Machine & RADIO JOURNAL

RCA VICTOR announces the SUPERETTE



The SUPERETTE

An 8-tube Super-Heterodyne employing two new Radiotron Super-Control Amplifier tubes, with tone color control, push-pull amplification, cabinet in Butt Walnut or Georgian Brown finish. \$57.50 list, less Radiotrons.



Trade Mark Reg. U. S. Pat. Off.

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

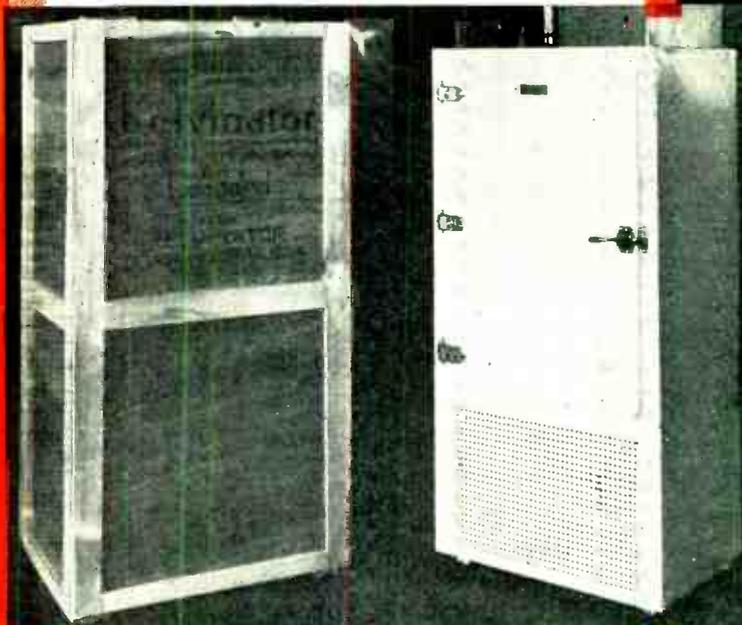
An 8-tube Super-Heterodyne in a small-size cabinet...including tone color control. \$57⁵⁰
less Radiotrons

AT last! A small set that's really a RADIO! A walloping big, 8-tube Super-Heterodyne condensed into a trim, convenient cabinet! All the marvelous performance of a big set.

The new RCA Victor Superette is not merely a Screen-Grid Radio . . . it's *more* . . . it's a Super-Heterodyne . . . the principle to which the entire industry is swinging . . . and it employs the new Super-Control Radiotron tube . . . the last word in *radio*.

Only the world's greatest group of radio engineers could have designed this set . . . only the world's largest radio factory could have produced it at \$57.50, less Radiotrons, including *tone color control!* Wise dealers are displaying it, and **SELLING** it. They also find it a great leader for attracting buyers of larger sets. Ask your distributor about it **TODAY**.

Refrigerators, like Radios look their best when shipped in Atlas Cases

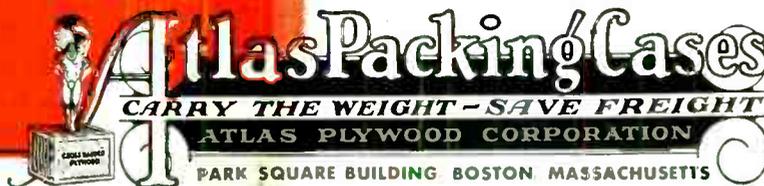


Refrigerators shipped in Atlas Plywood Packing Cases are easy to sell. They retain all the out-of-the-factory newness, all the eye-appeal of the careful finishing that they have when shipped from your factory.

Completely protected from transportation hazards, they are delivered to your dealers in their original condition. No time is lost in repairing damage received in transit. No expense is added for refinishing. They are ready for immediate display.

Lighter by far than ordinary packing boxes, ATLAS Plywood Cases offer a decided saving in freight charges. Labor costs, too, are reduced. An ATLAS Case can be assembled in half the time it takes to build a wooden box.

ATLAS engineers can show you how ATLAS Cases give your refrigerators complete protection at a worth while saving to you. Write.



New York Office: 33 W 42nd St Chicago Office: 649 McCormick Bldg.

Factories: Richford, Vt.; Montgomery Center, Vt.; Morrisville, Vt.; Greenville, Me.; Stockholm, Me.; Goldsboro, N. C.; Waterloo, Quebec
Branch factories in twelve cities.

4686

To secure the best service to your reply, be sure to mention

The Talking Machine
RADIO JOURNAL

ACHIEVED! BY GENERAL ELECTRIC

Brilliant Performance in *small* sets



The new Junior Console—38½" high, 21¼" wide, 11¼" deep. Harmonizes with small homes and apartments. Rich walnut cabinet. Takes little floor space, little wall space.

LIST PRICE, LESS RADIOTRONS **\$82⁵⁰**



The new Junior—21¼" high, 13¼" wide, 10¼" deep. Compact. And *portable!* For mantelpiece, bookcase, corner table, etc. So light a boy can carry it. Easy to take along for vacations. Antique bronze handle for carrying. Rich walnut cabinet, with butt walnut panel. Authentic 18th century mantel clock design.

LIST PRICE, LESS RADIOTRONS **\$62⁵⁰**



The Junior, with Clock—Similar to regular model Junior, with General Electric clock included.

LIST PRICE, LESS RADIO-TRONS **\$72⁵⁰**

INTRODUCING the new Junior, and Junior Console. Small sets, but distinctively *new*. In brilliance of tone—in beauty. So good that, in a masked test, they were unanimous choices over competing small sets.

8 tube, screen-grid superheterodyne. *Fully shielded* chassis. *Full size* 8" dynamic speakers. Using the new 235 Radiotrons that cut down cross talk, and improve tone at low volume.

Tone control that permits greater range in tone

quality than any control heretofore. Phonograph connection.

Sensitivity? Selectivity? Even better than you'd expect from such well-designed superheterodynes. Do this—compare with *any* small set. And we'll leave it to you!

Order from your G-E merchandise distributor now. Have stock on hand for May magazine and newspaper advertising announcing new sets to public.

GENERAL  ELECTRIC

FULL RANGE RADIO

Merchandise Department General Electric Company, Bridgeport, Connecticut

Ken·Rad

Fine Radio Tubes



What Kind of Economy is This?

MILLIONS of dollars are spent each year by set manufacturers for engineering and development work alone—to give you dealers and distributors better radio performance to sell.

But the finest instrument possible to build can be no better than the tubes that are used. Fine tubes can make a cheap set do more than the finest set with cheap tubes.

Why, then, should you or any set manufacturer supply any but the finest tubes available? . . . This certainly is

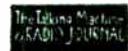
the last place that anyone should attempt to economize—because cheap tubes always prove to be false economy.

You can get cheaper tubes than Ken-Rads—but you can't get finer tubes. You practice sensible economy when you supply Ken-Rad Fine Radio Tubes as equipment in every set you sell. And you make more money, because the better performance of Ken-Rads will get and hold more customers for you . . . May we have the opportunity of presenting definite proof? Just write us!

THE KEN-RAD CORPORATION, *Incorporated*, OWENSBORO, KY.

Licensed Radio Tubes and Incandescent Lamps

To secure the best service to your reply, be sure to mention



It's Easy To Identify 1931 Tubes

Look for Robust Rectifiers

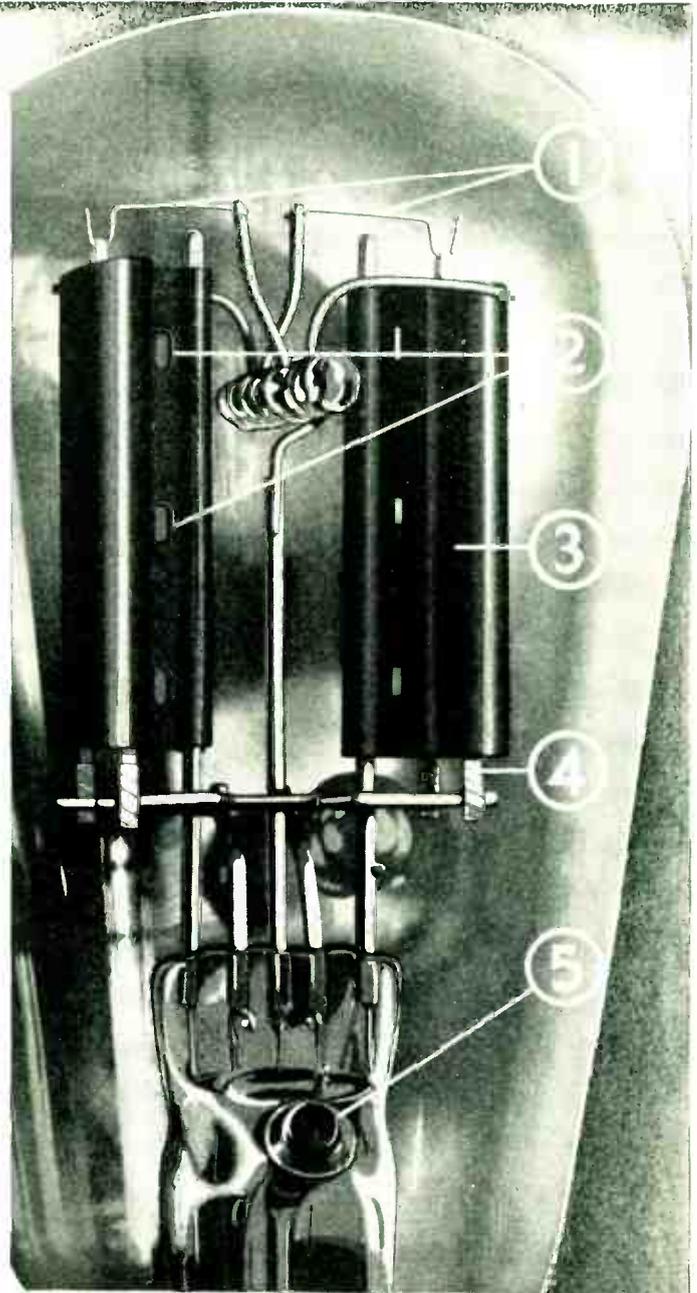
Ample and uniform current supply for every tube in the A. C. radio set—that is the function of the rectifier tube. De Forest engineers have insured that function with these latest refinements:

1. Special alloy hooks maintaining uniform tension on filaments.
2. Ingenious clamping to insure accurate plate dimensions for equalized full-wave rectification.
3. Carbonized plates insuring maximum heat dissipation at higher outputs demanded by latest sets.
4. Tabbed filament to insure low-resistance welds and prevent weakened filament due to spot welding.
5. Exhaust port positioned well below press to avoid leakage.

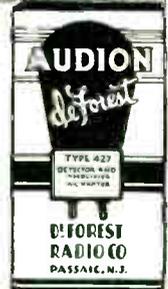
These and many other advanced features found in every type of fresh De Forest Audion, insure the 1931 performance of any radio set.

This is the fourth of a series of debunking messages dealing with 1931 radio tube features. The entire story can be sent to you immediately, if you so desire.

DE FOREST RADIO CO., PASSAIC, N. J.



de Forest
AUDIONS
RADIO TUBES



After all, there's no substitute for 25 years' experience



CROSLEY Offers Two Sensational *NEW* Radio Developments



The Crosley WIGIT

Only 12½" high, 11½" wide, 9¾" deep

THE sensational CROSLEY WIGIT (shown at the left) is a small-size, low-priced super-performing radio receiver readily adaptable as a personal radio set for every member of the family, and capable of bringing in distant stations in a sensational way.

This little radio marvel incorporates THREE Screen Grid tubes, Neutrodyne circuit, electro power speaker, Mershon condenser power pack, single tuning control, volume control and three gang tuning condenser. The exquisitely designed one-piece cabinet is of genuine Crosley Repwood "B".

Your CROSLEY distributor will demonstrate — see and hear for yourself the amazing value and performance offered at the unheard-of low price

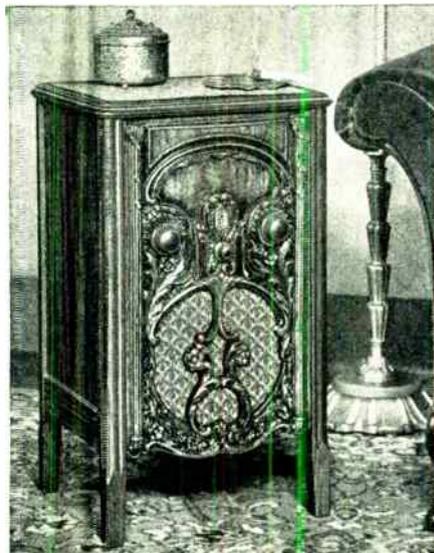
\$39⁷⁵
COMPLETE WITH TUBES

NOW Crosley introduces The JOHNNY SMOKER — the smoking stand radio. (Shown at the right). This set fills a need that cannot be met by any other radio set. It provides excellent radio reproduction and at the same time serves as a smoking stand, a place to put cigarettes, pipe, tobacco jar, and is a valuable accessory around the home. Next to an easy chair or a couch or out in the middle of the room, this little radio gem is a beautiful, refined, nicely finished piece. The front panel is of Crosley REPWOOD. The sides, top and back are of genuine walnut veneer.

The CROSLEY JOHNNY SMOKER is equipped with The WIGIT chassis, described above, and delivers the same sensational performance as The WIGIT.

Get in touch with your CROSLEY distributor to learn more about this little gem which sparkles with promise of a big future. It is priced right and will sell fast at the startlingly low price of . . .

\$47⁵⁰
COMPLETE WITH TUBES



The Crosley JOHNNY SMOKER

Only 22" high, 12¾" wide, 10¾" deep

CROSLEY SENIOR SUPERHETERODYNE (Pliodynatron) Series

The Crosley SUPER-ADMINISTRATOR



The New CROSLEY SUPER-ADMINISTRATOR is a truly modern radio receiver worthy to grace the finest homes. It introduces a new development in super-heterodyne engineering — the PLIODYNATRON — a special oscillator tube used in the circuit to reduce harmful harmonics and radiation. Sold at the low price of

\$109.50
Complete with tubes

The Crosley SUPER-RONDEAU



The New CROSLEY SUPER-RONDEAU is sure to attract those looking for what is finest and most modern in radio receiving sets. The sides and top of this exquisitely magnificent cabinet are of genuine 5-ply walnut veneer. The set and speaker are the same CROSLEY SENIOR SUPERHETERODYNE (Pliodynatron) chassis and newest CROSLEY full floating moving coil dynamic speaker as used in The CROSLEY SUPER-ADMINISTRATOR. Priced startlingly low at

\$119.50
Complete with tubes

The Crosley SUPER-SONDO



A magnificent, super-performing electric phonograph and radio set. Top and doors are of genuine 5-ply walnut veneer. It contains the same highly refined CROSLEY SENIOR SUPERHETERODYNE (Pliodynatron) radio receiving set and newest CROSLEY full floating moving coil dynamic speaker as used in the CROSLEY SUPER-ADMINISTRATOR. It sells at the low price of

\$189.50
Complete with tubes

THE CROSLEY RADIO CORPORATION

POWER CROSLEY, Jr., President

Home of "the Nation's Station" — WLW

CINCINNATI

Also manufacturers of the CROSLEY Battery Radio Receivers and the CROSLEY ROAMIO Automobile Radio Receiving Set.



To secure the best service to your reply, be sure to mention



This strong trend toward **COMBINATIONS**

Is one more good reason for pushing **COLUMBIA RECORDS!**

More and more people are realizing there's no substitute for getting just the musical selection you want right when you want it. That's why combination radio-phonographs are now bigger-selling favorites than ever before. Indicating that a healthy boom in record sales is under way.

Columbia Records are the most profitable disc line you can back. Recordings that catch the heart and

purse of every possible customer. Classics, latest dance hits, popular ballads, race and foreign favorites—all performed by the finest *exclusive* recording artists obtainable, and on Columbia's perfect, silent-surface discs.

Here are some examples of recent Columbia successes—sellers every one! Stock them now and see!

DANCE

Record No. 2408-D, 10-inch, 75c.

- { At Last I'm Happy (Incidental Singing by Ted Lewis)
- { Truly I Love You—Fox Trots—Ted Lewis and His Band

Record No. 2297-D, 10-inch, 75c.

- { Body and Soul (from "Three's a Crowd")
- { Something to Remember You By (from "Three's a Crowd")—Fox Trots—Paul Whiteman and His Orchestra

Record No. 2401-D, 10-inch, 75c.

- { By the River Sainte Marie
- { Running Between the Rain-Drops—Fox Trots—Guy Lombardo and His Royal Canadians

Record No. 2400-D, 10-inch, 75c.

- { Love for Sale (from "The New Yorkers")
- { 99 Out of a Hundred Wanna Be Loved—Fox Trots—Ben Selvin and His Orchestra

Record No. 2406-D, 10-inch, 75c.

- { We Can Live on Love
- { I Hate Myself (For Falling in Love with You)—Fox Trots—Smith Ballew and His Orchestra

Record No. 2403-D, 10-inch, 75c.

- { I Surrender, Dear
- { Sing Song Girl (Little Yella Cinderella)—Fox Trots—Mickie Alpert and His Orchestra

VOCAL

Record No. 2398-D, 10-inch, 75c.

- { Love Is Like That (What Can You Do?)
- { You're The One I Care For—Ruth Etting

Record No. 2388-D, 10-inch, 75c.

- { Blue Again
- { I'm One of God's Children (Who Hasn't Got Wings) (from "Ballyhoo")—Lee Morse and Her Blue Grass Boys

Record No. 2374-D, 10-inch, 75c.

- { Shine On, Harvest Moon (With the Rondoliers)
- { If You're Happy, I'll Be Glad—Art Gillham (The Whispering Pianist)

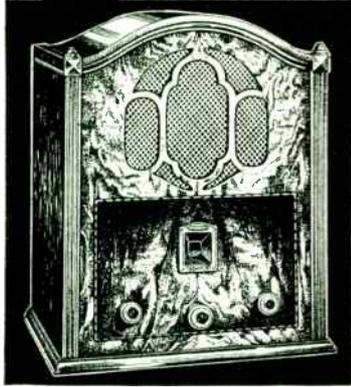
Record No. 2419-D, 10-inch, 75c.

- { Jesus Christ Is Risen To-Day—Cathedral Male Choir
- { The Strife Is O'er

Columbia Phonograph Co., Inc., New York City. In Canada, Columbia Phonograph Co., Ltd., Toronto

Sweeping! America!

and sweeping DOLLARS
into DEALERS' POCKETS



● 8-TUBE SUPERHETERODYNE mantel model. Matched walnut panel with imported marquetry inlay. Sold complete with Majestic tubes, \$69.50; less tubes, **\$47.80**



● NEW 8-TUBE MAJESTIC SUPERHETERODYNE chassis in a beautiful Tudor lowboy. Panels of matched butt walnut. Sold complete only with Majestic tubes, \$119.50; **\$97.80** less tubes



● 9-TUBE SUPERHETERODYNE in Hepplewhite highboy of beautiful matched walnut, with genuine marquetry inlay. Sold complete only with nine Majestic tubes, **\$123.40** \$149.50; price less tubes,

ALL PRICES SLIGHTLY HIGHER WEST OF THE ROCKIES

SIX AMAZING, ENTIRELY NEW SUPERHETERODYNES USING MAJESTIC'S SENSATIONAL NEW



NEVER HAVE DEALERS seen such a swing to a new set.

Orders are flooding in. The slump is over for Majestic dealers right now, and dollars are rolling in.

Imagine demonstrating in daylight on stations 1000 miles away—and getting "the coast" in the evening during store hours! They are doing it right now with an 8-tube superheterodyne that sells for only \$47.80 less tubes!

Automatic volume control, automatic station and tuning indi-

cator, noiseless tuner, static modifier, and an amazing new

circuit that tunes razor-sharp! Tone free at last from hiss, hum and tube distortion! Distance that amazes every listener! It's the greatest set ever built—and the fastest selling line in America right now.

Put your undivided effort behind a live one. The Majestic franchise is "money in the bank" today. Phone or wire your distributor now. Grigsby-Grunow Co., Chicago, Illinois.

Majestic

RADIO

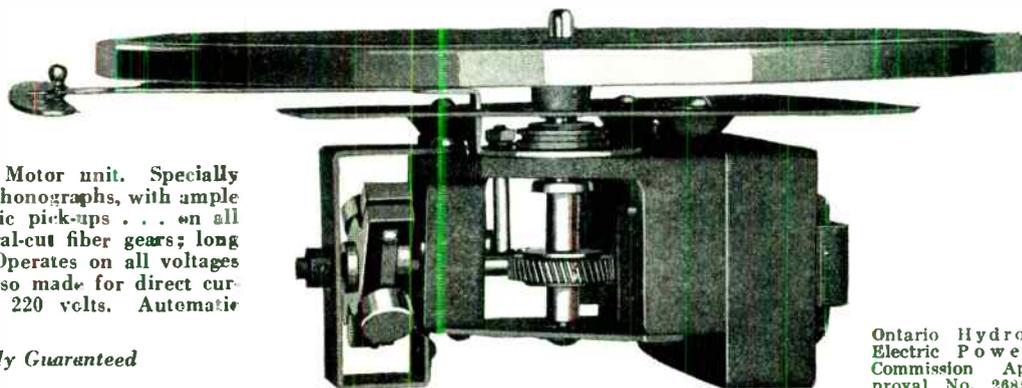
Licensed under patents and applications of R. C. A., Hazeltine, R. F. L., La Tour, also by Lowell & Dunmore

FLYER ELECTRICS

do a job to perfection

The Green Flyer Motor unit. Specially designed for Radio-Phonographs, with ample power for all electric pick-ups . . . on all records. Silent spiral-cut fiber gears; long oversize bearings. Operates on all voltages and frequencies. Also made for direct current, either 110 or 220 volts. Automatic stop optional.

Responsibly Guaranteed



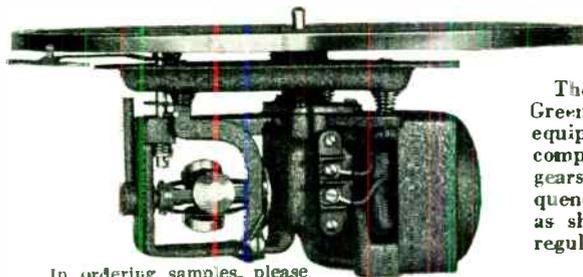
Ontario Hydro-
Electric Power
Commission Ap-
proval No. 2685.

LEADING engineers called the first Flyer Electric a good job. That was over two years ago. Ever since then the Flyers have consistently won the same enthusiasm and respect from everybody. The popular motors for radio-phonographs. Doing a job to perfection.

Their advantages in simplicity of design and balanced co-ordination are as distinct today as ever. Wherever installed the Blue Flyer or the smaller Green Flyer proves it. Thanks not only to superior design. Thanks

fully as much to 15 years of Flyer Motor experience in supplying power in over 5,000,000 quality phonographs. Thanks fully as much to a quarter century of similar success in electrical manufacturing by the same organization and plant.

Self-starting, amply powerful, supplying uniform speed to perfection, and uninterrupted service. For all voltages and frequencies. Also the Green Flyer for direct current, either 110 or 220 volts.



In ordering samples, please give voltage and frequency.

The Blue Flyer Motor unit. Like the smaller and lower-priced Green Flyer, self-starting induction type, with automatic stop equipment optional. Similar design . . . open construction with complete ventilation—no heat or hum. Silent spiral-cut fiber gears, long oversize bearings. Operates on all voltages and frequencies. Both the Blue Flyer and the Green Flyer are furnished as shown, complete with mounting plate, turn-table and speed regulator.

Responsibly Guaranteed

The GENERAL INDUSTRIES CO.

3111 Taylor Street, Elyria, Ohio



To secure the best service to your reply, be sure to mention





THE NEW Echophone RADIO

AN EIGHT TUBE
SUPER-HETERODYNE

That is

Sensationally New

Delightfully Different

Emphatically Better

\$69⁵⁰

**Complete with
Guaranteed Tubes**

ECHOPHONE, long recognized in the radio industry as an instrument of the finest proven quality in every detail, now challenges the world for superlative performance superiority under all conditions.

Echophone is unique in the compact arrangement of unit construction. Amazingly sensitive, it penetrates to extreme distances. Highly developed selectivity permits you to **USE** its great power without restraint or fear of interference by close-in stations.

ECHOPHONE RADIO MFG. CO., LTD.

FACTORY: 104 LAKEVIEW AVE. WAUKEGAN, ILL.

PACIFIC COAST WAREHOUSE, 968 NORTH FORMOSA AVE., HOLLYWOOD, CAL.

Champion

FIRST AND BEST CHAMPION POWER PENTODE

The greatest contribution to the advancement of radio reception assures a successful 1931 market.

The new Champion Power Pentode is **CHAMPION CREATED—CHAMPION DESIGNED**. A product of Champion Radio Works of DanVers, Mass.

ON JANUARY 15, 1930, Messrs MacLeod and Briggs, of Champion's Engineering staff, demonstrated before a distinguished gathering at Columbia University, the principles of a radically different radio tube—the POWER PENTODE. In the March 1930 issue of the "Proceedings of the Radio Club of America, Volume 7, No. 3, the following paragraph is noted: "Those who heard the demonstration of the Pentode Tube, which followed the presentation of the paper (demonstration of a Pentode by A. D. MacLeod and R. S. Briggs of the Champion Radio Works, Inc.) will recall that, etc., etc."



Then came months of study and experimenting . . . of laboratory tests . . . of intensive effort, day and night by the entire engineering staff of Champion to PROVE it's finding. Champion's new tube must meet the most rigid specifications of set manufacturers . . . it must be SUPERIOR in every way—greater in tone brilliance . . . more faithfully reproducing the high notes . . . duplicating every tonal inflection of the artist as though he stood before you!

Now the Power Pentode Tube is ready! Ready for your most critical audition. Ready to demonstrate a depth of power, tonal beauty and brilliancy never before available in radio! Hear it. Decide for yourself! You'll admit—once more—Champion is FIRST.

CHAMPION RADIO WORKS, Inc.
DANVERS, MASS.

To secure the best service to your reply, be sure to mention



HOTTEST *radio line of all time!*

All Pentode, Super-Heterodynes . . . Power and performance of nine and eleven-tube sets . . . Automatic Volume Control . . . New Variable - Mu Tubes . . . Full - Vision Dial . . . Static Reducer . . . New High-Gain Super Power Tube . . . De Luxe Cabinets . . . NEW LOW PRICES AND Clarion's exclusive feature — 98% PURE TONE!

Clarion Radio—choice of the stars of the stage, screen, and air . . . Rosa Raisa, Coe Glade, Coon Sanders, Barre-Hill, Ben Bernie, George White, Phil Spitalny, Art Kassel, David Belasco, Fanny Brice.

TRANSFORMER CORPORATION OF AMERICA

Ogden and Keeler Avenues, Chicago, Ill.

Clarion

Get the low-down on Radio's hottest line — the 1931 Clarion line. Write today — now—this minute—for the new big broad-side that describes in detail the new Clarion line, selling helps, advertising — the whole startling new Clarion story!

**ATWATER
KENT
RADIO**

**A
NNOUNCING**

THE NEW GOLDEN VOICED

COMPACT

with the **PENTODE TUBE**

[SUPER-HETERODYNE]

ATWATER KENT RADIO

WITH THE PENTODE TUBE (SUPER-HETERODYNE)

Atwater Kent adds another **FIRST**
to this impressive record:

FIRST with Compact radio (1925)

FIRST with Metal Chassis (1925)

FIRST with complete One-dial control (1926)

FIRST with All-electric at popular price (1928)

FIRST with perfected Screen-grid (1929)

FIRST with evenly spaced Quick-Vision Dial (1930)

And **NOW FIRST** with perfected use
of the new **PENTODE TUBE** in
a Compact Super-heterodyne

THE NEW PENTODE TUBE is a five-element power amplifier. Used as audio output in the new circuit developed by Atwater Kent for the Golden Voiced Compact, it handles as much power as two 245's plus the amplification of one 227—all three of which it replaces.

Atwater Kent now uses the wonderful PENTODE TUBE to improve audio frequency amplification just as Atwater Kent screen-grid power improved radio frequency amplification.

In short, by means of the new special

circuit designed for the PENTODE TUBE, Atwater Kent engineering has found the way of making a *small* radio of *big* performance at every point.

This is all accomplished without sacrifice of Atwater Kent standards of tone quality, super-heterodyne selectivity, sensitivity or reliability.

From top to bottom, the Golden Voiced Compact is a typical Atwater Kent quality radio. No radio has ever been made of better materials or with finer workmanship. The Golden Voiced Compact will sell easily—and *stay sold!*

SMALL ONLY IN
SIZE AND PRICE

BIG IN
PERFORMANCE,
WORKMANSHIP,
DEPENDABILITY,
VALUE

THE NEW GOLDEN

ATWATER KENT RADIO

WITH THE
PENTODE TUBE
(SUPER-HETERODYNE)

\$**69**⁵⁰

**COMPLETE
WITH TUBES**

*Prices slightly higher
west of the Rockies
and in Canada*

1932 Model

MODEL 84. Golden Voiced Compact, with the Pentode Tube. Cabinet design, Cathedral Gothic. Front, matched butt walnut; sides, selected striped walnut. Dimensions: 19 x 15 $\frac{5}{8}$ x 9 $\frac{5}{8}$. Quick-Vision Dial. New Electro-dynamic speaker. Antenna adjuster, securing full efficiency on antenna of any length. Armored chassis fully shielded to prevent radiation. Perfected super-heterodyne circuit, getting maximum selectivity, with rich, full tone.



VOICED COMPACT

ATWATER KENT RADIO

FROM THE
PIONEER
OF
UNOBTRUSIVE
RADIO



SIX YEARS AGO *Atwater Kent* brought out the first multiple-tube compact receiver.

Every radio merchant who was in business at that time remembers the "Model 20 Compact." It was no larger than a row of books on a living-room table.

The sensational success of that little model changed the whole design of radio.

Receiver and speaker were separate in those days. Now they are one. To make them work properly in a very small case requires special skill in design and manufacture.

The Atwater Kent Manufacturing Company is fortunate in having this skill at its command—and in having the many years' experience in precision workmanship required for the manufacture of such a radio.

Look inside the new Atwater Kent Golden Voiced Compact. Never before, in any radio of less than "standard size," have you seen such sturdy construction.

It's the radio you will be proud to sell and any customer will be glad to own!

The new sales value of the new Golden Voiced Compact with the new PENTODE tube, with the Super-heterodyne circuit, plus *Atwater Kent* public acceptance, plus the extremely low price, coupled with your own able selling efforts, will result in the turnover that means good net profits.

ATWATER KENT MANUFACTURING COMPANY

A. Atwater Kent, President

4700 WISSAHICKON AVENUE

PHILADELPHIA, PA.

First with perfected use of the

PENTODE TUBE

if this carload of refrigerators, for example, isn't taken off this wholesaler's hands by the manufacturer, what do you suppose will happen?

REFRIGERATOR MANUFACTURING in itself is a most skillful job. It takes a large amount of practice to know how to make a refrigerator. The writer has recently been through several refrigerator factories, and one in particular—the Kelvinator—isn't a factory at all. The plant is simply a huge testing laboratory; the parts production end is a small portion of the plant, but what a bunch of testing goes on. Continuous testing of this and of that, almost every 15 seconds of progress and for different lengths of time. Countless numbers of refrigerator parts lying around being "tested" eating up rent and interest just because this plant has safety standards and a determination towards perfection that require an elaborate and enormous formula of testing. They have the odd idea at the Kelvinator plant that the refrigerator must be right before it goes out—how strange this sounds to the average radio manufacturer—and the wholesaler who sells the refrigerator and the dealer who sells it, must be confident that it is right.

IN SPITE OF TREMENDOUS PRECAUTIONS to have things right, all refrigerators must be serviced. So, radio dealers who think that the word "refrigerator" is a magic path to easy and large profits will be disillusioned with the first ten sales. It wouldn't be amiss to remark here, and we don't think any refrigerator manufacturer would object to the statement, that if the same plans required in the sale of refrigerators were used on radio, the present live radio dealer would be able to do twice the volume of radio business, making three times the profit. Radio men have become so accustomed to thinking dully and are so close to radio that all they see in it is the

squawks, but let them get close to a few refrigerator men and they will find that the refrigerator business has its wailings.

THIS BRIEF SIDE LIGHT ON REFRIGERATORS and radio is for a dual purpose—that of raising enthusiasm for radio selling, and reducing to a sane basis the over-optimism of refrigerator possibilities. A dealer who can restore his sanity, according to the just mentioned formula, and who will throw out all salesmen's desks in his office, will exercise a degree of intelligence that is bound to give him a sensible and profitable business for 1931, whether he handles only radio, only refrigerators, or both products.

PORTLAND, OREGON, ANNOUNCES that it intends to enforce an ordinance passed in 1923, prohibiting the sale of any radio set not approved by the National Board of Fire Underwriters. The JOURNAL had an idea that all sets built are fireproof, but not fire-sale proof. Portland would do a much better job prohibiting fire-sales of radio.

IN THE DECEMBER JOURNAL, 80,000,000 tubes was the prediction for 1931 sales. Barron's, the financial journal, February 16th issue, says: "It is estimated the tube business for all companies for 1931, could total 77,000,000 tubes, including new sets and renewals, or an aggregate of \$200,000,000." Any Journal subscriber finding fault with the 80,000,000 estimate two months in advance of the country's greatest financial newspaper organization, can have his money back, if he is able to get it.

RADIO DEALERS SHOULD WATCH their step in buying unknown radio sets direct from manufacturer to

store. The gag is, that the dealer signs a number of trade acceptances at the time of placing the order, which are sold to a third party and the dealer has to come through with the dough, regardless of the merchandise. This is an old gag, worked for years in the piano business, then in the phonograph business, and is now coming to life again in radio. At one time The JOURNAL campaigned for months against this, securing sworn statements from a number of dealers that were gypped, and exposing this racket, month after month, saving dealers many thousands of dollars. Now that it has come to life again in radio, we warn you to sign no notes, no orders containing notes, and no orders containing trade acceptances, with the goods to be shipped later. See your merchandise first and see that what you are buying is worth what you are paying.

MANUFACTURERS WHO ARE IN a quandary as to what style of midget to produce, square or Gothic design, can stage a contest in the sales department for advance orders. During the past year Gothic type models sold 95 to 5 against square models. We think at least one model should have an electric clock in it, at \$10 more. Any sales contest for advance orders will prove the wisdom of having a Gothic type midget in the line, or to include the clock.

FURTHERMORE, A GOOD SIZED console cabinet with a midget chassis, to retail at \$99.50 is the new "style wave" in type of set for both dealer and consumer. The foregoing suggestions are in addition to the automatic combination instrument at a reasonable price. Several popular-priced odd pieces of furniture for housing chassis and an excellent cabinet model to retail at approximately \$150 should also be in the line. And don't forget the popular-priced automatic record playing combination of phonograph and

radio. The foregoing is The JOURNAL'S idea for the balance of this year, covering the coming "radio style season."

THAT THERE HAS BEEN A BIG shrinkage in dealers' assets is admitted by all in the business. We hope it isn't as great throughout the country as this example shows, which is cited to show the unusual conditions under which jobbers and dealers are now doing radio business. The following statement of assets and liabilities is a true case found in the Middle-West, of a dealer who did \$60,000 worth of retail radio business in 1930, and who, when trying to get another line, submitted this statement of assets and liabilities for the purpose of getting credit.

<i>Assets</i>		<i>Liabilities</i>	
Cash	\$ 500.00	Bills Payable ..	\$5,300.00
Accounts Receivable	646.00	Accounts Payable	2,000.00
Store Equipment & Fixtures ...	2,600.00		
Stock	2,000.00		
Reserve	1,700.00	NET WORTH..	146.00
	\$7,446.00		\$7,446.00

WHILE THE FOREGOING STATEMENT shows a net worth of \$146, it practically means that the dealer is insolvent, and to be in such shape after doing a \$60,000 retail business the previous year, indicates a number of things are not right with the handling of that dealer's business. A normal profit of 12% net should have been possible, and maybe the result is all we know, because we don't know what salary he withdrew. Wholesalers to whom we talked about this, said he was a good seller of radio and enjoyed a good reputation, and they could give no reason why his net worth was \$146 after doing a \$60,000 retail volume. We have seen reports of other dealers doing much less volume, showing much better financial conditions and the warning of this is that Volunitis is a baffling disease to cure.



Our credit loss is under .002

Because we refuse credit to 25% of the applicants

Says C. C. Jones

Radio Manager, Mace-Ryer Co.



IN a net radio business of \$350,000 done in 1929 the radio department of the Mace-Ryer Company, at 1120 Grand Avenue, Kansas City, Mo., experienced during 1930 a credit loss of less than two-tenths of one per cent. Yet the company sells on an average time payment of one year, and the bulk of its radio business is on the time payment plan. As most of the credits extend one year, merchandise sold in 1929 was paid for during the course of 1930. The average unit sale for 1929 was \$130.

This record is all the more unusual because the company features low down-payments and price in its newspaper advertising copy, which is heavy and continuous. This advertising brings in sixty per cent of the firm's customers who are sold on the floor, but it also brings in a lot of applications which must be turned down. Of the sixty per cent, a large number telephone in, and six lines are kept busy eight and one-half hours a day taking care of these calls and calls for service.

How the department maintains such a low credit loss is told by C. C. Jones, manager of the radio department and one of the outstanding radio merchandisers of Kansas City.

"In the first place, we reject an average of twenty-five per cent of all applications for credit we receive. This is the first important step in maintaining a low credit loss. The percentage, however, varies with the kind and amount of advertising we do. During special seasons, or when campaigning, rejections go up. During the two weeks of heavy Christmas buying in 1930, for instance, we rejected approximately thirty-five per cent of the applications that were made.

"Ten per cent of the sale price is the usual down-payment we require, but some merchandise is sold with no down-payment whatever. This occurs, however, only when the account is an established one and the management is convinced the customer is sincere in his desire to buy and keep the radio set. If the product and service facilities are what they should be—and we insist upon that—we don't need down-payments to make the sale stick. This type of account, however, is handled with especial care.

"The second factor is the rapidity with which we check up on payments. Prospective customers who telephone in response to advertising are qualified to a certain extent during that interview. Clerks who handle these calls have a form which they fill out as they talk to the prospect. This is not a very good check, but we can tell something about the sincerity of the customer in this way.

"When he goes out to make the sale or when the customer comes in, the salesman carefully fills out a credit application, which gives us a great deal of information about the customer. If the customer refuses to divulge any of the information called for, it is pretty certain that he or she is a joy rider, or that his credit is no good; and it is only in rare instances that sales are consummated where all the information asked for is not secured. This application is also used when a customer asks for a demonstration, and it acts as a sort of guarantee against the customer running away with the radio. The customer's sincerity at least is proved or disproved by the time the application is filled out.

"It is noticeable, even on the credit application, that we don't pay so much attention to the prospective customer's other accounts, his employment record, etc., as we do to his 'permanency,' a factor revealed by the length of his residence at a given address and by the number of relatives—parents, sisters, or brothers—that are living in the same community with him.

"We have in the store about 3,500 open radio accounts at all times, all information concerning which is contained in the credit applications. These are kept permanently in a kardex filing system, and have on the reverse side space for recording payments. When payment is made the card is pulled, goes through the combination cash register, posting and bookkeeping machine, and refiled. This machine gives us instant posting and daily checking where the old ledger system meant a week or ten days' delay. An account can be checked by this method in thirty seconds.

"At the end of each day every payment is posted. Six girls do nothing except check accounts for delinquencies. The delinquent account is turned over the day after the payment becomes delinquent to a call clerk, who immediately investigates, even though only one payment has been missed."

AGREEMENT

I, or We, hereby guarantee that the deferred payments on this account and on all future purchases which may be charged on this account, will be paid as per agreement. 8% interest may be charged after default. For the purpose of obtaining credit, I or we make the following statements which have been carefully read and certified by me or our signatures below that they are true and correct.

Date _____

Signed _____

All deferred payments on present and future charges are hereby guaranteed.

Signed _____

Full Name	Former Address		Address	
How Long	Over - Rent - Rooms - Boarding	Married - Single	White - Colored	How Long
Occupation	Salary	Employer	Age	Phone
Dear Former Employer	Wkg. No.	How Long	Phone	
Wife's Name	Employer	Occupation	How Long	
Other Acts	How Long	Their Phone		
His Parents	Name	Address	Occupation	Time Employed
Her Parents	Name	Address	Occupation	Time Employed
His Brothers or Sisters	Name	Address	Occupation	Time Employed
Her Brothers or Sisters	Name	Address	Occupation	Time Employed
Others	Name	Address	Occupation	Time Employed

Bank Reference

Referred by _____

Insurance _____

Auto _____

Window - Letter - Paper - Misc.

Address _____

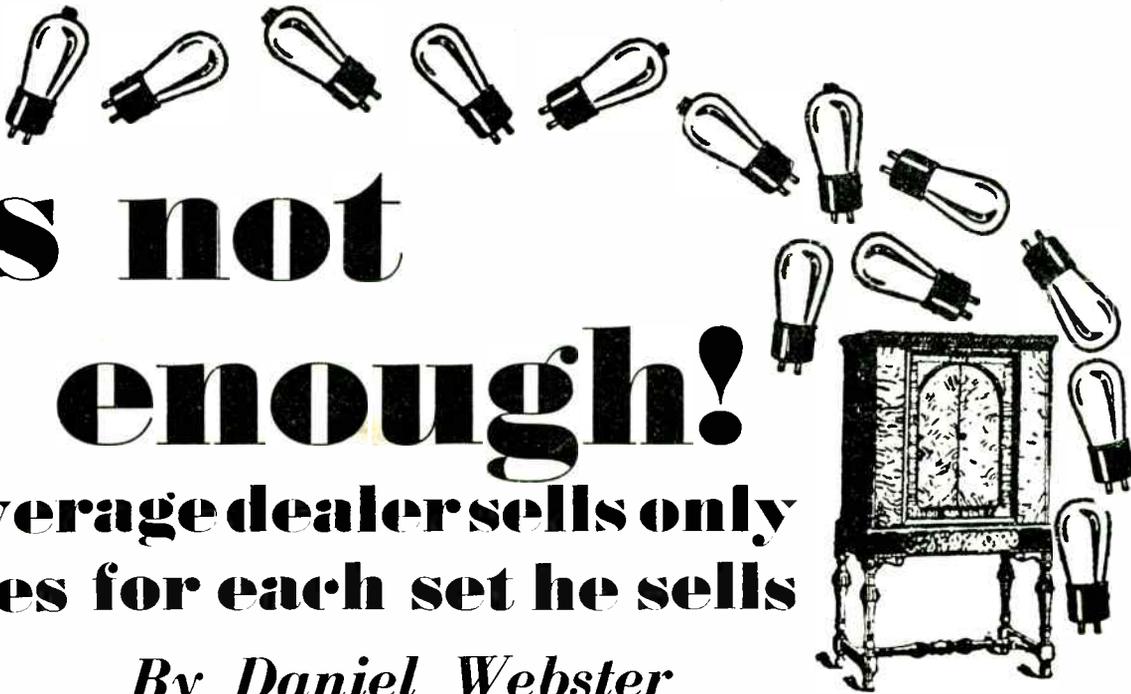
Article _____

Am't _____

Deposit _____

Payments _____

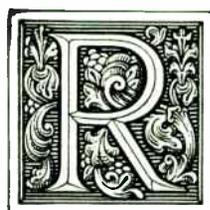
When _____



It's not enough!

The average dealer sells only 13 tubes for each set he sells

By Daniel Webster



RADIO dealers are not getting their share of the tube business. As every year this becomes a more important source of cash returns, the dealer who wants to make money in the future will have to find ways of bringing radio owners to his store for their replacement requirements.

Nearly one-half of the net profit of a successful radio store should come from tubes alone. Instead of nailing this business to his counter, too often the dealer has allowed it to slide away from him to the chain store, hardware store, drug store, or any other type of store that recognizes the possibilities of the tremendous future market.

From an intensive questionnaire among radio dealers we discovered the fact that for every set a radio dealer sells, he is selling only thirteen tubes. Last year nearly four million radio sets and over seventy million tubes were sold. This should give the dealer an average of twenty tubes to a set. The fact that he isn't getting this proportion shows he is not merchandising tubes. A few dealers who have their service departments organized to sell, reported tube sales running very high, one selling 109 tubes for every receiver.

It is surprising the number of dealers who reported exactly thirteen tubes to a set; 24 per cent of those questioned figured that average, 20 per cent of the dealers sold less than 7 tubes, 16 per cent sold from 7 to 12 tubes, 24 per cent sold 13 tubes, 12 per cent sold from 14 to 20 tubes, 12 per cent sold from 20 to 24 tubes, and 16 per cent sold 25 or more tubes for every set. The 28 per cent selling more than 20 tubes to a set are those who have designed their merchandising campaigns to take in this most important replacement market. Those who are selling 7 or less tubes to each set can hardly claim to be in the radio business.

With 14,000,000 radio sets now in use in American homes, many of them two years old, the forecast for the sale of 80,000,000 tubes for 1931 is very conservative. Averaging only 6 tubes to a set, there should be a replacement business alone of 84,000,000 tubes. Whether or not there will be such a replacement sale, and the

part of it which you get, depends entirely on how energetically the public is sold the idea of renewing the tubes in their old sets.

Left to himself, the average radio owner does not think of buying new tubes. A tremendous amount of publicity has been given the fact that as tubes gradually wear down no change is noticed by the constant listener, but it is only a beginning. Ninety-nine radio owners out of a hundred will tell you that their sets sound as good as when they bought them, although in two years they have bought only one tube.

The dealer who spends time and energy to combat this indifference is the dealer who will cash in on the tube replacement business. If you merely stock tubes and display them at cut prices, you are fighting only with the hundreds of other stores for the business which is already sold. In your possession, in your lists of radio owners and the goodwill of your customers, you have the most valuable asset to develop and secure tube replacement business.

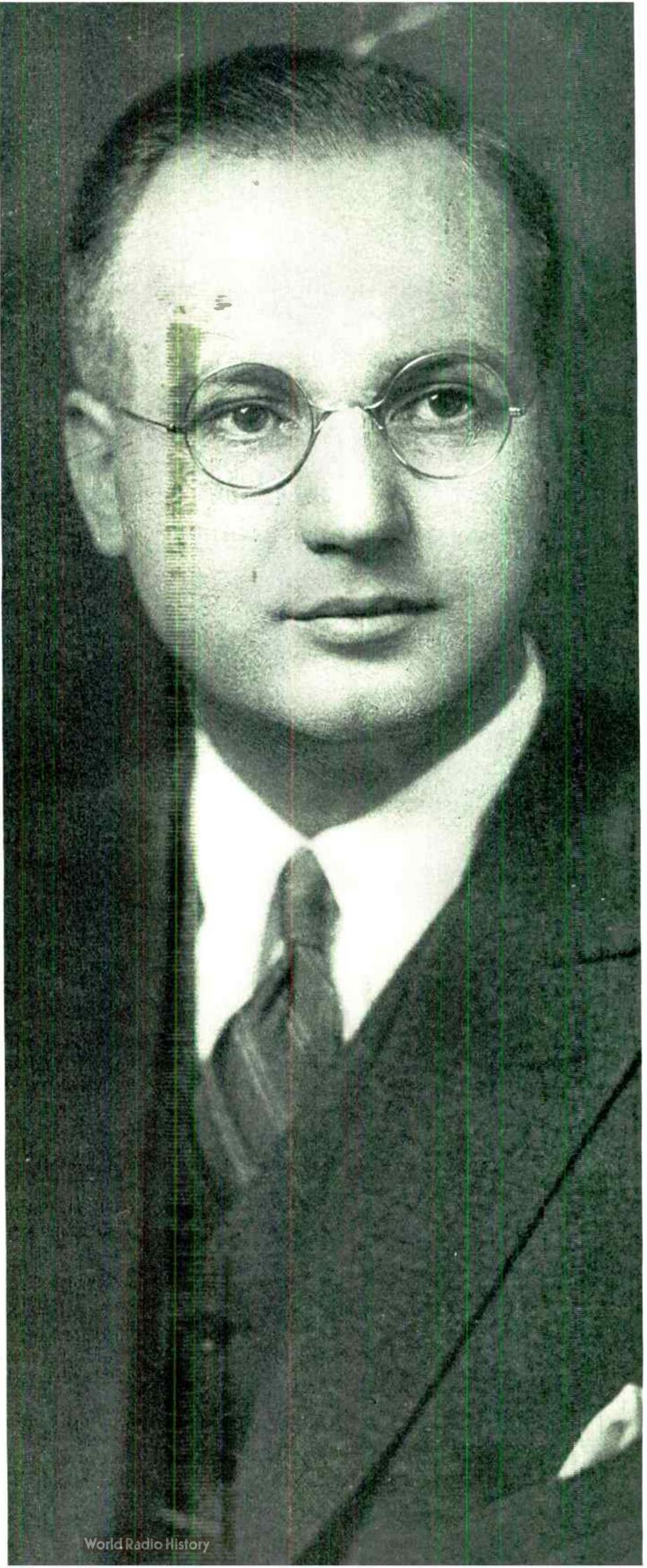
Featuring free tube testing in your advertising is good, but you must do more. Every radio owner in your community should receive some sort of personal solicitation. A mailing piece should be sent to each customer when his set is a year old. When a customer finishes his installment payments, give him a courtesy inspection of his set. It will please him with your interest and very likely discover worn tubes. A card can be given with each set sale to inform the customer of a definite date when he should have his tubes inspected. Immediately preceding each major broadcast program every effort should be made to tell the customer that he won't hear it at its best if his tubes are old.

The dealers who are selling a high proportion of tubes are chiefly those who are capitalizing on their service departments. The men a dealer has to pay salaries in order to install and service his set sales represent one of the greatest potential business-builders he can employ. A number of dealers have their service departments on a paying basis entirely through the sale of tubes, and this division of their organizations is going to make them good profits in future.

C. C. Bohner

The JOURNAL presents as prominent merchant of the radio industry for April, 1931, C. C. Bohner, Vice President and Sales Manager, Tung-Sol Radio Tubes, Inc.

April, 1931



And now-- sell electric appliances

**The radio dealer's set-up is ideal
for merchandising these products**

By A. W. Calder



ELECTRIC appliances have so rapidly taken their place in the radio dealer's store that this type of dealer is today recognized as one of the most important outlets for the electrical industry. Reports from electric appliance manufacturers tell us that, store for store, the radio dealers are far outselling the other classes of stores. The radio dealer has the habit of buying only what he can sell and then getting aggressively to work to sell it. Instead of buying and selling by catalog, he is taking on the lines he feels he can push.

The extent to which radio dealers have entered the electric appliance industry is proved in a recent survey among JOURNAL readers. Forty per cent sell vacuum cleaners, forty-eight per cent sell refrigerators, fifty per cent sell washing machines, fifty-two per cent sell electric clocks and forty-one per cent sell other appliances. The radio dealer has found his set-up ideal for merchandising the major appliances which have been the most difficult for the electrical dealer. This latter class has been content to allow the utilities and department stores take most of that trade, featuring in his own store the small goods of the electrical industry.

Generally speaking, a sharp distinction should be drawn between major and minor appliances, for the manner of successfully merchandising them is different. The major appliance gives a big enough gross profit to permit intensive selling. As a matter of fact, they all require intensive selling to be profitable. The minor appliances are cash sellers, not big enough to command much time per unit, but profitable "fill-in" sales.

The major appliances cannot be sold in the store. Although only one third of the homes in your territory now

own washing machines, one-half own vacuum cleaners and less than fifteen per cent own electric refrigerators, you must plan to sell your prospects in their own homes. Refrigerators, of course, are not demonstrated in the home, but the leads must be dug up by outside salesmen. Vacuum cleaners must be demonstrated, and successful washing machine salesmen are accustomed to doing a family's wash to prove their machines.

Direct mail advertising has generally proved to be more potent than newspaper adver-



**A recent
JOURNAL
showed these**

40% sell

48% sell

50% sell

52% sell

41% sell

tising. The dealer can easily build a list of prospects that should be hammered month after month with mailing pieces. He should organize a card system which will tell him at a glance exactly what appliance will most interest each prospect. The article in last month's JOURNAL describing such a list and telling how to arrange it by canvassing territories gives the dealer a method for establishing a system. Salesmen who work their territories properly should dig up more leads than they can cover.

Small appliances will be featured in the store and will be used by the salesman as a second sale. Radio dealers in the past have found that they can sell electric clocks by showing them with radio sets. The same applies to every small appliance. Every time a salesman opens a lead for a major appliance, he should plan to introduce a small item before he is finished.

Radio dealers find that much of the electric appliance field is new, for it has not been heavily exploited. For instance, in the matter of electric clocks, the average man in the street is just beginning to realize the advantage of owning one. Explain them to your customers and you'll sell a surprising number. Refrigerators have been considered seasonable in the past. As a matter of fact, Winter sales of refrigerators are rapidly gaining on Summer sales and many dealers are forgetting that there used to be seasons. Heaters, which used to be a big Fall feature, have their uses in the cool days of Spring.

Realizing the fact that radio dealers are aggressive sellers of electric appliances, the Sylvania Products Co. recently built an entire tube-selling campaign on the idea. Last month The JOURNAL showed how effective this plan was in uncovering leads for appliance sales. One of the big features of the campaign is that it almost guarantees your salesman securing an interview with each

prospect. The dealer supplies a list of prospects to Sylvania. A personal letter is written to each name by B. C. Erskine, president, introducing the dealer's salesman who "wants to inspect the radio". On the same day that the prospect receives this letter, the salesman receives the prospect's card. This plan has been very successful in selling tubes and enormously successful in discovering appliance prospects.

There seems to be no such thing as saturation in the electric appliance business. Electric irons, for instance, are the most widely used of all appliances, yet each year the replacement sale of irons is a very fine business in itself. New items, too, are frequently coming into use. For instance, the sunshine lamp is beginning to sell in quantities and it is confidently forecast that this product will quickly be put into at least every second home.

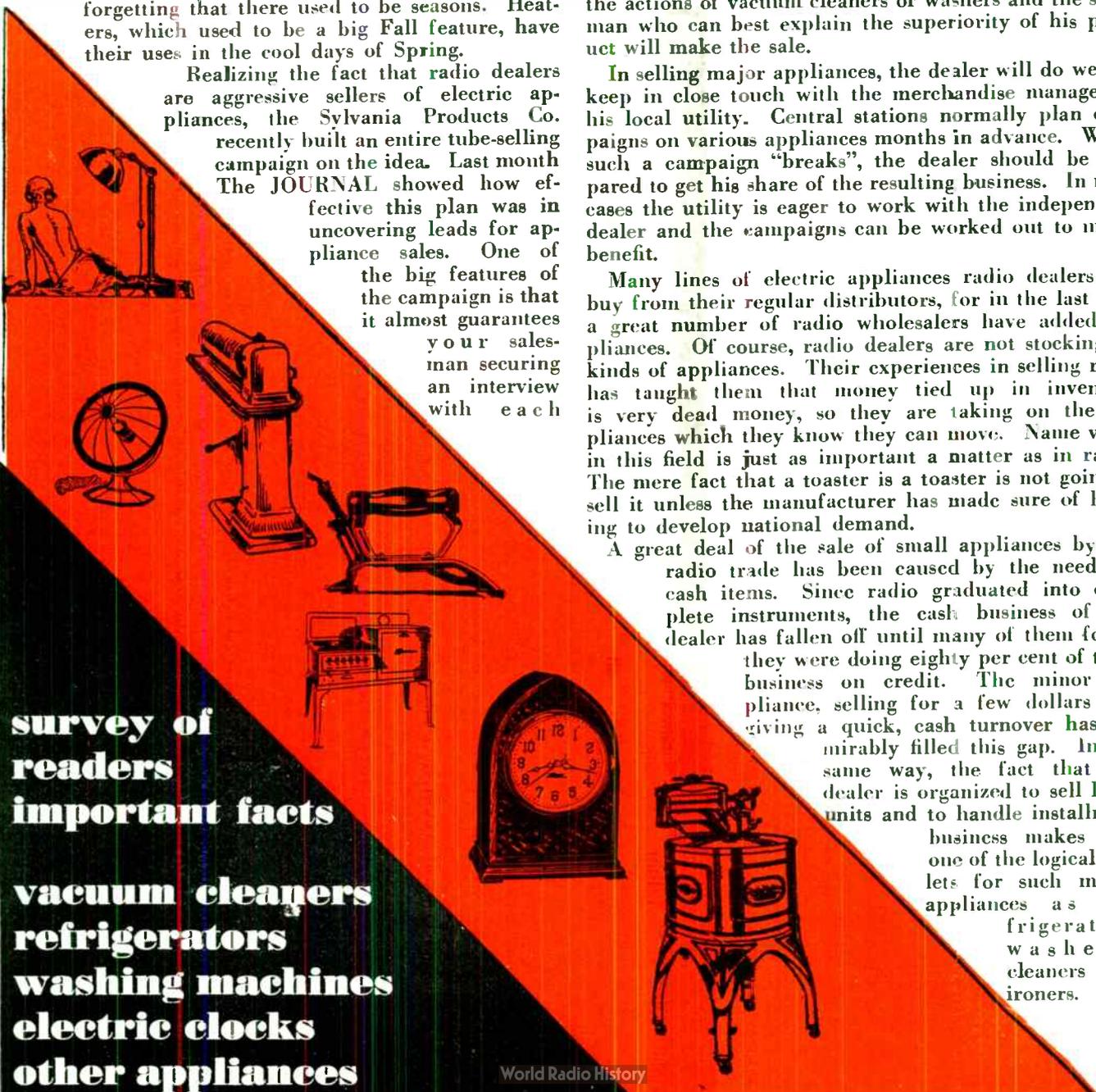
Obsolescence is nothing for the dealer to worry about. New models, of course, are constantly being announced, but they are not heralded as "revolutionary". Nor do sudden price cuts figure much in the appliance industry.

One thing which the dealer should give close attention when he takes on any line of major appliances is the education of his salesmen. It is essential that the salesman know every last detail about the appliance he is trying to sell. There is a tremendous difference in the actions of vacuum cleaners or washers and the salesman who can best explain the superiority of his product will make the sale.

In selling major appliances, the dealer will do well to keep in close touch with the merchandise manager of his local utility. Central stations normally plan campaigns on various appliances months in advance. When such a campaign "breaks", the dealer should be prepared to get his share of the resulting business. In most cases the utility is eager to work with the independent dealer and the campaigns can be worked out to mutual benefit.

Many lines of electric appliances radio dealers can buy from their regular distributors, for in the last year a great number of radio wholesalers have added appliances. Of course, radio dealers are not stocking all kinds of appliances. Their experiences in selling radio has taught them that money tied up in inventory is very dead money, so they are taking on the appliances which they know they can move. Name value in this field is just as important a matter as in radio. The mere fact that a toaster is a toaster is not going to sell it unless the manufacturer has made sure of helping to develop national demand.

A great deal of the sale of small appliances by the radio trade has been caused by the need for cash items. Since radio graduated into complete instruments, the cash business of the dealer has fallen off until many of them found they were doing eighty per cent of their business on credit. The minor appliance, selling for a few dollars and giving a quick, cash turnover has admirably filled this gap. In the same way, the fact that the dealer is organized to sell large units and to handle installment business makes him one of the logical outlets for such major appliances as refrigerators, washers, cleaners and irons.



**survey of
readers
important facts
vacuum cleaners
refrigerators
washing machines
electric clocks
other appliances**

A centralized sale a week

Every church, park and dance hall calls for a special job



HANNON RADIO SERVICE CO., Mount Vernon, N. Y., has had many public address and centralized radio equipment installations within

the past three months, an average of one a week, totaling fifteen in all. "We've done quite a few along the Bronx River Parkway," declared H. A. Shannon, "at various dance halls. These particular jobs generally meant the installation of a Capehart or Mills automatic combination, although they also used many Stromberg-Carlson radios in a three stage amplifier system and distributed through dynamic speakers for dancing."

There is one public address installation that Mr. Shannon is proud of, and that is an extensive wiring job he recently concluded at Our Lady of Victory church, in Mt. Vernon. Eight thousand feet of wire were used in this large sale.

Two 18-inch dynamic speakers were placed behind grilles on each side of the altar, and they were used to reproduce the programs of WLWL. A radio set was located in the rectory, where the operator also made use of a Webster amplifying device. Speakers were placed in the dining room of the rectory and a line was run to the nearby social hall, where more dynamic speakers supplied dance music for the parishioners at their get-togethers. Another line was run to the school for the education programs. If more money had been on hand, Mr. Shannon believes that he could have persuaded the church authorities to invest in an individually controlled public address system.

Another line was run from the rectory to the convent, where speakers were located in the study and living rooms. This convent installation utilizes as a prime mover a Crosley radio, combined with accompanying Webster equipment, permitting the sisters to have free access to the air programs. This convent installation

An Exclusive Interview with
H. A. Shannon
Shannon Radio Service



by the way, is what Mr. Shannon calls a "reverse" job, as the programs picked up on the Crosley receiver in the convent can be fed back to the other lines.

Shannon Radio Service Co. has had many other public address installations within the past few months—on an average of one a week, or about 15 in all.

"There is considerable money in the installation of public address apparatus," Mr. Shannon asserted. "There is practically an unlimited market. However, it requires a good deal more outlay in personnel, equipment and investment than any other work. I don't think the average one-man dealer can make a success in this field, because it requires so much outside selling. The present financial situation, too, prohibits selling places that in normal times would be open to your proposition."

The recent Vatican broadcast, which was relayed by American radio stations all over the country, afforded much activity for Mr. Shannon. "Radio men," he says, "could have prepared for that event 18 months in advance. The radio apparatus that we installed in the churches was used extensively on the day of the broadcast and our service work stopped because everyone wanted to listen to the Vatican program, to hear what was being said. No dealer did what could have been done with that broadcast."

Reverting to his original discourse on the profits involved in this work, Mr. Shannon explained: "Each individual job has to be engineered separately. I know of no straight way of handling it. My jobs range from \$600 or \$700 to \$1,200, and take in dance halls, churches, good-grade road houses, ice cream parlors, and similar sources of business, whether they require a public address system or the installation of an automatic phonograph.

"The only place for the public address system is a
(Continued on page 43)

\$1 a point

A projection of a
"good" needle point



AS the talking machine and radio dealer forgotten about needles? This used to be a very lucrative, cash business for you, but who is getting it now? Don't say there is no needle business. The sale of automatics and combinations has been reflected in a growing record business, and there are two new users of high-priced needles.

Do you know that the talking machine needle manufacturing companies are doing a very nice volume in needles priced as high as a dollar each. There is a brisk trade in needles packed 2,500 to an envelope, selling for around three dollars a package.

The needle business isn't what it used to be. It's a different business today. There is, of course, the usual five cent package of needles. On this there is a profit of two cents and a tremendous competition with drug, chain and novelty stores. Then there is a 25 cent package of needles, giving the dealer five times the profit, 13 cents, and little competition. Next come the needles for automatic talking machines which must play a number of records. They sell for 25 cents and \$1.00, according to the type.

Home recording has opened a new demand for needles. Whether they are designed to cut celluloid or metal, they cost at least 25 cents for four or eight according to the package. Then to reproduce metal home recordings, a fibre needle is used, listing again at 25c. Two brand new markets have been opened in the last couple of years. Electrical transcriptions have suddenly assumed a very important part in broadcasting. Every record for this purpose must be played with a fine quality needle and the manufacturers have designed special points to fulfill the rigid requirements of Western Electric. One manufacturer sells these needles for \$2.50 for a package of 2,500.

Theatres using sound picture equipment cannot be too careful in their choice of needles. Nothing worse than the break-down of a needle can happen in the

middle of a "talkie". The theatres are perhaps the users of the finest grade needles manufactured today. They insist on changing needles every record, and every needle must be exactly like the others. One manufacturer is offering its specially made needle to this trade at \$3.55 for 2,500.

What does all this mean to you? If you are doing nothing but stock five-cent or ten-cent needles, you are handing business to a dozen different competitors. No doubt, the drug and chain stores are selling more cheap needles than you. No doubt, the high-priced business is going over your head.

Your salesman knows the meaning of p.m. Try him out with 25 cent needles. It doesn't sound like much money, but it gives you a 500 percent increase in gross profit. Every time a customer asks for a package of needles, the salesman can explain in two sentences that there is great variation in cheap needles. If the customer wants the best music from his phonograph, he should buy the best needles. There is an amazing number of people who really appreciate their recorded music and they are willing to pay twenty cents more to get the best. Another idea would be to try a few packages of the needles used in electrical transcription. There is always a market for the best.

Home talkies are opening up another opportunity for you to sell the highest-priced needles. The installation of these projecting and reproducing instruments, and the increasing demand for centralized equipment fed from automatic phonographs, means a very lively trade in your neighborhood for needle sales that mean respectable profits.

Needle manufacturers themselves admit that there is a tremendous difference in the needles packed in one five-cent envelope. One firm reports that a series of microscopic studies of needles from various sources showed nearly fifty percent of all points examined so badly defective that they would spoil reproduction. Tell your owner of an electric combination that every second record he plays is off key because of the needle, and he will quickly graduate into the high-price class.



Television means cash

amount to a fairly sizable business after a short time.

Mr. Trachtenberg regards the sale of a radio receiver, a short wave set or a television kit as *just the beginning of more sales*. When a customer buys any one of these sets, he is put down in Eddie's "new business" book as a prospect for the sale of the other two receivers. "Radio-television-short wave are the trinity of entertainment over the air," says this merchant whose experience in radio extends back to the old "wireless" days. "I have manufacturers' literature, letters of my own and other direct mail contacts which I use on every customer that isn't supplied with all three receivers. When a radio, large or small, has been purchased, that client is eventually mailed literature explaining to him the advantages of short wave reception, how the short wave adaptor fits in perfectly with his present radio and what a kick the reception of stations all over the globe gives him when he uses his short wave adaptor. So I generally sell that customer a short wave set, thus establishing two sales—radio and short wave, each of them good for many additional little sales in the form of replacements, etc.

"But the customer who has a radio and a short wave receiver in his home can still be interested in the purchase of a television kit. The same methods of contact are pursued. We point out that he can participate in the wonder of television, now that he has a short wave set. 'Purchase a television kit which you can utilize with the short wave resistance coupled amplifier and thus introduce into your own home the entertainment offered by the 30 or more television broadcasting stations in the country, at least ten of which are operating on regular schedules'."

Eddie explains to his customers that his television kits will hook up with special short wave radio sets.

(Continued on page 32)



WHILE television is being perfected I'm finding a very profitable market for 'the early bird' television fans and I'm sure this department of my business will build itself up amazingly in the months to come. Its development will echo the mushroom growth of the present-day radio.

That's how Edward I. Trachtenberg, the genial "Eddie" of Eddie's Wireless, in Newark, N. J., addressed a JOURNAL scribe on his sales activities in the marketing of television kits.

"And each sale whether it be a complete television set, a tube, a television kit, or any other part, is a cash sale.

"The television model selling for \$42.50 is a money-maker" he continued. "Selling it complete gets \$75. An Eveready Kino tube alone costs \$11, and the television discs, each bringing in a new television broadcasting station, are sold at \$15 apiece." Selling parts, you can readily perceive, can



Eddie's television displays block the streets

C. O. Williams

The JOURNAL presents
as prominent manufacturer
of the electric appliance
industry for April, 1931,
C. O. Williams,
president of Williams Oil-
O-Matic Heating Corp.

April, 1931



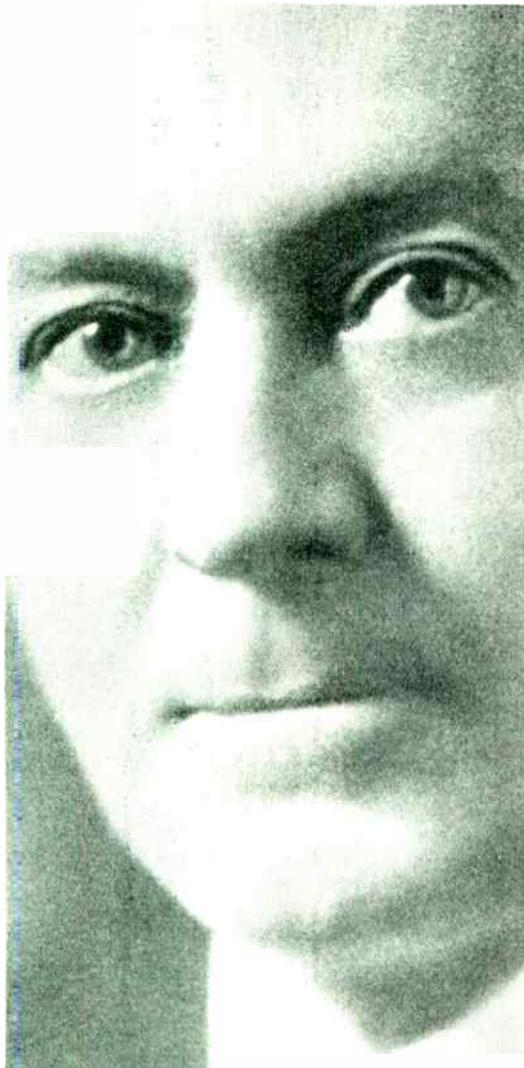


A business show — not ballyhoo

LESS ballyhoo and more business will feature the radio trade show next June in Chicago, if the plans of the RMA board of directors are followed. Morris Metcalf, president of the RMA, called a meeting of the board late in March at the Hotel Statler, Buffalo, chiefly for the purpose of making the arrangements which will guarantee a business-like convention. Since his election last year to the presidency, Mr. Metcalf has been industriously working for the betterment of the industry, and the association's report of progress for the year shows tremendous strides ahead in every branch of manufacturing, merchandising, and exporting.

Four Chicago hotels will be devoted to the convention and trade show, with an exhibition space of 30,000 square feet in the grand ball room and exhibition hall of the Stevens Hotel. Advance space reservations, at the time of writing, have spoken for most of this space. Allotments will be made about May 1st, and every indication points to nearly 100 per cent representation of the manufacturing trade. Advance reservations of rooms at the Blackstone, Stevens, Congress, and Auditorium Hotels, the four convention hotels, are reported as heavy.

In order that the trade show



Morris Metcalf

will be of the greatest value to the dealers who plan to attend. rigid requirements for each exhibitor have been announced by H. P. Disbecker, manager, aimed at limiting the ballyhoo and increasing the business value. Exhibitors are required to show current merchandise or be denied the privilege of having either a booth in the exhibition hall or the use of hotel demonstration rooms.

In spite of the wide current interest in outside lines, radio products only may be exhibited in the hall according to Mr. Disbecker. Members of the association who exhibit in the hall are permitted to demonstrate products of their own manufacture, whether radio or not, in the hotel rooms. These hotel rooms will play an important part in the convention, for the Stevens Hotel does not offer the demonstration facilities found last year in the Auditorium in Atlantic City.

News from the manufacturers report a number of important developments in radio merchandise for announcement in June. Pentode tube sets and variable-mu tube sets are in the works by several important manufacturers. Home talking picture equipment will be shown by several. Super-heterodyne sets and midgets will play an important part.



A straight course . . . straight ahead!

Radio dealers know now that the one sure way to profits lies in the sale of merchandise that is built to sound standards of quality and is backed by a name of long-established reputation. Brilliant stars may flash across the sky . . . but they burn out while the steady, unflick-

ering light of old, standard names grows from year to year as a dependable guide to the safe and sure pathway to profits and success.

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



BRUNSWICK LOWBOY
 MODEL 15

Armored chassis with Esterline-grid tubes and two 45's in parallel. Uni-Selector and Illuminated Horizontal Tuning Scale. Tone Control. Cabinet of seasoned and selected burwalnut with eared front panels. \$139.50
 Other models \$170 up (less tubes)

BRUNSWICK RADIO

To secure the best service to your reply, be sure to mention



EXTRACTS FROM



A smile doesn't cost anything—unless your wife catches you at it too often.

Young children and some employees seem to construe kindness as a sign of weakness.

Some people are sullen by nature, and others by intent.

Some husbands' idea of masculine authority is making their wives beg like children for a \$5 bill.

Some men wouldn't know that they had had a good time if they weren't reminded of it by a headache.

There'd be fewer parties if the women didn't have so many new dresses they wanted to show off.

If I had enough money I can imagine myself doing almost anything except

smoking dollar cigars regularly—that is too much for a cigar.

Do you remember when you used to chew licorice and make yourself believe you were chewing tobacco?

It's terrible the way some men will blow up their wives for a little thing like a couple of buttons off a shirt, or a measly bill from a department store.

One business that has successfully resisted modern tendencies is the second-hand book store. It conforms to tradition. Although apparently in disorder, the second-hand store is really quite efficient in an eighteenth century way.

It has been said that the second-hand dealer can locate a copy of any book that was ever published. At lunch today a collector of odd and rare books confessed that he had only once been disappointed, and that even in that instance the files had not yet been closed.

This man asked a dealer to find a copy of "Preliminary Discourse of Natural Philosophy" by John W. F. Herschel, published a hundred years ago. Recently, three months after the order was placed, it came from England. Delivered at his office the price was \$2.25.

In Leipsic, last summer, this man told a dealer to obtain an English edition of "Common Sense of Exact Sciences" by W. K. Clifford, published about 1890. Two months later it came to America by post, price \$1.60.

Five years ago he began a search for "The Art of Discovery" by Gore, long out of print. He placed orders with dealers in this country and England. Not even the Congressional Library has a copy of this book, although it is referred to in the footnotes of many volumes. Failing to obtain a copy through the regular sources, he went to an obscure dealer in his own city and told him he would pay up to \$20 for a copy. Advertisements were placed in booksellers' journals, and within sixty days the book was at hand. Price

\$22.50. Just a little more than the man had offered.

Rare books and first editions for which there is a lively demand sell at high prices, but important books for which the demand is slight, sell at ridiculously low prices. Book-dealers appear to be quite honest. They are undisturbed by modern cost-accounting. Imagine giving shelf space to a book for fifteen or twenty years, and then selling it for \$1.25. That is a daily occurrence in the second-hand book store. A dealer will write fifteen letters to find a book for a prospective customer, finally locate it, and report that the price is \$5. The customer will say, "Too much," and that will end the matter. Salesmanship is distasteful both to dealer and customer.

For three years I have been seeking a copy of "Collections Relating to the Surname of Feather," by George William Marshall, published in England in 1887. There is a copy in the Congressional Library, but so far none has been found elsewhere. I will pay \$15 for the first copy that turns up.

In London, last summer, I placed an order for the book. The dealer promised to write when a copy was in stock.

"But the price may be too high," I said.

"You don't need to take it," he said. "We merely ask that you notify us that you don't want it. Once one of your countrymen ordered a book here, and when we wrote him that we had it, he never answered our letter. That was a bit confusing and not quite fair, because we didn't know whether to keep the book for him, or offer it elsewhere."

Second-hand book dealers are like that.

Last night I read a book in which the word "eupeptic" occurred twice. This noon a man used the word again, so I was prompted to ask the meaning.

Eupeptic, he told me, is the opposite of dispeptic.

"I am eupeptic" means "I digest food easily."

I doubt that I shall ever use the word, but if I do, readers will know the meaning.

(Copyright, 1928)

Television Means Cash

(Continued from page 28)

When the customer is just investigating short wave and television, the various receivers and the way they operate are, naturally, new to him. He wants to know the "why" of things, how short wave differs from the usual radio broadcast, why short wave and television have to go together, how many tubes are used in television, etc. Eddie will tell you modestly that he doesn't know everything about the technicalities of television, but he has a special man on the floor to hook up the television kits, explain their operation, how easy every part works, how easy it is to hook up the kit in the home. Notice the phrase, in the home, because Eddie's television man doesn't spend his time running around to the homes of television set owners. His work is confined to the store. Only in rare cases, in special calls, will he go outside of the store for home servicing.

Although Eddie carries only the popularly priced television receiver on his floor, he uses it as the foundation for larger sales. He explains the advantages of the higher-priced jobs. "For best reception of the television

programs you should have a special amplifier," the customer hears, "for a clearer picture. This set will give you better amplification for the television picture as it covers a wider band or range."

When a customer first buys a television kit, Eddie and his salesman select for him the television disc which will enable him to receive the station nearest his home. As a general rule, the customer is satisfied with receiving that one station for a few weeks or so, but he soon begins to wish for other television broadcasts, although he realizes that each new station requires another disc and each disc costs \$15. Therefore, the average television customer doesn't buy all available discs at once; there is an interim between his sales, but when he does buy a new disc, he also purchases other odds and ends of television equipment.

Besides the Jenkins television equipment, Eddie carries the Pilot, RCA and Conqueror short wave sets. For years he carried the Davin television parts.



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.

You have a Big Market for this New Low-priced Clothes Washer



A big seller to small families—especially those with children

Cinderella ^{\$}37⁵⁰ Portable Electric Clothes Washer

THE Cinderella is just what thousands of women have been waiting for. A complete electric Clothes Washer they can really afford. Naturally, at the low retail price of \$37.50, Cinderella is going over big!

But low price isn't the only feature of the Cinderella. It washes by an amazing new "Vacuum-Action" principle that wins women on sight. No moving parts touch the clothes—hence there is nothing to wear out dainty fabrics or pull off buttons.

And when it comes to speed, capacity and

economy, Cinderella is a little wonder. Takes only two minutes to fill it and start it running. Then in 15 minutes the clothes are thoroughly washed and ready to rinse. It costs less than a penny an hour to run!

You can sell a lot of Cinderellas in your vicinity—and you will make a \$60 profit on each \$90 invested! For Complete Sales Plan, mail the coupon below. Cinderella is a product of the Black & Decker Mfg. Co., World's largest manufacturer of Portable Electric Tools. Send the coupon now.



Black & Decker Mfg. Co.,
700 E. Pennsylvania Ave.
Towson, Md.

Please send me the name of my state distributor and the sales plan on the new Cinderella Clothes Washer.

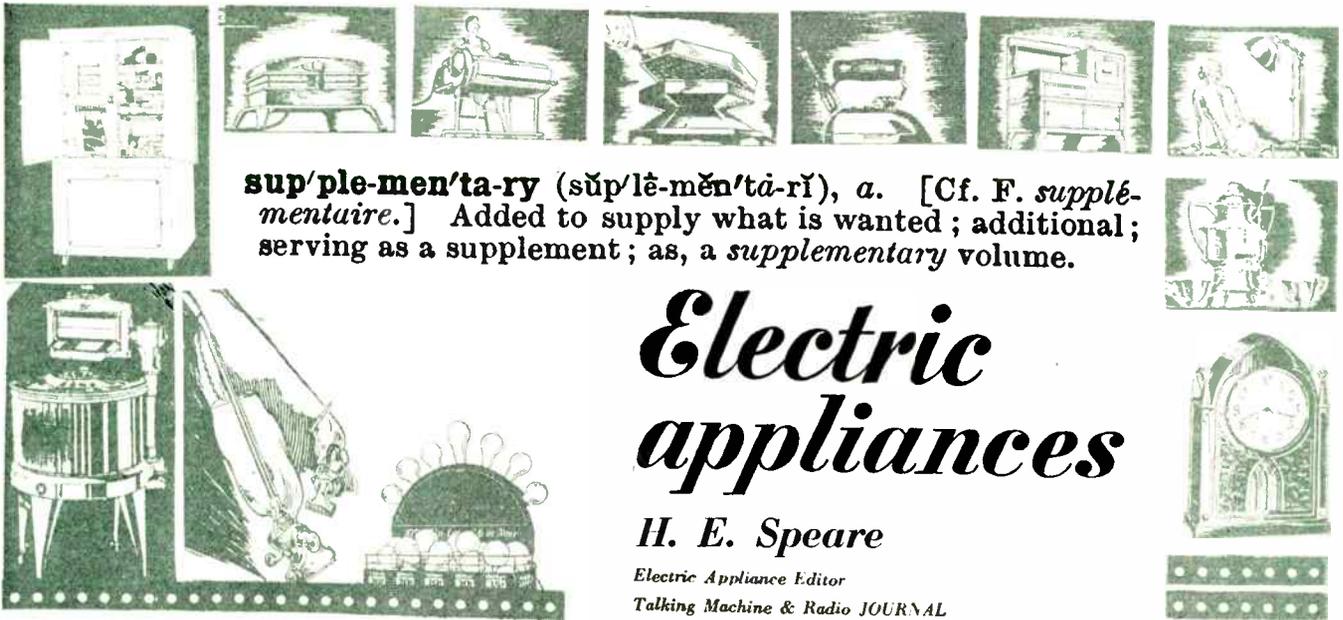
Name.....

Street No.....

City..... County..... State.....

To secure the best service to your reply, be sure to mention





sup'ple-men'ta-ry (sŭp'lĕ-mĕn'tā-rĭ), *a.* [Cf. F. *supplémentaire.*] Added to supply what is wanted; additional; serving as a supplement; as, a *supplementary* volume.

Electric appliances

H. E. Speare

Electric Appliance Editor
Talking Machine & Radio JOURNAL

How to plan your year's campaign on washing machines

RADIO dealers selling washing machines will find that there are new principles of merchandising for them to learn. In advertising alone, the dealer will find that results come from much different kinds of media and appeals than in radio. In the past, radio has been so widely in demand that the dealer found that best results came from his advertising of the special services he could render.

There is nothing radically new about the washing machine or its appeal, although many improvements have made it an amazingly efficient home aid. Most of your prospects know at least something about washers. Your advertising job is to sell them the conveniences, the economies and the time-saving features of owning a washer. When this first message is planted, then follows the demonstration of the practical advantages of your own brand of washer. In order to get this appeal across most effectively, the major part of your washer advertising will have to be direct mail work.

How to budget your year's advertising of washers is excellently presented to the dealer by the Hurley Machine Co., manufacturers of Thor products. Successful advertisers, both manufacturers and dealers, they point out, operate their advertising expenditures by a budget established on a basis of the potential volume of business which can be reasonably obtained. The advertising budget should be set up to cover the entire year with various amounts specifically allotted to various forms of advertising and specified seasons. This is the only way to control expenditures and conduct your advertising on a business-like and profitable basis.

The problem of most dealers is to get their share of the potential business in their territories; to keep it from going out of the territory or to competing dealers in the same district. Consequently, you must know what your potential market is. Set up your advertising budget on a given percentage of volume it is possible for you to do and then decide or what forms of advertising you will use in what amounts and at what periods.

EXAMPLE											
Dealers' Washer Advertising Budget, 1930											
Prospects in territory (wired homes without electric washers or ironers)											
WASHERS:	350 homes x \$100.00 (average price) equals \$35,000										
IRONERS:	720 homes x 80.00 (average price) equals 57,600										
Potential Volume \$92,600											
DEALER'S SHARE OF POTENTIAL											
20% of Total.....	\$18,520.00										
Advertising Percentage.....	5%										
Advertising Appropriation.....	926.00										
Direct Mail 50% \$463.00	Newspapers 35% \$324.10	Display 15% \$138.90									
SALES AND ADVERTISING CHART											
MAILING DATES											
Jan. 25th	Feb. 25th	Mar. 25th	Apr. 25th	May 25th	June 25th	July 25th	Aug. 25th	Sept. 25th	Oct. 25th	Nov. 25th	Dec. 15th
QUANTITY											
2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
NEWSPAPER SPACE											
24 in.	36 in.	48 in.	48 in.	48 in.	48 in.	48 in.	36 in.	36 in.	36 in.	36 in.	48 in.
NOTE: As advertising rates vary over the country, we have not suggested the number of insertions of each advertisement each month.											

Generally speaking, 50 percent of the budget should be set aside for direct mail advertising; 35 percent for newspaper advertising; 15 percent for store and window displays. The point is to set up a definite budget and plan of advertising in advance and stick to it. The big factor in making advertising profitable is constancy. Every time you stop advertising, you lose a great deal of the momentum or the effect of your past advertising. Look on advertising as a business insurance and do not let it lapse.

The way in which successful radio dealers are rapidly assuming an important place in the retailing of washing machines is shown in the experiences of the Stewart-Warner Sales Co. of Minneapolis, which recently added a line of washers

for distribution to the trade. The first thing this company did was to make a survey of the towns they cover to select the outstanding dealers. In order to successfully retail washers, this distributor believes that each dealer should have a good rating and outside salesmen.

Once the dealer takes on the line, it is up to distributor to educate him. Salesmen from this distributor spend time with the dealer and his salesmen demonstrating the instruments and the way to sell them. In addition to this, the dealer's salesmen are invited to frequent meetings at the distributor's showrooms, where full evenings are spent going over the most successful ways of developing and closing sales.

Cash in on '31 with WILLIAMS ICE-O-MATIC

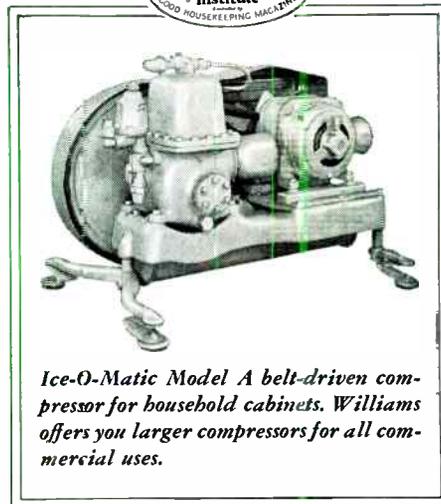
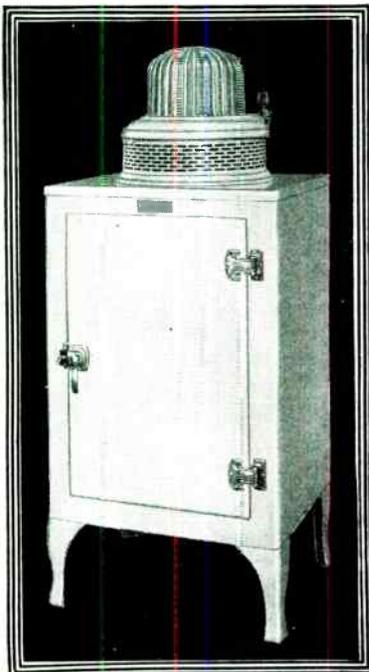
TWO years ago successful music and radio dealers began adding to their profits by adding refrigeration to their lines. This '29 trend has turned into a '31 tide.

The sales manager of one of the largest organizations said, "1931 sales of refrigerators will be surprisingly good. The million dollar N. E. L. A. campaign, plus advertising by all manufacturers, will create a great volume of new and profitable business."

Cash in on this incoming flood of buying. Sell the complete Williams Ice-O-Matic line. Nationally advertised, Ice-O-Matic enables you to offer all

the best features at low prices. You have a double opportunity to make a profit from every prospect. You have an Ice-O-Matic sealed unit, with a fan-cooled oil condenser, in addition to a belt-driven machine. Side-by-side tests in your shop will prove Ice-O-Matic offers you improvements and operating economies not approached by any other electric refrigerator.

Wire or write right now for all the facts on the improved new Ice-O-Matics—photographs, specifications, selling helps and discounts. Sending for this interesting information is your first step toward making more money in '31.



WILLIAMS ICE-O-MATIC REFRIGERATION

DISTRIBUTOR OPPORTUNITY: Active distributor organizations are invited to write in confidence regarding certain large territories. Please outline the size of your wholesale selling force, dealer outlets, warehousing facilities, financing, etc., and mention lines now represented by your firm.

Ice-O-Matic Division

WILLIAMS OIL-O-MATIC HEATING CORPORATION • BLOOMINGTON, ILLINOIS

To secure the best service to your reply, be sure to mention



What do you mean— "Sell refrigerators?"

By Paul B. Lanius

A Radio and Refrigerator Distributor at Denver

THERE is hardly a radio dealer in the United States who since January 1st has not given some thought to the sale of mechanical refrigerators, which, for the most part, are electrically operated in the better known makes. Generally, radio dealers this year will be offered electric refrigerators made by eight to ten manufacturers that have manufactured mechanical refrigerators with varying degrees of success for the past ten years. In addition to the older identities, there will be twenty to thirty other makes of refrigerators brought on the market by factories which have recently entered the industry.

"Now, What's It All About" for Mr. Radio Dealer, who is sometimes referred to as "Dear Mr. Radio Dealer"? He will be assailed with all sorts of propaganda from manufacturers, factory and jobber salesmen, any one of whom will present their sales ballyhoo so convincingly to "Mr. Dealer" that he can only reach the immediate conclusion a ready made fortune is lost unless he immediately signs up and secures the franchise without delay. And what is this franchise, and what does the line cover in the field of electric refrigeration?

Anyone who has been in the selling field of electric refrigeration for the past four or five years will conscientiously admit that nine out of every ten radio dealers will not know whether they are buying a ticket to Portland, Oregon, or Portland, Maine, when they decide to get on the refrigeration band wagon. Before "Dear Mr. Dealer" signs up, he should go into a "huddle" with Mr. Dealer, himself. His catechetics (propolition) with himself should follow something like this:

"Is the Sudden Service Radio Shop prepared to hazard only a small amount of capital in this new field, or are we willing to invest as much money in our contemplated refrigeration activity as we have in radio and be a predominating retail outlet?"

"If Sudden Service Radio Shop only gets its feet wet and puts one or two household refrigerators on our display floor, are we going to successfully meet the competition of our neighbor who carries a complete line of household refrigerators in ten to twelve different sizes and is prepared to offer his prospective customers refrigeration in all its many applications, such as: meat-market, florist, drug store, restaurant, hotel, apartment house, theatres, office buildings, etc.?"

"Are our sales activities to be limited to a definitely small field of sales, or are we big enough to organize, school, and finance ourselves in a sales field that will identify Sudden Service Radio Shop as the institution which can furnish prospective buyers just what they want in up-to-the-minute electric refrigeration.

"Perhaps we had better do a little investigating for S.S.R.S. on our own account. Yes, the jobber salesman stories about the KOLDER-N-L line sound awfully good, but let's investigate for ourselves and find out what it's all about."

And this is what the Chairman of the

Board, President, Vice-President, Treasurer, Secretary, Comptroller, Auditor, and other officials of Sudden Service Radio Shop will find:

In the year 1930 the sales of domestic or household refrigerators for the United States reached a sales total of \$197,625,000, 775,000 units, or a unit sale of \$254.00 for each individual installation. (A single apartment in an apartment house is counted as a unit installation.) This year the refrigeration industry sets its sales goal (bogey) at 1,000,000 household units. Then, by a simple process of deduction, if there are 20,000,000 wired homes in the United States, one out of each twenty homes, individual apartments included, should buy an electric refrigerator. That is five per cent.

Generally, prices and discounts are not the same as in radio. National list prices are not advertised and each locality sets its own schedule of list prices in line with the freight differential paid for transportation from the factory. The abused 40 per cent discount margin prevalent in the radio industry has not as yet become a source of grief in the refrigeration industry. Dealer margins are generally 25 per cent to 35 per cent from established list prices, so that to make a reasonable profit the dealer must stick strictly to selling at list price and not hedge for cash or take trade-ins. (The dealer who takes ice box trade-ins is a SUCKER pure and simple. If an ice box is worth anything, it is worth the installation of an electric refrigeration system. The man of the house and even the wife will welcome the old ice-box refrigerator as a good storage place for beer bottles.) N. B. Author's Note: Beer is beer, and nine out of every ten prospective buyers of electric refrig-

erators in our town are interested in beer bottle cooling and storage.

Anybody can build a radio set after a fashion, as the midget radio manufacturers so drastically demonstrated. The mechanism of a mechanical refrigerator is one of the simplest mechanical units (a pump) in general use today, and anyone can build an electric refrigerator, after a fashion. But, in the radio dealer's language, what about tubes blowing out, and what about power pack and transformer trouble? There is not much point in arguing with a radio dealer as to the advisability of handling merchandise made by a nationally known manufacturer that has stability and a product that bids for permanency. Various makes of electric refrigerators will survive as the manufacturers are able to substantiate the claims for their product and back up performance in the customer's hands over long periods of time.

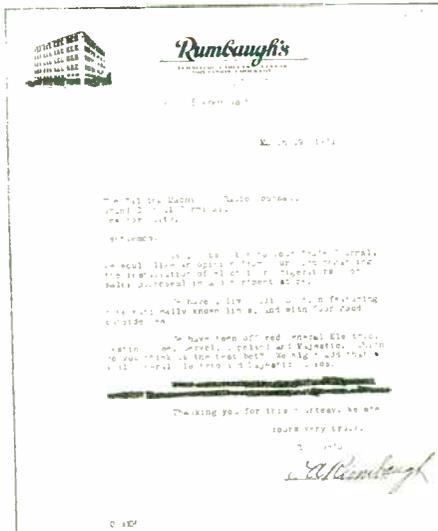
Any piece of mechanism which has moving parts or consumes energy will eventually wear. Therefore, when we conscientiously get together with ourselves in a "huddle," we cannot help but come to the final conclusion that a refrigerator mechanism, as it runs merrily on hour and hour and day after day, must ultimately be subject to wear, and necessitate care and attention.

Well, what about this attention? It does not make much difference how it is handled except that it has got to be intelligently anticipated. Some dealers will undoubtedly want to handle those makes of refrigerators that have integral-unit refrigerating mechanisms and keep a stock of these integral-unit mechanisms for replacement in refrigerator cabinets when performance is not satisfactory. Other dealers will appreciate that as in radio they must have trained mechanics at hand who, with a simple kit of tools, can make simple adjustments. In one case there is a substantial investment in extra units for replacement. In the other, a small investment in tools and small parts, and the necessity of having at hand a man in the organization who can make minor adjustments to refrigerators in the customers' homes.

No matter how the dealer goes at this maintenance problem, he has absolutely got to have some tactful person in his organization who can intelligently explain to Mrs. Owner what she can expect from an electric refrigerator once she has it in her home. It is not necessary to exchange refrigerators or units if the cold temperature of the refrigerator is too warm or too cold for Mrs. Owner; an adjustment can be made. If she does not know that oranges, pineapples, cheese, fish, and other edibles produce disagreeable odors in a mechanical refrigerator, somebody besides a truck driver must call on her. The modern iceman even wears a white coat and puts on sandals when he enters the kitchen.

No industry in the United States has made such a bugaboo of the damnable world "service" as the refrigeration industry. The automobile industry licked this apparition years ago by admitting that an automobile was subject to wear and tear, and if the owner wanted to use an automobile day after day and year after year, it must have mechanical attention. No one complains that the average life of an automobile is only five to six years, and yet in contrast the refrigeration industry does not know the life of an electric refrigeration unit, even though the sales increased from 10,000 in the

Ask Us!



Each month we receive and answer hundreds of letters like this. Ask us!

(Continued on next page)



Why isn't he outside selling ABCs?



ABC SPINNER

Electric centrifugal dryer.



ABC COMPANION

Electric, with wringer.



ABC PLAYMALD

Electric Round Tub. with wringer.

5 MODELS
100% COMPLETE
100% PORCELAIN
100% SALABLE

An outside man hanging around inside, is worse than no man at all. Why don't you give him something he *CAN* sell? People who can't buy luxuries *are* buying necessities. ABC dealers have proved this by breaking all sales records in 1930—by doing better business than ever in 1931.

Practically All Your Customers Are Washer Prospects

They know your store—they have confidence in you and the merchandise you recommend. You have ready entrance to their homes. Cash in on your previous efforts—sell them ABC household appliances with a minimum of solicitation effort—and practically no credit risk.

And the prospects you didn't sell—the folks who looked at your machine or radio set with longing, talked about "buying it sometime", but had to say "No". Right now they are buying necessities essential to better house-keeping even though they couldn't afford luxuries. What a golden opportunity to re-canvass them with the ABC line.

Drug stores once filled prescriptions—today they sell bathing suits, too. Music stores once sold pianos to folks who stayed at home. Today they sell washing machines and other household aids to folks who must save time and economize so they can go out.

A lot of far sighted music and radio dealers will mail this coupon. Are you one of them?

ALTORFER BROS. CO.
PEORIA, ILLINOIS

(EST. 1909)

Altorfer Bros. Co., Peoria, Ill.
Gentlemen: I am interested in your dealer proposition. Send complete merchandising facts.
Name _____
Address _____
City _____
State _____

How to get the cleaner prospect's name on the dotted line

RADIO dealers who have started selling vacuum cleaners will welcome having a fund of general information which they can mold to their individual sales talk. The following article contains vital and interesting material which you can supplement with facts regarding your own line. We would suggest that you have each salesman read this carefully and memorize the salient features.

To preserve the life and beauty that the manufacturer has built into his carpets and rugs, we need to use the modern electric sweeper—it is the only safe method to use upon woven floor coverings. And there is this further and very important reason—*cleanliness*, from æsthetic and sanitary standpoints. The standard of cleanliness for floor coverings should be *thorough cleanliness*, just as this is the only standard tolerated for the dishes from which we eat, for the clothes we wear and that baby wears, the standard that we have for our own persons.

The very structure of rugs makes it urgent that we use electric sweepers. The tufts are woven into the fabric in rows, and the small spaces between the tufts and between the rows form pockets into which dirt embeds itself. In an ordinary 9 x 12 rug there are millions of these small pockets. Modern carpets, constructed as they are, therefore, make perfect storehouses for dirt. And 90 per cent of all house dirt is to be found in the carpets or on the floor. It is impossible to prevent this condition, or to alter it, because all dirt naturally gravitates toward the floor.

There are three kinds of dirt, and the importance of thoroughly and regularly cleaning the rugs will become evident when we get a mental picture of them. First is Dust—the light dirt that is carried on the currents of air and deposited everywhere—on furniture, draperies, and rugs. This is the dirt that rises in clouds when the broom is used for cleaning.

Second is clinging dirt—threads, lint, hair, ravelings and sewing-room litter. This unsightly dirt stubbornly resists removal by almost any cleaning method—a hand-picking is usually required, as you no doubt have observed.

Third is Grit—the *sandy, glass-like, cutting dirt* that is carried in from the street on the soles of shoes and rubbed off on the nap of floor coverings. This

Ask Us!

*Mac's Radio Shop
Kingfield, Maine
March 21, 1931*

*Henderson Publications, Inc.,
New York, N. Y.*

*Attention Mr. H. E. Spears,
Electric Appliance Editor
Gentlemen:*

Many thanks for your very kind reply of the 19th regarding electric refrigerators. If not too much trouble can you advise me in relation to other household electric appliances, such as washing machines, vacuum cleaners, electric clocks, etc.

Heretofore I have handled radio only, but this year I want to include household appliances as well and those I have mentioned would seem to cover the ground fairly well as a beginning.

*Thanking you again, I am
Yours Truly,*

A. W. McLeary.

Every month we receive and answer hundreds of letters like this. Ask us!

dirt is *heavy*; it is dangerous, destructive, and *germ-laden*, and is tramped down and embedded into the millions of dirt pockets in the body of the rug, where it soon becomes caked in.

Being sharp, sandy grit, and being lodged at the *base* of the rug, it is easy to picture the effect it must have on the soft wool fibers of the nap when a grinding or shifting weight is placed on top of the rug. Caught between hard soles and unyielding floor, the soft nap threads are twisted and ground against the sharp grit. *Something must yield—always it is your beautiful carpet.*

These three dirt are present to a greater or less extent in every floor covering. The fine dust particles work no

immediate harm, but they do gradually bring deeper shades and cause the rug to lose its original brightness. Dust, however, is a health menace; it irritates tender membranes in the nose and throat, and is, therefore, to be avoided in the home.

The second dirt, being visible, one is quick to remove it for the sake of appearances.

The presence in floor coverings of the third dirt, the dangerous, destructive, glass-like, cutty street dirt, is usually evidenced by the presence of dead nap at or near the surface of the rug. Moisten the finger tips and rub the rug vigorously for a moment. You'll probably rub up some of the loose nap threads, showing that your rugs have begun to succumb to the destructive effects of the heavy grit buried below. This condition is particularly evident just a few feet inside the entrance door, around the dining-room table or in front of the favorite chair.

The task of removing the embedded grit is far beyond the ability of the broom to accomplish; it is beyond the ability of the carpet-sweeper. It is futile to try to sweep a rug clean with old-fashioned equipment. But there is yet another angle to consider. The modern broom is a descendant of the bundle of twigs which our early ancestors used to sweep out their caves. It is a tied-up bundle of sharp straws. Tap the back of the hand against the business end of a broom—do that about 50 times and the skin will bruise and probably tear.

When sweeping carpets and rugs with the broom, one tears at the soft wool pile threads with these sharp straws, pushing downward with a pressure of from 3 to 12 lbs. per stroke and drawing the sharp straws through the nap. It reminds one somewhat of the rake—it opens up the pile and packs down the dirt into the heart of the rug.

The broom, in this modern day, is at best a makeshift that removes some of the less tenacious litter, but at a cost. At the end of every sweeping stroke the broom straws snap outward. Dust is catapulted into the air. Disease germs are stirred up. And someone is apt to get at least a headache as flying dust settles on the membranes in nose and throat. Draperies, furniture, and walls become covered with floating dust. And when finished sweeping it is necessary to go over everything with a dust cloth.

Sell Refrigerators?

(Continued from page 36)

year 1922 to 75,000 units in 1930, and there are probably up to 2,000,000 units in constant operation today.

There is no retail merchant who has a more intimate knowledge of service than the radio dealer, and the radio dealer complacently assumes a highly technical, expensive service burden as part of the pleasure of doing business. The comparatively small amount of attention any standard make of refrigerator should require will be "Duck Soup" for the radio dealer if he will meet it intelligently and give it half the technical attention that is given to radio.

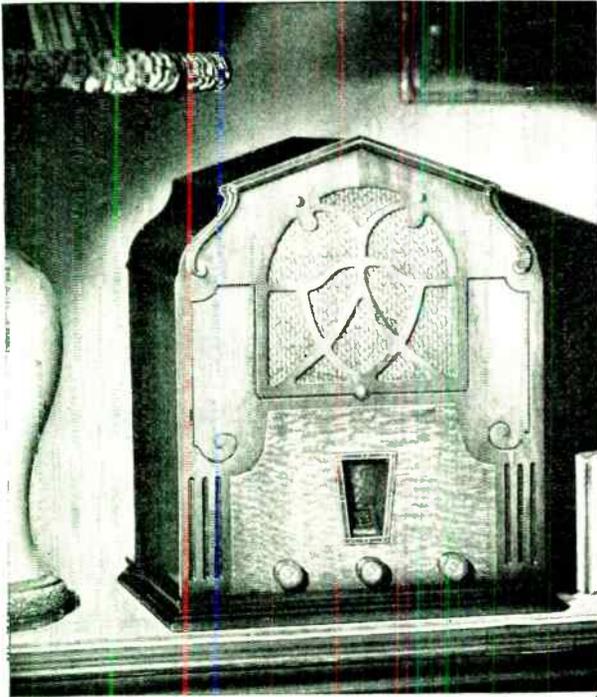
Don't expect any make of electrical re-

frigerator to walk into your customer's home, take its place in the kitchen like the policeman on the beat, and stay consistently on the job for many long years without the consideration of occasional attention. It's only common decency to occasionally pat a fellow on the back who is faithfully doing his job day in and day out. Who knows? Perhaps your customer might want to buy another refrigerator.

Now, all this simmers down to this for the Radio Dealer who contemplates entering the field of selling electric refrigeration:

1. First, decide what he wants to do in the field of selling electric refrigeration and what he can do in that field.
2. Devise a sales program to the best of his intelligence and follow it.
3. Establish values in anticipated volume of sales and values in the line which he elects to sell.
4. Prepare to intelligently give his customer the same courteous attention and accommodations he would expect if he were the purchaser.
5. Realize that success is only attained after hard, consistent plugging.

These Sets Sell on Performance



It is the superior performance of these superheterodyne receiving sets that makes sales and brings profits to dealers.

The fidelity of reproduction and purity of tone find instant favor, while the knife-like selectivity and the ability to easily bring in the far-away stations appeal to radio buyers.

And added to their performance is cabinet design and finish that just naturally goes with any type of room furniture.

You really should hear and see these new Sentinels to fully appreciate their sales possibilities.

Sentinel NO. 108 Superheterodyne

New standards of performance for small sets are being established by the Sentinel No. 108. They are achieved by the unified design of the seven-tube superheterodyne receiver, the special electrodynamic speaker, and the cabinet.

This new set has been engineered for perfect balance and utmost efficiency. There are four screen-grid tubes. Double screen-grid detection, utilizing the high gain obtained from two screen-grid tubes, makes it easy to get the distant stations. Tuned antenna, followed by coupled-type pre-selectors, in conjunction with double-action volume control, eliminates crosstalk and insures fine reception even when close to local stations.

The chassis is exceptionally compact and substantial. Walnut cabinet is 13½ inches high and 11 inches wide.

\$69.50 Complete with Tubes



Sentinel "PORTOLA" Superheterodyne

An eight-tube superheterodyne receiver of outstanding performance housed in an attractive cabinet that affords the utmost in portability—these are the distinctive features of the Sentinel "Portola." Equipped with a special flat extension cord that plugs into any lamp socket and provides antenna and ground. Retail price, \$89.50, complete with tubes.

You can cash in on Sentinel performance. Furnished as complete sets, or chassis only. Write for prices and detailed information.

RADIO DIVISION
UNITED AIR CLEANER CORP.
9705 Cottage Grove Ave., Chicago, Ill.

Sentinel

SURPASSING RADIO PERFORMANCE

TONE QUALITY~SELECTIVITY~SENSITIVITY~CONSTRUCTION

To secure the best service to your reply, be sure to mention





CEDAR BAR HOTEL BERMUDIANA

Royal Smith, who has been appointed to represent the Ken-Rad Corp. in Texas and Louisiana

The two "X" marks, one for each spittoon, represent the two musketeers, Len Welling and Martin Zatulove



Haynes-Griffin window features the new Victor record display material.



Burton Browne, advertising manager of Silver-Marshall, Inc., and his aurascope, photographed on specially toughened negatives.



Louis Buehn, Philadelphia, president of the Radio Wholesalers' Association; James Aitken, Toledo, president of the National Federation of Radio Associations, and H. G. Erstrom, executive vice-president of both associations.



The Art Music Co., Berkeley Calif., uses a midget car and a monster radio for deliveries. The radio set opens to carry deliveries.



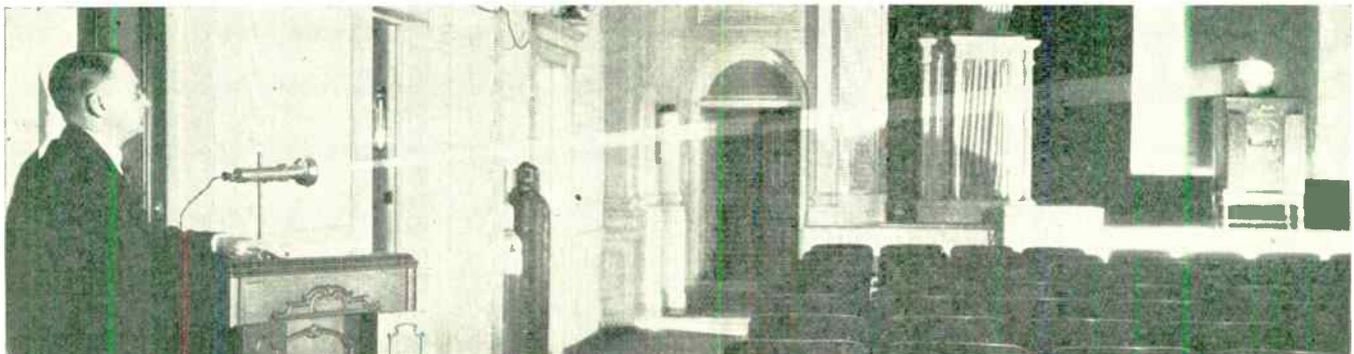
Penny in the slot for ice. A new idea in paying for a refrigerator is this coin-controlled ice-box.



Said to be the only female service operator in the country. Miss Ruby Smith, of the James Parker store, Lakin, Kansas.



Novel Atwater Kent display at the convention of the Dept. of Superintendents of the National Educational Association.



Speech and music are transmitted on a beam of light at an experiment conducted by Dr. V. K. Zworkin, research engineer of the RCA-Victor Co., Inc.

CLEVELAND Distributors

AITKEN RADIO CORP., 5208 Euclid Ave. Main office at Toledo, O.; branches in Detroit, Mich., & Dayton, O.
Endicott 2333.

Pres. & Treas., James E. Aitken; Secy., Stanley Hiatt; Credit Mgr., D. A. Browning; Branch Mgr., Owen Smith.

TERRITORY: (Exclusive) Northern & Western Ohio & Southern Michigan.

RADIO SETS: Crosley, Amrad. TUBES: Cunningham & National Union. ACCESSORIES: Burgess: Batteries, Belden, Jewell & Weston. ELECTRIC CLOCKS: Hammond. OTHER PRODUCTS: Evinrude Outboard Motors. (Exclusive distribution in Ohio.)

ARNOLD WHOLESALE CO., 5209-15 Detroit Ave. (Branch of The Tracy-Wells Co., Columbus, O.)
Evergreen 5400.

Pres., W. P. Tracy; Sec'y, L. A. McCroden; Sales Mgr., H. T. McMahon; Vice-Pres. & Gen. Mgr., R. C. Hager; Treas., C. C. Wolf.

TERRITORY: (In Ohio) Ottawa, Sandusky, Seneca, Wyandotte, Crawford, Erie, Huron, Lorain, Ashland, Wayne, Medina, Richland, Cuyahoga, Summit, Stark, Carroll, Harrison, Portage, Geauga, Lake, Ashtabula, Trumbull, Mahoning & Columbiana.

RADIO SETS: Silver-Marshall, Story & Clark, and Apex. TUBES: Radiotrons and Perryman. REFRIGERATORS.

CANTON HARDWARE CO., THE, 4800 Prospect Ave.
Henderson 3280.

Pres., H. R. Jones; Secy. & Treas., E. C. Raedil; Sales Mgr., B. F. Booth; Vice-Pres., O. E. Barnett; Credit Mgr., H. Ream.

TERRITORY: Exclusive distributors in Northeastern Ohio.

RADIO SETS: Brunswick. TUBES: Cunningham & DeForest. ACCESSORIES: Budd & other radio accessories.

CLEVELAND DISTRIBUTING CO., 5205 Euclid Ave.
Henderson 1290-1-2-3-4-5.

Pres., Ray H. Bechtol; Sec'y, Robert F. Bingham; Vice-Pres., R. O. Semrad; Treas., A. L. Madou; Sales Promot. Mgr., James Collins; Credit Mgr., C. A. Reeves.

TERRITORY: Northern Ohio.

RADIO SETS: Atwater Kent (exclusive). TUBES: Ken-Rad and Cunningham. ACCESSORIES: Belden quality line. CLOCKS: Hammond. OTHER LINES: Ken-Rad lamps.

CLEVELAND TALKING MACHINE CO., 1300 Euclid Ave. (Branch at 1217 Madison Ave., Toledo, O.) Endicott 4560.

Pres., Howard J. Shartle; Sec'y, Milton H. Wells.

TERRITORY: Northern Ohio & Erie and Crawford counties in Pa.
RADIO SETS: RCA, Victor. TUBES: Radiotrons. RECORDS: Victor. OTHER LINES: Victrolas.

CLEVELAND IGNITION CO., East 22 St., Sales Manager, R. H. Bechtol.
RADIO SETS: Stewart-Warner.

COLUMBIA PHONOGRAPH CO., 1825 E. 18th St. (Direct factory branch). (Sub-branch operated at Cincinnati).
Prospect 3180.

Dist. Mgr., R. J. Mueller; Ass't. Mgr., V. W. Lee.

TERRITORY: All of Ohio.

RADIO SETS: Columbia Tele-focal Combinations. TUBES: Cunningham. PORTABLES: Columbia. PHONOGRAPHS: Columbia. RECORDS, Okeh and Harmony.

FEGAN CO., THE N. A., 1531 West 25th St.
Main 6964.

Pres., N. A. Fegan; Secy., H. A. Gillis; Treas., W. M. Fegan; Credit Mgr., H. E. Stever.

TERRITORY: Exclusive Zenith distributor for Northeastern Ohio.

RADIO SETS: Zenith. TUBES: Cunningham.

GENERAL ELECTRIC SUPPLY CORP., 4958 Woodland Ave.
Henderson 7280.

TERRITORY: Northeastern Ohio.

RADIO SETS: General Electric. ELECTRIC CLOCKS: General Electric.

GENERAL MOTORS RADIO CORP., 3030 Euclid Ave. (Factory branch of The General Motors Radio Corp., Dayton, O.)
Prospect 6607.

Ohio Zone Mgr., Charles C. Price.

TERRITORY: Northeastern Ohio.

RADIO SETS: General Motors.

GRAYBAR ELECTRIC CO., 1010 Rockwell Ave.
Cherry 1360. Jim Sturtevant.

TERRITORY: Northeastern Ohio.

RADIO SETS: Graybar. ELECTRIC CLOCKS: Telechron, Revier, Manning-Brown.

HAAS ELECTRIC SALES CO., THE, 512-518 Huron Road.
Cherry 3788.

Pres., H. H. Parker; Secy., L. D. Goldhamer; Treas., J. W. Goldhamer.

TERRITORY: 30 Counties in Northeastern Ohio.

RADIO SETS: Colonial. Tubes: Cunningham & Eveready Raytheon. BATTERIES: Eveready. AERIAL EQUIPMENT: Standard brands. REFRIGERATORS: Mayflower. ELECTRIC CLOCKS: Sessions & Lincoln.

M. AND M. CO., 500 Prospect Ave.
Cherry 2520.

Pres. and Sales Promot. Mgr., J. C. McLean; Sec'y and Treas., J. Q. Herron; Sales Mgr., C. V. Brown;

Credit Mgr., E. A. Moritz.

TERRITORY: Northern Ohio and Western Pa. (exclusive on Clarion and competitive on Apex).

RADIO SETS: Clarion and U. S. Apex. TUBES: Cunningham, National Union and Areturus. ACCESSORIES: Yakley, Bnd, Parent and Burgess. CLOCKS: Hammond.

MAJESTIC DISTRIBUTING CORP. of Cleveland, 4608 Prospect Ave. Toledo Branch, 703 Adams St., C. W. Smith, Mgr. Columbus Branch, 199 E. Broad St., J. W. Tracey, Mgr.
Endicott 4338.

Pres., Dan J. Nolan; Vice-Pres., Ralph R. Myers; Credit Mgr., W. J. Grisez.

TERRITORY: Following Ohio Counties—All Exclusive: Monroe, Lenawee, Hillsdale, Williams, Fulton, Defiance, Henry, Lucas, Paulding, Putnam, Hancock, Van Wert, Allen, Hardin, Mercer, Auglaize, Wyandot, Crawford, Wood, Ottawa, Sandusky, Seneca, Muskingum, Guernsey, Noble, Franklin, Marion, Morrow, Union, Delaware, Knox, Holmes, Coshocton, Tuscarawas, Licking, Pickaway, Fairfield, Perry, Morgan, Ross, Hocking, Athens, Vinton,

Pike, Erie, Huron, Lorain, Cuyahoga, Summit, Lake, Trumbull, Portage, Stark, Wayne, Medina, Richland, Ashland.
RADIO SETS: Majestic. TUBES: Majestic. REFRIGERATORS: Majestic.

MAU SHERWOOD SUPPLY CO., 500 Line Road.
Main 7310. Mr. Mau.
RADIO SETS: Audiola.

MIDLAND RADIO CORP., 725-27 St. Clair Ave.,
N. W. (subsidiary of The Ohio Rubber Co.,
Cleveland).
Main 8165.

Pres., Henry Hallock; Vice-Pres. & Gen. Mgr., Warren Cox.
TERRITORY: Exclusive distributors in Northeastern Ohio.
RADIO SETS: RCA Radiola.

OHIO RADIO WHOLESALE, INC., 3869 Carnegie
Ave. Columbus branch, 69 East Chestnut, Mgr.,
D. Bennett.
Henderson 8880.

Pres., Warren B. Davis; Sec'y-Treas., Geo. H. Stuart; Sales Mgr.,
J. B. Hook.
TERRITORY: Northeastern Ohio.
RADIO SETS: Spartan.

RADIO WHOLESALE, INC., 2307 Chester Ave.
Prospect 1023. Lambert Freidl.
(Have no line at present).
TERRITORY: Northeastern Ohio.

ROGERS PHILCO CO., THE, 2309 Chester Ave.
Prospect 1000.
Pres., C. R. Rogers; Sales Mgr. & Sales Promot. Mgr.,
H. F. Nickerson; Vice-Pres., A. E. Rogers; Credit Mgr.,
J. A. Staggs.
RADIO SETS: Philco. Also Philco automobile Transitone sets.
TUBES: Philco.

SMITH, INC., B. W., 2019 Euclid Ave.
Endicott 4644.
Pres. & Treas., L. N. Bloom; Sec'y & Credit Mgr., E. S.
Herschberger; Sales Mgr., J. C. Richardson; Vice-Pres.,
P. H. Oelmau.
TERRITORY: State of Ohio.
RADIO SETS: Lyric and Edison. TUBES: Cunningham and
Arcturus.

STEWART-WARNER SALES CO., 3855 Carnegie
Ave.
Endicott 4952. Earle F. Morford.
TERRITORY: Northeastern Ohio.
RADIO SETS: Stewart-Warner.

WAITE, INC., F. HOWARD, 718 Union Trust
Bldg. (Mfg. representative—direct to deal-
ers sales).
Main 9591.

Pres. & Treas., F. Howard Waite; Vice-Pres., Octavi Waite; Sec'y,
M. E. Madsen.

TERRITORY: Following exclusive Northern Ohio counties:
Astabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Lucas,
Mahoning, Medina, Ottawa, Portage, Sandusky, Summit, Trumbull,
Wood, Ashland, Carroll, Coshocton, Guernsey, Harrison, Holmes,
Knox, Licking, Morgan, Muskingum, Noble, Richland, Stark,
Tuscarawas, Wayne, Allen, Anglaize, Crawford, Defiance, Dela-
ware, Fulton, Hancock, Hardin, Henry, Logan, Marion, Mercer,
Morrow, Paulding, Putnam, Seneca, Shelby, Union, Van Wert,
Williams and Wyandot.
RADIO SETS: Stromberg-Carlson. ACCESSORIES: Stromberg-
Carlson.

WESTINGHOUSE ELECTRIC SUPPLY CO.,
THE, 1430 West 9th St.
Cherry 6006.

Gen. Mgr. & Asst. Treas., J. Sidway; Secy., W. Ire-
land; Sales Mgr., W. W. Adams; Credit Mgr., R. Schaeffer.

TERRITORY: Exclusive Ohio Counties: Crawford, Marion, Mor-
row, Richland, Ashland, Medina, Wyandot, Seneca, Sandusky, Erie,
Lorain, Cuyahoga, Lake, Geauga, Ashtabula, Huron, two Pennsyl-
vania counties: Erie, Crawford.

RADIO SETS: Westinghouse. TUBES: Radiotrons. ACCES-
SORIES: Belden, Yaxley, Birnbach, Fleron, Bud. ELECTRIC
CLOCKS: Westinghouse New Haven. WASHERS: Apex & Sun-
ny Suds. REFRIGERATORS: Westinghouse.

WORTHINGTON CO., GEORGE, 802 St. Clair
Ave. N.
Cherry 1600.

Pres., A. J. Gaehr; Vice-Pres. & Sales Mgr., H. E.
Hulburd; Treas. & Sec'y, J. C. Schullian; Mgr. of Elect. & Radio
Dept., D. Aitken, Sr.

TERRITORY: 28 Northern Ohio counties exclusive.
RADIO SETS: FADA. TUBES: Cunningham.

A Centralized Sale A Week

(Continued from page 26)

tion to set. Dance halls offer a good field, but the public address equipment is best for church work. Among the things that have to be considered before an estimate can be given for a public address job are the following: How many speakers, their location, eliminating echoes, how much current will be necessary, how many mikes, whether the installation will be partial or entire, what's to go in and what's to go out, the type and size amplifier, the physical limitations of the job, etc. It is only when you have considered these salient points that you can quote your figure. It means knowing your stuff—knowing it backwards. This is a strictly cash or notes business. Two men can do any job. Of course, we use an outside electrician: we have to conform with local labor demands.

"One thing of which we have to be certain beforehand is that the party or parties with whom we do all the preliminary contact work, with whom we sign the contract, go over the plans, etc., has the necessary authority or say in the matter. Sometimes the individual with whom you transact the preliminary business appears to have that authority, but it has happened that when the time comes for the actual payment, those who have to cough up the money balk. So it is well to in-

vestigate your grounds thoroughly before actually starting your wheels moving."

There's one thing that Mr. Shannon's very enthusiastic about, and that is the sale and installation of ear-phones for the deaf, in churches and theatres, where often two or three rows of seats can be installed with the phones. or in homes and institutions for the deaf or aged, and, finally, in the private home where the family is anxious to provide entertainment for their dear ones whom age has deprived of their hearing. "There are good systems for this sort of installation," declares Mr. Shannon, "the Mears and the Acousticon systems, both reasonably priced, and, of course, there is the Western Electric job, but that's more expensive.

"Every radio dealer cannot go in for public address work in a big way, but he can tackle the head-phone angle of the business, as it presents less difficulties and less technical knowledge than the more complicated p.a. jobs. Organizations specializing in radio service work find that that type of business ties in with public address work beautifully. Although we get, on an average, one really good public address job a month, still, in between these jobs my men can be concentrating on the servicing of radio sets. Radio servicing and public address installations go together. They are the coal and ice business of radio. I am also enthusiastic over the introduction of extra speaker sales possibilities with new radio receivers."

PENTODE

the A. C. Tube
first demonstrated
by CeCo engineers
in January 1930

THIS new type tube . . . that delivers a greater undistorted power output . . . is a development pioneered by the CeCo Laboratories.

Over 15 months ago—on January 23, 1930—CeCo Engineers demonstrated the first A. C. Pentode receiving set, using the newly developed Pentode Tube.

Since the introduction of the first A. C. Pentode, the CeCo Laboratory has also pioneered two additional Pentode Tubes—the P-1 and the P-5. Both of these tubes were used in a receiving set demonstration at the R. M. Trade Show at Atlantic City in June, 1930. That was 9 months ago.

Recently the Radio Tube-Sub-Committee of the Radio Manufacturers Association suggested standard specifications to popularize the Pentode. These standard specifications will permit the adoption of this tube by receiving set manufacturers.

The new CeCo Pentode Tube—Pentode Type P-3—is in conformity with these specifications. It is a product of the laboratories that pioneered the Pentode. CeCo Mfg. Co., Inc., Providence, R. I.



**CeCo Engineers
pioneered the
AC Pentode Tube
January 23, 1930**



Radio Tubes

Licensed under patents of Radio Corp. of America

They're Better or You Don't Pay

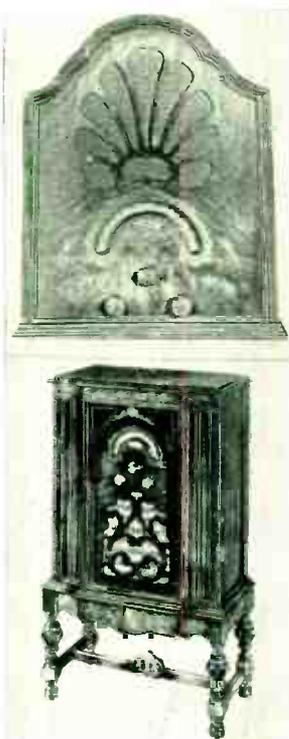


mentioned in your reply gives you a quicker answer.

New Models

Here are the latest additions to the lines offered by manufacturers

Lyric Pentodes



The P 4, a small table model, and the P 9, a console receiver, are the latest addition to the Lyric line of radios manufactured by the All American Mohawk Corp. Both of these models employ the Pentode tube, which, it is claimed, give increased audio amplification, with the result that for full output volume the detector operates at lower output voltage and does not overload. The listener gets greater volume with full tone quality and the sensitivity is increased and the weaker stations received with greater volume, it is said.

The P 4 mantle model lists at \$69.50 complete, the P 8 Consolelet at \$89.50 complete, and the P 9 at \$99.50 complete. Each of the above models contain the Lyric Pentode chassis, six tubes, four of which are screen grid 24's, one a Pentode and one of the '80 type. The P 8 Consolelet is the mantle model with its accompanying table.

Royal

The Royal Television & Finance Co. introduces seven new Royal models—five of them radio receivers and two television receivers. Of the radios, the Royal Midget, with Hammond electric clock, complete with tubes at \$77.50, and another Royal Midget, with clock, complete at \$59.50, are the most popularly priced; both are screen grid sets housed in walnut veneer cabinets. The Royal Consolelet (which is practically the Royal Midget \$59.50 job with a harmonizing table) is listed at \$67.50 complete; in this case the wood is shaded walnut; dimensions are 43 inches high, 10 inches deep and 16½ inches wide, including a bookshelf; equipped with electric dynamic speaker, \$100 is the price of the Royal All-Electric Console, complete; the matched walnut cabinet contains 8 tubes, 4 screen grid, electro dynamic speaker and push-pull amplification; volume, tone and selectivity control; 38 inches high, 25 inches wide and 14 inches deep. The Royal Secretary radio, complete at \$150, is a desk-secretary job and has an adjustable shelf, bookcase or china-closet adaptability, with the Royal radio and a chest of drawers; brown mahogany wood is used; the concealed set is screen grid and offers tone control, electro dynamic speaker, selectivity; size is 82 inches high, 15½ inches deep and 33 inches wide.

Sentinel



United Air Cleaner Corp. announces the Sentinel No. 108, a 7-tube superheterodyne receiver, with electro dynamic

speaker, double-action volume control, tuned antenna and coupled-type pre-selector, double-tuned intermediate transformers, tone control. The chassis, which uses four '224 screen grids, one '227 heater, one '245 power amplifier, and one 280 rectifier tube, with a consequent double screen grid detection, is constructed of heavy gauge steel, cadmium plated; the entire assembly is anchored to the cabinet. The variable condenser is mounted on a three-point suspension and prevents torsional distortion, it is said. Cabinet is of walnut; dial is calibrated in kilocycles, and is illuminated with a pilot lamp indicating whether receiver is on or off. Cabinet is 18½ inches high, 11¼ inches deep and 14 inches wide. Shipping weight is 38 pounds.

Ottawa



The Ottawa Furniture Co., manufacturers of the Ottawa radio, is presenting 7 cabinet models: Pembroke, No. 200, \$89.50; Cape Cod, No. 204, \$110.00; Oxford, No. 202, \$84.50; Cambridge, No. 205, \$94.50; Harvard, No. 201, \$98.50; Cued, No. 203, \$94.50; No. 206, \$98.50.

The Ottawa radio itself is 14 inches by 10 inches by 11 inches, excepting in No. 201 in which case it is 13½ inches by 9¾ inches by 10 inches, it is licensed under RCA patents, has four screen grid tubes and a total of 7 tubes; it is a four gang-condenser set with tone control, power dynamic speaker, illuminated dial and kilocycle arrangement.

Each of the 7 Ottawa cabinet models contain bookcases, several of them in the grandfather clock style, which make them adaptable from the furniture appeal angle. Available in Models 201 and 203 are a 5½ inch Hammond electric clock; Model 204 contains a 3⅝ inch Hammond electric clock.

No. 200 is 73 inches high, 19½ inches wide and 12½ inches deep, and weighs 95 pounds, with set; No. 204 is 78½ inches high, 17½ inches wide, 13½ inches deep, and weighs 90 pounds with set; No. 202 is 61½ inches high, 18 inches wide, 14¼ inches deep, and weighs 75 pounds with set; No. 205 is 55½ inches high, 16 inches wide, 14½ inches deep, and weighs 75 pounds with set; No. 201 is 38 inches high, 27 inches wide, 13½ inches deep, and weighs 90 pounds with set; No. 203 is 36½ inches high, 17 inches wide, 12½ inches deep, and weighs 75 pounds with set.

Carryola

The Carryola Cabaret, new and simplified coin operated record-changing phonograph, is announced by the Allen-Hough Carryola Co. as merchandise priced to retail at a popular figure. The new product is encased in an all-walnut cabinet, affording visible operation of the record-changing units. The measurements of the cabinet are 43 inches high, 27 inches wide, and 16 inches deep. The operating mechanism is finished in Butler silver, while the reproducing mechanism consists of a 10-inch full dynamic speaker, coupled with two stages of push-pull amplification. The machine is equipped with a multiple coin slot, permitting the insertion of from one to six nickles simultaneously; installations may be made providing for wall coin boxes for both booths and private dining rooms; there is also included a mechanical arrangement whereby the coin slot mechanism may be disconnected allowing operation without coin manipulation, which feature gives a greater market for the mechanism. The machine is said to be practically 100 per cent trouble-proof.

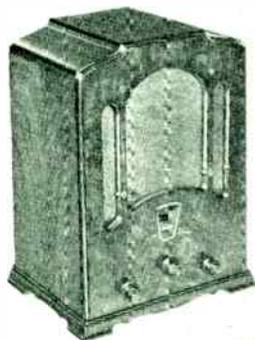
Atwater Kent Compact



The new Atwater Kent Golden Voiced Compact, with the pentode tube, has made its debut. It is Model 84 and contains a super-heterodyne circuit. The price is \$69.50, complete. Cabinet design is pure Cathedral Gothic; the front, flanked on either side by graceful pilasters, is of matched butt walnut, and the sides are of selected striped walnut; speaker grille is decorated with walnut Gothic fretwork. Dimensions are 19 ins. by 14 3/8 ins. by 9 3/8 ins.; it covers about a square foot of floor space. Equipped with the exclusive Atwater Kent quick-vision dial, and antenna adjuster.

Six tubes are employed in this 60 cycle A.C. set: three screen-grid 224's, one 227, one rectifier 280, and one pentode, the latter a five-element power amplifier used as audio output in the new circuit developed especially for the 84; the pentode tube is said to be able to handle as much power as two 245's plus the amplification of one 227—replacing all three.

RCA Victor Superette



An 8-tube screen-grid super-heterodyne in a small size cabinet, including tone color control, priced at \$57.50, less Radiotrons, comes from the plant of RCA Victor Co., Inc. The set uses two new Radiotron super-control amplifier tubes; push-pull amplification is a feature; cabinet is in butt walnut or Georgian brown finish, and is trim and convenient in measurements.

General Electric



The 18th century style of clock furniture characterizes the new General Electric Co.'s Junior models which break away from the Gothic or Cathedral designs in small cabinets. Both, of course, are portable and an antique bronze folding handle is placed on top of the sets, whose weight is 35 pounds.



One of the Junior models features an electric clock; dimensions of the Junior model are 19 3/4 ins. high, exclusive of the handle, 13 3/4 ins. wide and 10 ins. deep.

A companion of the G-E Junior is the Junior Console patterned in cabinet design more after the standard of the larger models, drawing its motif from the early American Duncan Phyfe design; the Junior Console is dimensioned as follows: 38 1/2 ins. high, 21 1/4 ins. wide, 11 3/4 ins. deep.

The chassis of both models employs an 8-tube screen-grid superheterodyne circuit; they are equipped with the newly perfected super-control Radiotron, minimizing cross talk, cutting down distortion on strong signals and eliminating necessity of a local-distance switch. New type of tone control is used, it is said. Special phonograph input terminals are part of the equipment. Standard 8 ins. dynamic speaker is employed. Tubes are shipped in sockets without removal. Circuits are well shielded.

Jackson-Bell

A new 8-tube midget radio, Model 68, the product of the Jackson-Bell Co., makes its appearance. Its attributes include a local-distance switch, tone control and vernier dial. A

Magnavox speaker, of latest design, is used as well as four screen grids and two '245's in push-pull amplification. The chassis, of solid construction, is fully shielded. The cabinet is of the concert grand size, somewhat larger than other Jackson-Bell midgets, but still portable. 19 1/4 inches high, 16 1/2 inches wide, and 11 inches deep.

Clarion



Models 80, 81, 90, and 91 join the Clarion line of receivers manufactured by TCA. Each of these super-heterodynes uses the Pentode and Variable-Mu tubes. 80 is a 7-tube mantel model, \$67.50 complete; 81 is a 7-tube console, \$81.50 complete; 90 is an 8-tube mantel model, \$78.50 complete; 91 is an 8-tube console, \$97.50 complete. The 8-tube models have automatic volume control, which maintains uniform volume. All models possess the full-vision dial; a mechanism plays a traveling beam of light on a transparent dial, locating the kilocycle reading of a station to which the selector is turned. A static reducer handles static noises of high frequency, these frequencies being eliminated. High sensitivity is another feature of the sets.

Three of the tubes are variable-mu, whose action eliminates background noise, hiss, cross-talk, hum and tube distortion, it is claimed. Superiority four times superior to other tubes is furthermore claimed for the variable-mu. The super-power amplifier, the 5-element audio output tube (pentode), provides 2 1/2 watts distortionless power,

making unnecessary two 245's in push-pull. Cabinets are of high-lighted two-tone effect, and construction is described as three times heavier than the ma-



Model 81, the other console, is 35 inches high, 12 inches deep, and 20 inches wide. The mantel models are made of highly figured butt walnut, with a high grade of veneer; 19 inches high, 1 1/4 inches deep, and 17 inches wide, while Model 80 is 19 inches high, 10 1/2 inches deep and 16 inches wide.

Recordophone

The Fastron Recordophone is a device by means of which permanent reproductions of air programs and the voices of those in the home are made on aluminum discs. Economy in the operation is claimed, and the electrical consumption in making a record cannot be put down in pennies, it is said. The aluminum discs, each 7 and 1/2 inches in diameter, will run for three minutes taking approximately 100 words on each side at a total cost of 30 cents for the record. The disc, furthermore, will last a lifetime, it is claimed, as they are of an alloyed metal that will keep the sound signals transplanted thereon, without impairing reproduction for over 1,000 playings. The Fastron Recordophone is also an orthophonic phonograph since it's attached to the radio and will play any discs formerly reproduced by the old phonograph.

Crosley



The Crosley Radio Corp. offers three full-sized Senior Superheterodyne (Pliodynatron) receivers, containing a new chassis. Crosley is also offering the "Johnny Smoker," a combination radio and smoking stand enclosed on all sides and equipped with the Wiglit chassis and electric power speaker.

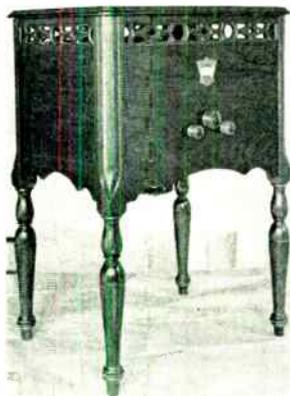
The three Pliodynatron models are the Super-Administrator, \$109.50; the Super-Rondeau, \$119.50, and the Super-Sondo, a combination, \$189.50. Cabinets are the creations of Everett Worthington. The chassis uses four screen grid 24's, one 27, two 45 power output tubes (used together as a push-pull audio amplifier), one 80 rectifier tube. A full floating moving coil dynamic speaker is used. Models embody static and tone control, local-distance switch, a power switch operated by the volume control knob. The Pliodynatron circuit is used in combination with a 24 screen grid oscillator tube. Dial is graduated in channel numbers, which are the frequencies with the last zero left off.

Dimensions of the three Pliodynatron cabinets are: Super-Administrator — 36 3/4 inches high, 23 1/2 inches wide, 13 3/4 inches deep; Super-Rondeau— 37 3/4 inches high, 25 1/4 inches wide, 15 1/2 inches deep; Super-Sondo—45 5/8 inches high, 29 1/4 inches wide, 16 3/8 inches deep. Both Administrator and Rondeau have phonograph pick-up terminals. Mahogany veneer decorates the tops and sides of the Administrator; pilasters are of mahogany, also, while the panel across front top arch is of a new veneer material: front

panel is of Crosley Repwood B. Sides and top of the Rondeau are of 5-ply walnut veneer with front, top and sides of selected veneers and the center panel a reproduction of an original wood carving. The rounded corners and sides of the Sondo are of a new material known as "Carve-Art," of multi-ply veneer faced with genuine walnut: motor is self-starting.

The front of the "Johnny Smoker" is of Crosley Repwood and reproduces an original wood carving; sides, top and back are of walnut veneer; dimensions are 22 inches high, 12 3/8 inches wide and 10 3/4 inches deep; three 24 screen grids are used, two in the radio frequency stages and one in the detector stage; the power output stage uses a type 45 tube; one 80 type tube is used as rectifier.

Kenola Pentode



A Pentode all-electric, 110 volt, 60 cycle A.C. 5-tube screen-grid set is offered by the Kenola Radio Corp. at \$87.50, complete. This set uses the latest power Pentode tube and the Variable-Mu Tetrode, which are said to reduce to a negligible factor background noise and hum. Three-stage circuit, tuned radio-frequency, power detector feeding directly into a high-power pentode output tube, no audio transformers, resistance capacity coupled throughout; circuit uses only 16 one-watt carbon resistances. No other make of screen grid tubes may be used beside two special type 551 Arcturus variable-mu radio frequency amplifiers, detector, rectifier, and "PZ" pentode; the power tube gives nearly three watts of undistorted audio power to drive the super electro-dynamic speaker, 12 ins. in diameter, concealed in base of cabinet, which is a piece of utility furniture, similar to an end table. Receiver is sold only with a complete kit of tubes ready to be placed in sockets. Kenola claims that its special speaker tone chamber gives the effect of two dynamic speakers operating in unison; there are open

grille decorations around the cabinet top giving freedom to the radiated sound waves, as well as ventilation for the slight heat of the rectifier and power tubes.

"Health" Ray Lamp



"Health" Ray Mfg. Co., Inc., presents the new "Health" ultra-violet and infra-red sunshine lamp at \$5.95 complete. This therapeutic ultra-violet lamp is said to contain a specially designed generator which gives simultaneous production of infra-red, A.C. or D.C. operation, rated at 1000 watts, 110 to 120 volts, uses 6 mm. 6 ins. carbons broken in half, the use of the latter making it possible to operate the lamp without the necessity of putting heavy fuses in the house lighting circuit; the lamp, therefore, is designed to operate on these smaller carbons, which are angle trimmed, with one carbon adjustable by means of a knob on the back of the lamp; a slight movement of the knob to the right brings the carbons together, then, a very slight movement to the left causes the arc to occur, the arc automatically going out when sufficient space has been burned between the ends of carbons; the less the knob is turned back the longer the arc will be sustained without resetting.

Resistance coil is of nickle chrome wire and is guaranteed for one year. Carbons may be used down to within 3/8 ins. of their ends and operate for 50 minutes. The lamp in carton weighs 5 pounds; shipping carton contains 6 lamps, weight 33 pounds. (Box of 10 carbons makes 10 sets of carbons by breaking standard 6 ins. carbon in half). List prices of accessories are as follows: goggles—25 cents; box 10, 6 mm. 6 ins. sunlight carbons \$1.10; box 10, 6 mm. 6 ins. tanning carbons—\$1.35.

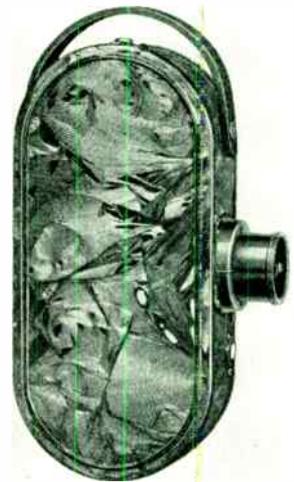
Zenith

Zenith brings out two new models—called Hypermetron—Model 82 and Model 89. The former, priced at \$235, complete with Zenith tubes, is a combination of butt walnut with long, graceful side panels

together with a shaped, piano finish top, a gracefully designed grill and bell turned legs; the set features automatic tuning—"press the button—there's your station": dimensions: 39 ins. high, 29 1/4 ins. wide and 14 1/2 ins. deep; there are 10 tubes, including rectifier. The latter, priced at \$265, complete with Zenith tubes, is a warm-toned, golden brown highboy, with grained butt walnut and walnut veneers, curved, receding side panels, carefully shaped top, and graceful leg effects; dimensions: 50 ins. high, 27 ins. wide and 17 1/4 ins. deep.

The Hypermetron circuit is said to be extremely sensitive and exceptional for long-distance reception. Cabinets themselves are said to contain air chambers and proper acoustics to back up the performance of the circuit.

Hollywood Camera

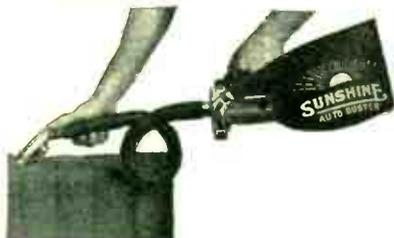


A new home movie camera, the "Hollywood Model," is to be placed on the market soon, announces the Stewart-Warner Corp. Mechanism and operation of this device are extremely simplified, it is claimed. It measures 8 3/4 inches high, 5 inches wide and about 2 inches thick. With a full 100-foot film it weighs but 3 1/2 lbs. Difficulty in adjusting lens to different light conditions is said to be eliminated by a simplified gauge attached to the lens, which, when turned to one of five marked stops, admits the proper amount of light. A sound counter audibly "clicks" as each foot of film passes the lens; a regular visual footage indicator dial is also set in the side of the case. Film can be loaded into the camera in daylight, it is said. Enclosed in an etched satin finish case, the camera will retail complete with leather bound case and shoulder carrying strap. Long wear is promised, as it is made of duralumin throughout, with gun metal satin-finished lens mount. It will retail at \$50.

Cashitivity

A page featuring goods that can be sold for cash—fast-selling products

Sunshine Hand Vac



Wise-McClung is now marketing the Sunshine Junior Hand Vac, which boasts an over-size motor delivering over 15 inches water lift. It has been designed and built for speedy cleaning of upholstered furniture, drapes, mattresses, stair carpets, for moth control, and deodorizing and other household uses. It is also compact enough to get into the corners of automobile interiors. Its nozzle is equipped with a floating, self-adjusting brush and detachable sanitizer, in which any brand of crystals may be used, it is said. The motor is self-lubricating. The weight is only a few pounds.

Universal



An electric hot water kettle, bearing the "Universal" trademark, is presented by Landers, Frary & Clark. Of aluminum construction, equipped with ebony handle and knob and 6 feet of heater

cord, this appliance has a 3-quart capacity and a 1,000 wattage. Its packed weight is 4 lbs., and it is packed one in a carton, or three in a unit package. The catalog number is E9263.

The new Universal kettle, claims the company, has the advantages of speed and thermostatic protection. It is said that a quart of water (starting at 60 degrees F.) can be boiled in this electric kettle in 6 minutes, and other quantities, it is further stated, up to three quarts, can be boiled proportionately as fast. The thermostatic switch, it is declared, permits the kettle to boil dry without injury to the unit; this latter feature is said to be exclusive with the Universal kettle. The appliance cannot be operated from a light socket, only from convenience outlets.

Victor Remote Control



Presto Recorder

Home recording equipment in two models has been announced by Presto. One model in a kit form for use on radio phonograph combinations lists at \$39.50. The other contains an electric turntable complete with recording and reproducing equipment in a portable leatherette case and lists for \$85.

The kit contains recording head, feed mechanism, microphone, and selective switch. It is said to be easily installed on standard combination instruments.



Separate parts, including recording head, feed mechanism, microphone, selective switch, recording needles, reproducing needles, and records are sold separately.

The Presto recorder cuts and grooves its own records from aluminum alloy blanks. It does not use pre-grooved discs. Records may be made direct from broadcast reception.

Luminous Tone Control



Each tone is shown by different colored lights, green, purple, red and white, in the Royale Luminous Tone Control. It is a small tone control box, which fits easily into the hand. The price is \$6.95. "Just turn the knob—the tone and color both change," assert the manufacturers, who claim that their product has eye as well as ear and sales appeal. Dr. Lee DeForest offers the Royale Luminous Tone Control as his latest invention. A figure of a kneeling female contemplating the shifting colors from the pilot light graces the device. In back of her is located the control knob.

Baltimore and Washington

Polikoff Uses Airplanes to Go Places

Martin J. Polikoff, well known in the radio trade as the representative of manufacturers of radio products, with headquarters in Philadelphia, recently did some fast stepping—rather some whizzing—in the vicinity of Washington, D. C., and Philadelphia, attending two sales meetings in one day.

On March 7th, he had a long contab with Oscar Getz, vice-president and general sales director of the Steinite Mfg.



Martin J. Polikoff and Oscar Getz before Marty's airplane hop.

Co., and attended a jobbers' meeting at 10:00 o'clock, following which he hopped aboard a tri-motored plane at the Washington-Hoover Airport, in the Capital City, at 1:00 o'clock, arriving at Philadelphia an hour later, in time to attend a sales meeting at 2:30 with the Keystone Radio Co., distributors for Steinite in Philadelphia.

Parks & Hull Takes on Cinderella Washer

Parks & Hull, Inc., outstanding jobber in Baltimore, whose radio line is the Atwater Kent product, has just taken on the Cinderella washer, manufactured by Black & Decker. Gordon Parks heads the progressive Parks & Hull organization. Both he and his advertising manager, R. B. Green, are enthusiastic about the Cinderella appliance, listing at \$37.50. It washes by bubble action, air, suds, and water being forced through the clothes.

Ollendorf-Hirsch Acquire Victor Distributorship

Following its purchase of the business of the Baltimore Victor Distributing Co., Ollendorf-Hirsch, formerly National Light & Electric Co., Brooklyn, N. Y., have been appointed RCA-Victor distributors for the Baltimore-Washington territory. Ollendorf-Hirsch have been Radiola distributors in the New Jersey and Brooklyn-Long Island territories for the past 12 years. Handling both the Radiola and Victor lines, the company's selling area for the latter takes in all of Maryland, District of Columbia, 24 counties in Northern Virginia, 8 counties in West Virginia, and 2 counties in Delaware.

The operation of the business, the company announces, will comprise the distribution of Radiolas, Victor instruments, records, etc., and will be carried on in the existing Baltimore Victor Distributing Co.'s houses, the main one located in the Candler Bldg., Baltimore, with a branch on 10th Street, N. W., Washington. Each house will be provided with service stations, trucking service and complete distribution facilities. Both George Ollendorf and Harry Hirsch have the esteem of RCA-Victor and the dealer trade.

"I and my associates plan to personally visit our dealers and are looking forward with pleasure to the opportunity," Mr. Ollendorf declares. "We feel very proud of the privilege and responsibility afforded us by the RCA-Victor Co. to service RCA-Victor dealers in the new territory. We will extend to this cooperation our undivided time and attention, and we feel that with our 22 years of merchandising experience and friendly relationship, backed by the two most powerful trademarks in the radio industry, namely, RCA and Victor, we can assure our dealers a happy and profitable future. We will lend our entire efforts to this end, and solicit the cooperation of the dealer trade."

May Hardware Steinite Jobber in Washington

The F. P. May Hardware Co., Washington, D. C., has been appointed a distributor of the new Steinite line of tuned radio frequency and super-heterodyne receivers, according to Martin J. Polikoff, of Philadelphia, district sales manager for Steinite Mfg. Co.

The May Hardware Co. maintains warehouses and general offices on C Street, N. W., and will cover the District of Columbia and parts of Virginia and West Virginia. One of the South's oldest established jobbing houses, this company handles hardware, automotive equipment, and electrical appliances, in addition to radio.

A dozen men are traveled by the May Hardware Co., the executive personnel of which consists of: Arthur May, president

Washers and Refrigerators Sell Fast, Says Zamoiski

Radio dealers are making excellent profits from selling washing machines, according to C. J. Zamoiski, president and treasurer of the Jos. M. Zamoiski Co., Baltimore, distributor of radio and home appliances. Mr. Zamoiski distributes Servel refrigerators, Easy washers, Telechron clocks, and Samson-United products in addition to radio.

"Thirty dealers in our territory," Mr. Zamoiski told the writer, "have already sold over three carloads of washing machines in only three weeks' time since we started distributing Easy. I know of no dealer on our books who hasn't given us at least one repeat order in this time."

"Refrigerators are going just as big. We now have approximately sixty dealers selling Servel, and we have started a merchandising school to give them ideas on retailing. The day of order-taking is over, we tell them, and we show them how to exist in this day of intensive home selling. Twice monthly the dealers gather for these instructive meetings."

"Jerry Proper has been placed in charge of our appliance division, to handle Telechron and Samson-United, and he works with both our salesmen and their dealers in helping move these products. With the 'proper' kind of help, the radio dealer makes the best kind of an appliance merchant."

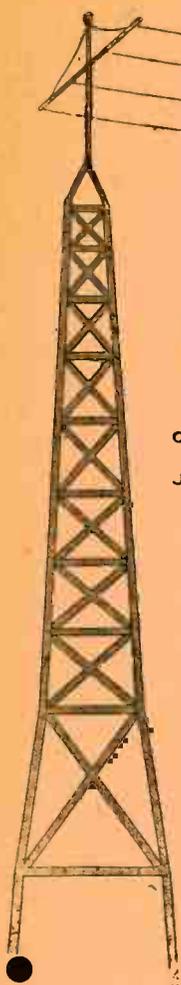
Baltimore Radio Men Know Their Tees

Golfers are hereby warned off Baltimore. The home talent is too good for you, boys. Of course, they may handicap you a derby hat or a pair of spats, and even supply you with light-weight clubs, but when Charlie Coombs and a certain radio magazine representative, two city slickers, tried to take one of Baltimore's distributors of radio and electric appliances, they got took.

Fiske Busy with New Jesse French Sets

Fiske Factors, Inc., distributor for Jesse French & Sons Piano Co., is now holding forth with the new Jesse French line of radios, including the Tudette table model, listing at \$59.50 complete, and another midget, listing at \$75 complete; the first is a t.r.f. set and the latter a super-heterodyne. The new line is rounded out with a consolette and a radio-phonograph combination.

and treasurer; Leo C. May, vice-president; Charles E. Clayton, secretary; Harry E. Young, manager radio department



RADIO

JOS. M. ZAMOISKI CO.
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THE ELECTRICIERS

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PRES. AND TREAS.
JOSEPH KATZ,
VICE PRES

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NEW! ATWATER KENT COMPACT

Super-Heterodyne
Pentode

\$69.50

with tubes



Baltimore and Norfolk Atwater Kent Dealers now have the **FIRST** Pentode Compact and the **FIRST** Super-Heterodyne in the new **COMPACT** Model. It insures your greatest year in Radio.

PARKS & HULL, Inc.

Atwater Kent Wholesalers

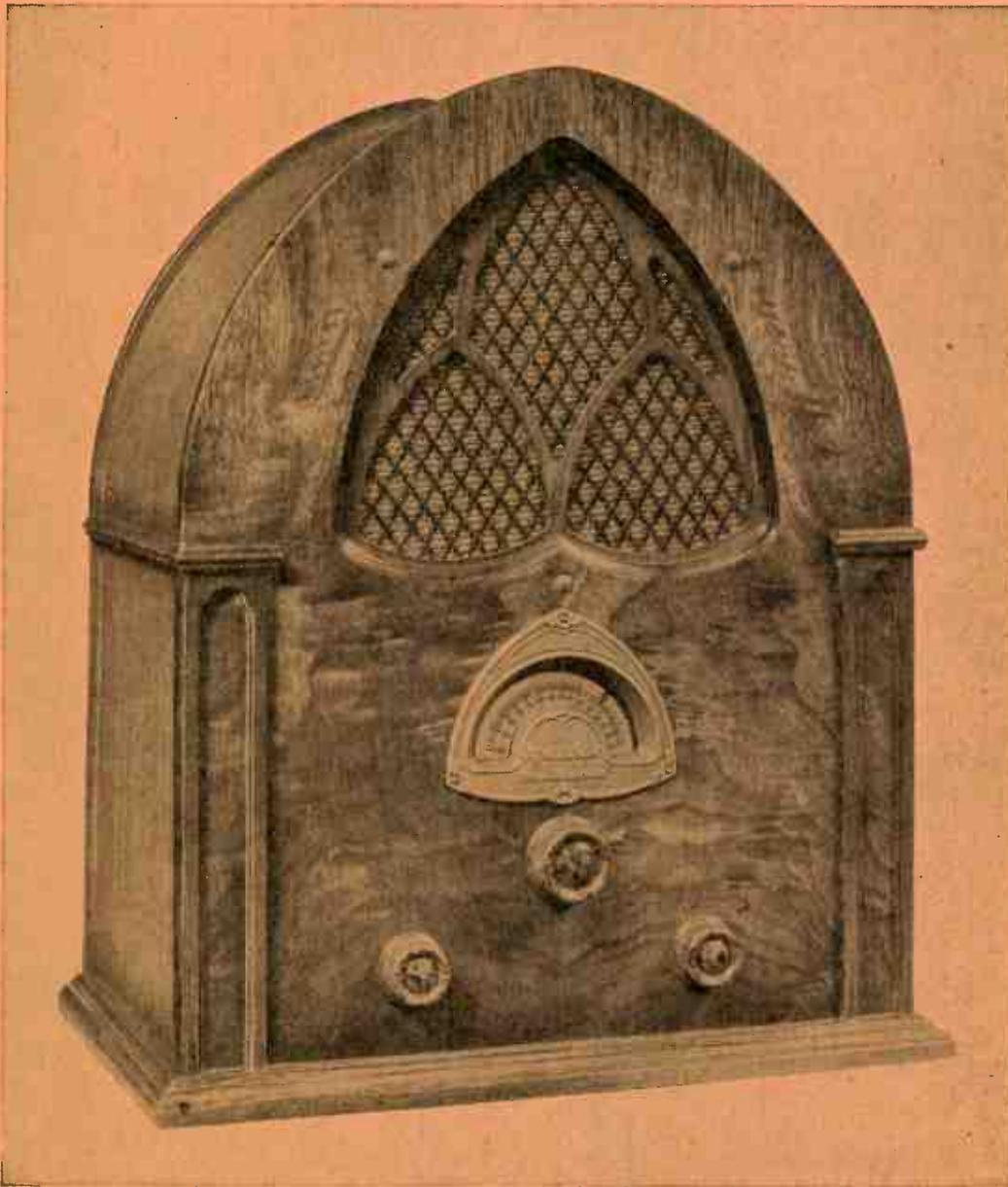
1035 Cathedral St.
BALTIMORE

16th and Monticello Ave.
NORFOLK

Cinderella Clothes Washers; Ken-Rad Tubes; Cunningham Tubes

Washington Atwater Kent Dealers

Look at the beauty of this New Atwater Kent Golden Voice Compact, with Super-heterodyne and PENTODE, listing at **\$69.50** complete with tubes. This is the latest achievement of the radio art, and sets a new standard for radio reception.



This new model, No. 84, is the first perfected use of the new PENTODE tube in a super-heterodyne circuit.

SOUTHERN WHOLESALERS, INC.

Atwater Kent Wholesalers 1519 L St., N. W. Washington, D. C.

Serviceman salesmanship

(For the serviceman who wants more money)

Service men can "feed" the sales organization "hot" leads

From an Exclusive Interview with

John S. Dunham

President, QRV Radio Service, Inc.

THAT the service man can and should work hand-in-glove with the salesman, is the belief of John S. Dunham, president of the QRV Radio Service, Inc., of New York City. "I believe the service man is the ideal individual to pass leads on to the sales organization," he recently told the writer, "although I do not believe in attempts to make the service man into a salesman in addition to his regular work.

"Obviously, the service man is the one who really contacts with the customer, but he should be used merely as the point of contact to suggest to the sales organization openings for new sales. The service man should be trained to look for the signs of a potential sale: he should observe the customer's attitude and spot the clues discernible in a customer who is considering a new set. The service man should be provided with slips for this purpose. After he's turned in the slip the sales force can go to work. If his lead hasn't produced an actual sale within a reasonable length of time, then the service man naturally loses out on his commission. But if the sales force does put over the sale, then the service man who provided the lead should get his commission, but his actual selling work should be confined to the gathering of sales leads. His commission should be small.

"The average dealer in the metropolitan area," declares Mr. Dunham, "has no idea of the value of good service, the absolute necessity of good installation work if his merchandise is to sound well in the customer's home. The average dealer, as you know, won't pay his own service men, or a service organization, enough to render decent service. In New York you have the foolish picture of dealers telling the customer of six months' to two years' service."

The QRV organization used to advertise regularly two or three years ago in the Sun, Herald, Times, and Evening Journal, and has advertised some this fall, but it is now contacting its public by means of return post cards. Each customer is contacted regularly with these cards for a year. After the company has serviced a set for the first time, that customer receives his first QRV card

If only your radio itself could telephone to us!



"Hello, Doc QRV. It has been FOUR MONTHS since you were here to see me, and you know it is time to look me over again. My volume control and tube sockets feel dusty, and some of my tubes are a little weak. When are you coming?"

The attached return card, mailed now, will secure prompt service!

Sincerely yours,
J. F. B. MEACHAM
Vice-Pres.



four months later, and a new card each succeeding month.

QRV service men carry tube kits with them. They sell tubes and everything that is necessary for service. The service man gets a small commission, but not enough to turn his mind entirely towards selling.

"The most important thing for service men to remember always is that his job is not primarily to repair the radio, but is, primarily, to satisfy the customer," states Mr. Dunham.

"Everything else follows this 'first principle' of servicing. Clothes must be clean, shoes must be shined, hair must be combed, fingernails must be presentable. The service man should wear a white shirt; he must never wear a cap, must never smoke in the customer's house, never engage in unnecessary conversation with the customer, outside of the necessary conversation to ascertain what is wrong with the set.

But the primary consideration for the service man is this: he has to fix that something in the customer's mind, because of the effect that something is having on

the customer. It is not only fixing the radio trouble itself. Repairing the radio is even secondary to what's in the customer's mind. The service man must "sell" the customer the idea of a good installation and the fact that the set itself is quiet.

QRV service men always do their best when they make an installation, because if a complaint is received within two weeks on one of their jobs, that service man has to go back to that job on his own time and at his own expense. If another service man has to perform the job, then the service man responsible for the complaint has to pay the second man out of his own pocket. It is easy to see how this efficient check eliminates inefficient service work.

It is the necessity of the good installation work that draws Mr. Dunham's attention. If the public would insist on good installation work, then half the service walls would die down, he believes. Radio manufacturers in their advertising don't stress sufficiently the importance of the installation, he says. The average dealer regards service work—and installations are a part of his disdain—as a necessary evil. "He doesn't give it one-tenth the attention it deserves," declares the QRV president. "He should realize that service work is absolutely essential to retain his customers' good will."

Write us for further information about how dealers operate service departments to make sales.

Mr. Dealer: Give this page to your chief service man. He'll make money for you.

THE JOURNAL RADIO

...cyclopedia...

(Midgets and Automatics will be found on page 52)

Trade Name	Model	Price	Tone Control	Tube Types	Trade Name	Model	Price	Tone Control	Tube Types	
Apex	28-A	\$105.00 (tubes)	Yes	3-24, 2-27, 2-45, 1-80	General Motors	Hepplewhite	\$136.00 (tubes)	Yes	3-24, 2-27, 2-45, 1-80	
	31-B	\$127.50 (tubes)	Yes	3-24, 2-27, 2-45, 1-80		Sheraton	\$152.00 (tubes)	Yes	3-24, 2-27, 2-45, 1-80	
	31-C (Comb.)	\$175.00 (tubes)	Yes	3-24, 2-27, 2-45, 1-80		Late Italian	\$172.00 (tubes)	Yes	3-24, 2-27, 2-45, 1-80	
	11-D	\$185.00 (tubes)	Yes	3-24, 2-27, 2-45, 1-80		Queen Anne Comb.	\$198.00 (tubes)	Yes	3-24, 2-27, 2-45, 1-80	
	54	\$95.00 (tubes)		1-01A, 2-24, 1-26, 1-71A		Georgian Comb.	\$279.00 (tubes)	Yes	3-24, 2-27, 2-45, 1-80	
	55	\$58.00 (tubes)		1-01A, 2-24, 1-26, 1-71A						
	Automobile Set 32B	\$75.00 (tubes) \$79.50 complete		2-24, 1-26, 1-01A, 1-71A 3-24, 2-45, 1-27, 1-80						
Atwater Kent	70	\$119.00	Yes	3-24, 2-27, 2-45, 1-80	Graybar	700	\$142.50	No	4-24, 2-45, 1-27, 1-80	
	74	\$125.00	Yes	3-24, 2-27, 2-45, 1-80		770	\$179.50	Yes	4-24, 2-45, 1-27, 1-80	
	75 (Comb.)	\$195.00	Yes	3-24, 2-27, 2-45, 1-80	900 (Comb.)	\$285.00	Yes	4-24, 2-45, 1-27, 1-80		
	76	\$145.00	Yes	3-24, 2-27, 2-45, 1-80	Grebe	AH-1	\$160.00	Yes	3-24, 1-27, 1-80, 2-45	
	72	\$133.00	Yes	3-24, 2-27, 2-45, 1-80		AH-1	\$189.50	Yes	3-24, 1-27, 1-80, 2-45	
Andiola	62	\$107.00	Yes	4-24, 2-45, 2-27, 1-80		AH-1	\$225.00	Yes	3-24, 1-27, 1-80, 2-45	
	72	\$119.00	Yes	4-24, 2-45, 2-27, 1-80		SK-4	\$265.00	Yes	3-24, 1-27, 1-80, 2-45	
	82	\$181.00	Yes	4-24, 2-45, 2-27, 1-80		SK-4	\$285.00	Yes	3-24, 1-27, 1-80, 2-45	
	Junior	\$60.50	Yes	Triple screen grid	SK-4 Comb.	\$450.00	Yes	3-24, 1-27, 1-80, 2-45		
Brunswick	15	\$189.50	Yes	4-32, 1-30, 4-71	Gulbransen	Champion 161	\$139.00	Yes	3-24, 2-27, 2-45, 1-80	
	22	\$170.00	Yes	4-24, 2-45, 1-80		Champion Jr.	\$94.50	Yes	3-24, 1-27, 2-45, 1-80	
	42 Auto. Comb.	\$480.00	Yes	4-24, 2-45, 1-80		Minuet	\$81.75		3-24, 1-27, 2-45, 1-80	
	S-81	\$185.00	Yes	4-24, 1-27, 2-45, 1-80	Howard	Plymouth	\$165.00		3-24, 2-45, 1-27, 1-80	
	S-32 Comb.	\$265.00	Yes	4-24, 2-45, 1-80		Console	\$185.00	Yes	3-24, 2-45, 1-27, 1-80	
	Models 15, 22, 32, and 42 also in DC. Model 15 also battery.					Puritan	\$219.00		3-24, 2-45, 1-27, 1-80	
Bosch	58-B	\$159.50	Yes	4-24, 1-27, 2-45, 1-80		Hepplewhite	\$243.00		3-24, 2-45, 1-27, 1-80	
	58-A	\$144.50	Yes	4-24, 1-27, 2-45, 1-80		Florentine	\$275.00		3-24, 2-45, 1-27, 1-80	
	60-D	\$195.00	Yes	5-24, 1-27, 2-45, 1-80	Gothic Comb.	\$325.00		3-24, 2-45, 1-27, 1-80		
	60-E	\$250.00	Yes	5-24, 1-27, 2-45, 1-80				3-24, 2-45, 1-27, 1-80		
	62-C	\$159.50	Yes	4-24, 2-27, 2-45, 4-24, 2-80	Kennedy	826	\$199.00	Yes	3-24, 2-27, 2-45, 1-80	
	59-A	\$144.50	Yes	4-24, 1-27, 2-45, 1-80		726	\$229.00	Yes	3-24, 2-27, 2-45, 1-80	
	59-B	\$159.50	Yes	4-24, 1-27, 2-45, 1-80		426	\$158.00	Yes	3-24, 2-27, 2-45, 1-80	
	62-A	\$144.50	Yes	4-24, 2-27, 2-45, 4-24, 2-80		526	\$169.00	Yes	3-24, 2-27, 2-45, 1-80	
	62-B	\$159.50	Yes	4-24, 2-27, 2-45, 4-24, 2-80		632	\$139.00		3-24, 2-45, 2-27, 1-80	
	73A	\$79.50 complete		2-45, 3-24, 1-27, 1-80	826A Comb.			3-24, 2-45, 2-27, 1-80		
73B	\$95.00 complete		2-45, 3-24, 1-27, 1-80	826B Comb.			2-52, 3-24, 2-45, 2-27, 1-80			
Carteret	M5		Yes	3-24, 1-45, 1-80	Kiel	K100	99.50		3-24, 2-27, 1-45, 1-80	
Clarion	70	\$79.50 (tubes)	Yes	1-27, 3-24, 2-45, 1-80		Leutz	Seven Seas	\$275.00	No	3-24, 2-27, 2-50, 2-81
	81	\$84.50 complete		Pentode Super-Het.	Silver Ghost		\$2000.00	No	4-24, 4-27, 2-50, 2-81	
	91	\$99.50 complete		Pentode Super-Het.	Lytic	H-19	\$134.00	Yes	3-24, 1-27, 2-45, 1-80	
Colonial	Princess	\$129.50		3-324, 1-327, 2-35, 1-80		H-34	\$149.00	Yes	4-24, 2-45, 1-27, 1-80	
	Mayflower	\$139.50		3-324, 1-327, 2-35, 1-80		H-29	\$154.00	Yes	4-24, 2-45, 1-27, 1-80	
	Windsor	\$149.50		3-324, 1-327, 2-35, 1-80		H-69	\$184.00	Yes	4-24, 2-45, 1-27, 1-80	
	Lafayette	\$275.00		3-24, 1-27, 2-35, 1-80		325	\$365.00	Yes	4-24, 2-27, 2-45, 1-80	
Columbia	C-21	\$185.00		4-24, 1-27, 2-45, 1-80		365	\$325.30	Yes	4-24, 2-27, 2-45, 1-80	
	C-20	\$145.00		4-24, 1-27, 2-45, 1-80		J8	\$ 69.50 complete	Yes	4-24, 1-45, 1-80	
	939 (Comb.)	\$285.00		4-24, 2-45, 1-27, 1-80	J8	\$ 89.50 complete	Yes	4-24, 1-45, 1-80		
	Crosley	Elf	\$37.50 (tubes)	No	2-24, 1-45, 1-80	P-9	\$99.50 complete		4-24, 1-80, Pentode	
Buddy Boy		\$59.50 (tubes)	No	3-24, 1-45, 1-80	Majestic	22	\$ 97.50 (tubes)	Yes	3-51, 2-27, 2-45, 1-80	
Buddy		\$64.50 (tubes)	No	3-24, 1-45, 1-80		23	\$119.50 (tubes)	Yes	3-51, 2-27, 2-45, 1-80	
Pal		\$74.50 (tubes)	No	3-24, 1-45, 1-80		61	\$137.50 (tubes)	Yes	3-51, 1-24, 2-27, 2-45, 1-80	
Mate		\$79.50 (tubes)	No	3-24, 1-45, 1-80		62	\$149.50 (tubes)	Yes	3-51, 1-24, 2-27, 2-45, 1-80	
Classmate		\$85.50 (tubes)	No	3-24, 1-45, 1-80		163 Comb.	\$197.50 (tubes)	Yes	3-51, 1-24, 2-27, 2-45, 1-80	
Director		\$107.50	No	3-24, 1-27, 2-45, 1-80	National Transformer	Chassis			3-24, 2-27, 2-45, 1-80	
Administrator		\$112.50	No	3-24, 1-27, 2-45, 1-80		Mantle			3-24, 2-27, 2-45, 1-80	
Arbiter		\$137.50	No	3-24, 1-27, 2-45, 1-80		Philco	96 Comb.	\$198.00	Yes	3-24, 3-27, 2-45, 1-80
Super-Admin.		\$109.50 complete		4-24, 2-45, 1-27, 1-80			96	\$127.50	Yes	3-24, 3-27, 2-45, 1-80
Super-Rondeau		\$119.50 complete		4-24, 2-45, 1-27, 1-80			77 Console	\$95.00	Yes	3-24, 2-45, 1-27, 1-80
Super-Sondo		\$189.50 complete		4-24, 2-45, 1-27, 1-80	77 Lowboy		\$110.00	Yes	3-24, 2-45, 1-27, 1-80	
Fada		47 Comb.	\$328.00	Yes	3-24, 3-27, 2-45, 1-80		41 Highboy			3-24, 2-71A, 1-27
	41	\$218.00	Yes	3-24, 3-27, 2-45, 1-80	41 Lowboy				3-24, 2-71A, 1-27	
	42	\$159.00	Yes	3-24, 3-27, 2-45, 1-80	41 Console				3-24, 2-71A, 1-27	
	44	\$188.00	Yes	3-24, 3-27, 2-45, 1-80	Concert Grand Comb.		\$350.00	Yes	4-24, 4-27, 2-45, 1-80	
	46	\$228.00	Yes	3-24, 3-27, 2-45, 1-80	Superhet.			Yes	4-24, 4-27, 2-45, 1-80	
	82	\$172.00	Yes	3-24, 3-27, 6-71	111 (Highboy)		\$155.00	Yes	4-24, 4-27, 2-45, 1-80	
	84	\$201.00	Yes	3-24, 3-27, 6-71	111 (Lowboy)	\$129.50	Yes	4-24, 4-27, 2-45, 1-80		
	81	\$231.00	Yes	3-24, 3-27, 6-71	20 (Lowboy)	\$ 69.50	No	1-83, 3-24, 2-71A, 1-27		
86	\$241.00	Yes	3-24, 3-27, 6-71	220 (Comb.)	\$ 99.50	No	1-83, 3-24, 2-71A, 1-27			
Jesse French	Queen Anne	\$89.50	No	3-24, 1-45, 1-80	211 (Comb.)	\$272.00	Yes	4-24, 4-27, 2-45, 1-80		
	Junior	\$ 69.50	No	3-24, 1-45, 1-80						
	Tudor (Comb.)	\$129.50	No	3-24, 1-45, 1-80						
General Electric	31	\$142.50	No	4-24, 2-27, 2-45, 1-80						
	51	\$179.50	Yes	4-24, 2-27, 2-45, 1-80						
	71 (Comb.)	\$285.00	Yes	4-24, 2-27, 2-45, 1-80						
	TRF	\$112.50	No	4-24, 2-45, 1-80						
	Junior	\$82.50		8-tube super-het.						

Trade Name	Model	Price	Tone Control	Tube Types
Pierce-Airo	724 Chassis		Yes	3-24, 2-27, 2-45
	727 Chassis		No	
RCA Radiola	30	\$142.50	Yes	4-24, 2-27, 2-45, 1-80
	32	\$179.50		
	36 (Comb.)	\$285.00		
	42	\$ 91.50 (tubes)		
Sentinel	10	\$127.50	Yes	3-24, 1-27, 2-45, 1-80
	15	\$137.50	Yes	3-24, 1-27, 2-45, 1-80
	5	\$130.00	Yes	3-24, 1-27, 2-45, 1-80
	11	\$99.50	No	4-24, 1-27, 2-45, 1-80
	12 (Comb.)	\$180.00	Yes	3-24, 1-27, 2-45, 1-80
	9 (Comb.)	\$149.50	No	4-24, 1-27, 2-45, 1-80
	16	\$150.00	Yes	3-24, 1-27, 2-45, 1-80
	Portrola	\$89.50	Yes	4-24, 1-27, 1-45, 1-80
Silver Marshall	39	\$106.55 (tubes)	Yes	3-24, 2-27, 2-45, 1-80
	40	\$124.90 (tubes)	Yes	4-24, 2-27, 2-45, 1-80
	41	\$149.90 (tubes)	Yes	4-24, 2-27, 2-45, 1-80
Sparton	591	\$119.25		6-84, 2-82, 1-20
	598	\$119.25		6-84, 2-82, 1-20
	600	\$141.00		7-84, 1-80, 2-88
	610	\$141.00		7-84, 1-80, 2-88
	620	\$156.75		7-84, 1-80, 2-88
	740	\$185.75		7-84, 2-81, 2-50
	750	\$222.75		7-84, 2-81, 2-54
	870	\$327.25		7-84, 2-26, 2-81, 2-56
	Automobile Set	\$115.00		4-24, 1-12
	420	\$96.50		2-24, 1-27, 2-83
	410	\$56.00		
Steinige	Consolette	\$64.50	Yes	3-24, 2-45, 1-80
	605	\$99.50	Yes	3-24, 2-45, 2-27, 1-80
	630	\$79.50	Yes	3-24, 2-45, 2-27, 1-80
	635	\$119.00	Yes	3-24, 2-45, 2-27, 1-80
Sterling	Mantel	\$69.00		3-224, 1-45, 1-80
	Chorister	\$107.50	Yes	4-24, 1-27, 2-45, 1-80
	Minstrel	\$123.50	Yes	4-24, 1-27, 2-45, 1-80
	Auto-Radio	\$70.00	No	3-24, 1-27, 1-71
Stewart Warner*	Raphael	\$162.50		3-24, 2-27, 2-45, 1-80
	St. James	\$197.50		3-24, 2-27, 2-45, 1-80
	Graham	\$187.50		3-24, 2-27, 2-45, 1-80
	Avon	\$ 94.75		3-24, 2-27, 2-45, 1-80
*All four models also available for DC and Battery Operation				
5 (Comb.)		\$215.00		3-24, 2-27, 2-45, 1-80
	11	\$112.50		3-24, 2-27, 2-45, 1-80
Story & Clark	36	\$208.00	Yes	3-24, 1-27, 2-45, 1-80
	43	\$248.00	Yes	3-24, 2-27, 2-45, 1-80
	51	\$317.00	Yes	3-24, 2-27, 2-45, 1-80
	Petite	\$ 89.50 (tubes)	Yes	3-24, 2-45, 1-27, 1-80
Stromberg Carlson	10	\$259.00		4-24, 2-45, 1-80
	11 (Convert.)	\$285.00		4-24, 2-45, 1-80
	12	\$855.00		3-24, 3-27, 2-45, 2-80
	14 (Auto. Comb.)	\$645.00		3-24, 3-27, 2-45, 2-80
	645	\$272.50	No	3-24, 3-27, 2-45
	652	\$239.50	No	3-24, 1-27, 1-45, 1-80
654 (Comb.)	\$369.00	No	3-24, 1-27, 1-45, 1-80	
846	\$347.50	No	3-24, 3-27, 2-45, 2-80	
Victor	R15	\$112.50	No	4-24, 2-45, 1-80
	R85	\$152.50	Yes	4-24, 2-45, 1-27, 1-80
	R39	\$185.00	Yes	4-24, 2-45, 1-27, 1-80
	RE 57 (Comb.)	\$285.00	Yes	4-24, 2-45, 1-27, 1-80
	14	\$ 91.50 complete	Yes	4-24, 2-45, 1-80
	34	\$121.00 complete	Yes	4-24, 2-45, 1-27, 1-80
	17 (Comb.)	\$189.50 complete	No	4-24, 2-45, 1-80
Victoreen	Victoreen	20 cabinet designs	Yes	4-24, 3-27, 1-50, 2-81
Westinghouse	5	\$142.50	Yes	4-24, 2-27, 2-45, 1-80
	6	\$179.50	Yes	4-24, 2-27, 2-45, 1-80
	WR7 Comb.	\$245.00	Yes	4-24, 2-27, 2-45, 1-80
	4	\$112.50	No	4-24, 2-45, 1-80
Columnaire			Yes	4-24, 2-27, 2-45, 1-80
Zenith	71	\$185.00	Yes	3-24, 3-27, 2-45, 1-80
	72	\$210.00	Yes	3-24, 3-27, 2-45, 1-80
	73	\$265.00	Yes	3-24, 3-27, 2-45, 1-80
	74	\$315.00	Yes	3-24, 3-27, 2-45, 1-80
	75 (Auto. Comb.)	\$375.00	Yes	3-24, 3-27, 2-45, 1-80
	10	\$155.00	Yes	4-24, 2-45, 1-27, 1-80
	11	\$155.00	Yes	4-24, 2-45, 1-27, 1-80
	12	\$175.00	Yes	4-24, 2-45, 1-27, 1-80
C	\$ 84.00	Yes	3-24, 2-45, 1-80	
D		Yes	3-24, 2-45, 1-80	

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Midgets

Trade Name	Model	Price (complete)	Tubes	Types
Atwater Kent	84	\$69.50 complete	3-24, 1-27, 1-80,	pentode
Art-Craft	Midget	\$59.50 complete	3-24, 1-27, 1-45, 1-80	
Audiola	Junior	\$49.50		
Clarion	61	\$67.50 complete	3-24, 2-45, 1-80	
	80	\$67.50 complete	pentode super-het.	
	90	\$79.50 complete	pentode super-het.	
Colonial		\$49.50	3-24, 2-71, 1-27, 1-83	
Crosley	Wigit	\$39.75 complete	3-24, 1-45, 1-80	
	Buddy Boy	\$59.50 complete	3-24, 1-45, 1-80	
Echophone		\$69.50 complete	8-tube superheterodyne	
Fada	43	\$84.50 complete	3-24, 1-27, 2-45, 1-80	
Jesse French	Mantle	\$49.50	3-24, 1-45, 1-80	
Freshman		\$49.50	3-24, 1-27, 1-45, 1-80	
General Electric	Junior Clock	\$62.50 \$72.50	8-tube super-het.	
General Motors	Little General	\$74.60 complete	4-24, 1-45, 1-80	
Glortone	26	\$49.95 complete	3-24, 1-45, 1-80	
Howard	Compact	\$69.50		
Lyric	J-3	\$69.50 complete	3-24, 1-27, 2-45, 1-80	
Jackson Bell	62	\$59.50	4-24, 1-45, 1-80	
	50	\$49.50	3-24, 1-45, 1-80	
	68		3-24, 2-27, 1-71, 1-80	
Jewel	120	\$59.50	3-24, 1-45, 1-80	
	Consolette	\$69.50	3-24, 1-45, 1-80	
Kennedy	1142	\$69.50	3-24, 1-27, 1-45, 1-80	
Lyric	P4	\$69.50 complete	4-24, 1-80, pentode	
Majestic	21	\$69.50 complete	3-51, 2-27, 2-45, 1-80	
Master	424	\$69.50 complete	4-24, 1-45, 1-80	
	Comb.	\$99.50	4-24, 1-45, 1-80	
	Console	\$89.50 complete	4-45, 1-45, 1-80	
Philco		\$49.50	3-24, 2-27, 1-71, 1-80	
Pierce-Airo	523 chassis		3-24, 1-45, 1-80	
	524 midget		3-24, 1-45, 1-80	
Pilot	Midget	\$59.50	3-24, 1-27, 1-45, 1-80	
Premier	Home	\$69.50 complete	3-24, 1-27, 1-45, 1-80	
Radia-Cron	K-10	\$69.50	4-24, 2-45, 1-80	
	Comb.	\$99.50	4-24, 2-45, 1-80	
Radiette	Junior	\$59.50 complete	3-24, 1-27, 1-45, 1-80	
Remler	Super-Het.	\$77.50 complete	4-24, 2-27, 1-45, 1-80	
Roamer	60	\$69.50 complete	3-24, 1-27, 1-45, 1-80	
	Consolette	\$79.50 complete	3-24, 1-27, 1-45, 1-80	
	Comb.		3-24, 1-27, 1-45, 1-80	
Royale	Mantle	\$69.50 complete	4-24, 1-45, 1-80	
Sentinel	108		1-24, 1-27, 1-45, 180	
Silver	Compact	\$79.50 complete	3-24, 2-27, 2-45, 1-80	
	Cadet	\$89.50 complete	3-24, 2-27, 2-45, 1-80	
Simplex	Gothic	\$49.50	3-24, 1-45, 1-80	
	Modern	\$54.50	3-24, 1-45, 1-80	
Steinite	421	\$65.00 complete	3-24, 2-45, 1-80	
	600	\$89.70 complete	2-45, 2-27, 1-80	
Sun Glow	Mantel	\$39.50	3-24, 1-45, 1-80	
	Lowboy	\$49.50	3-24, 1-45, 1-80	
	Lowboy	\$59.50	3-24, 1-45, 1-80	
Thom Thumb	Midget Consolette	\$69.50 complete \$79.50 complete	4-24, 1-45, 1-80 4-24, 1-45, 1-80	
Victor	Superette	\$57.50	8-tube super-het.	
Waltham	Midget	\$59.50	4-24, 1-45, 1-80	
	Midget	\$49.50	3-24, 1-45, 1-80	
	Consolette	\$89.50	4-24, 1-45, 1-80	
Zaney Gill	Midget Consolette	\$49.50 \$69.50	1-27, 1-45, 3-24, 1-80 1-27, 1-45, 3-24, 1-80	
Zenith	A	\$57.50	3-24, 2-45, 1-80	
	B	\$57.50	8-24, 2-45, 1-80	

Automatics

Trade Name	Model	Price	Records	10 or 12 in. Records
Brunswick	Combination No. 42	\$480.00	20, one side	10 in.
Cardon	Ensemble Combination No. 108	(with tubes) \$580.00	18 to 25, one side	Both sizes
Capehart	1	\$650.00	14, both sides	10 in.
	2	\$550.00	14, both sides	10 in.
	2½	\$660.00	14, both sides	10 in.
	5	\$395.00	10, one side	Both
	6	\$365.00	10, one side	Both
	7	\$330.00	10, one side	Both
	11	\$955.00	28, both sides	10 in.
	15	\$225.00	10, one side	Both
	15-S	\$285.00	10, one side	Both
	20	\$262.50	10, one side	Both
	20-S	\$272.50	10, one side	Both
	30	\$940.00	28, both sides	10 in.
	60	\$550.00	28, both sides	10 in.
	100	\$650.00	14, both sides	10 in.
	191	\$1495.00	14, both sides	10 in.
	192	\$1745.00	14, both sides	10 in.
	193	\$1995.00	14, both sides	10 in.
	900	\$105.00	10, one side	Both
	1000	\$122.50	10, one side	Both
Columbia	991	\$325.00	10, one side	Both
	990	\$275.00	10, one side	10 in. only
Crosley	Combination	\$222.50	9, one side	10 in. only
Concertrope	Senior	\$845.00	32, both sides	10 in. only
	Junior	\$645.00	23, both sides	10 in. only
Deca Disc	99K	\$599.00	10, one side	Both
	175K	\$650.00	10, one side	Both
	90K	\$599.00	10, one side	Both
	37 Comb.	\$499.00		
	29	\$359.00		
	15	\$295.00		
Link	Senior	\$850.00	10, selective	Both
	Junior	\$295.00	10, selective	10 in.
Sparton	235	\$280.00	12, one side	Both
Stewart-Warner	Automatic Combination	\$425.00 and \$400.00	24, both sides	10 in. only
Stromberg Carlson	No. 14	\$645.00	12, one side	Both
Western Electric	Selectraphone		8, selectivity	10 in.
	Selectraphone			
	Combination		8, selectivity	10 in.
	WMD No. 50		1-15, both sides	10 in.
	WMD No. 50A		1-15, both sides	10 in.
	WMD No. 51		1-15, both sides	10 in.
	WMD No. 51A		1-15, both sides	10 in.
	WMD No. 60		1-15, both sides	10 in.
	WMD No. 60A		1-15, both sides	10 in.
	WMD No. 61		1-15, both sides	10 in.
	WMD No. 61A		1-15, both sides	10 in.
	WMD No. 70		1-15, both sides	10 in.
	WMD Uo. 70A		1-15, both sides	10 in.
	WMD No. 71		1-15, both sides	10 in.
	WMD No. 71A		1-15, both sides	10 in.
	WMD No. 80		1-15, both sides	10 in.
	WMD No. 80A		1-15, both sides	10 in.
	WMD No. 81		1-15, both sides	10 in.
	WMD No. 81A		1-15, both sides	10 in.
	Combination Automatic			
	No. 75	\$375.00		10 in. only

The Last Word

Compiled as The JOURNAL goes to press, to give the last word of news

Atwater Kent Convention

84 Distributors at Philadelphia to Discuss New Compact Receiver

Eighty-four Atwater Kent radio distributing organizations from all sections of the country assembled at the Bellevue-Stratford Hotel in Philadelphia on March 19 and 20 to participate in what turned out to be one of the most enthusiastic Atwater Kent conventions held in a number of years. The outstanding highlight of the two-day sales conference was the announcement by A. Atwater Kent of the new compact with the pentode tube in a compact super-heterodyne circuit. The set was announced as priced to sell, complete with tubes, at \$69.50.

At the end of the convention, optimism over the coming selling season was rampant, and it was the expressed opinion on all sides that Atwater Kent merchandise would reach new heights of consumer demand.

The entire first day of the convention, after its formal convening by J. W. Hitchcock, assistant general sales manager, and the opening address by F. E. Basler, general sales manager, was devoted to an open forum discussion among distributors, led by Mr. Kent. During Mr. Kent's first appearance on the rostrum he presented the new Compact Model 84, and explained its various features.

Mr. Basler opened the second day of the convention by introducing David Bauer, advertising manager, who presented the opening campaign to be released on the new compact, and discussed advertising and dealer helps generally. He was followed by Roy Durstine, of the Batton, Barton, Durstine & Osborn Advertising Agency, who followed along the same lines of discussion as the preceding speakers, amplifying his remarks and detailing various phases of the advertising campaign.

At the beginning of the afternoon session, Mr. Basler introduced P. A. Ware, sales promotion manager, who presented initial sales promotional plans in support of the new Compact Model 84, and also stressed the rich market opened up by the new Atwater Kent Centralized Control Multiple Speaker Equipment. Leon Charbonnier, service manager, followed Mr. Ware, and briefly and concisely explained the technical phases of the new pentode super-heterodyne circuit as used in the Golden Voiced Compact, and also touched on certain technical aspects of the multiple speaker equipment.

The next speaker, Mr. Bert Dowden, Atwater Kent Territorial Supervisor, presented an interesting analysis of what had been accomplished in one particular distributor's territory in connection with the sale of the multiple speaker equipment.

The last speaker of the Convention, introduced by Mr. Basler, was Richard W. Lawrence, president of the Bankers Commercial Security Company. Mr. Lawrence in a short and eminently able address, intelligently traced the business curve of the past eighteen months and adduced conclusive evidence in his contention that prospects for the coming year looked immeasurably brighter. Mr. Lawrence retired to the accompaniment of tremendous applause from the assembled distributors. The Convention was then formally adjourned by Mr. Basler.

The Convention was managed by Robert Stroud of the Atwater-Kent Company.

Stromberg-Carlson Earnings

Radio Is Now 60% of the Company's Business, with Telephone only 40%

The annual report of the Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., for 1930 shows net earnings of \$669,703.20, equal, after paying \$65,000 of dividends on its 10,000 preferred shares, to \$2.21 a share on its 273,280 common shares. This compares with a net of \$1,076,055.58, or \$3.74 a share earned in 1929.

Besides the 6½ per cent dividend on its preferred shares, the company paid

\$1.00 regular and \$.37½ extra, or \$372,014.12, on its common shares, and had remaining a net addition to surplus for the year of \$234,371.44. This addition to surplus increases the book value of the common shares \$.85 a share, to a total book value of \$4.57 a share.

The company's dividend on its common shares has increased from \$1.00 regular and \$.12½ extra in 1927 and 1928, to \$1.00 regular and \$.25 extra in 1929, and to \$1.00 regular and \$.37½ extra in 1930.

Current assets, as of December 31, 1930, amount to \$5,823,339.88, as against current liabilities of \$1,415, 184.06, a ratio of 4.1 to 1.

The company entered radio actively about seven years ago. While its telephone sales during that seven-year period have averaged the largest in its history, its radio sales have gradually grown to the point where they have more than doubled the company's opportunity for volume and profit. Of 1930's volume, 60 per cent was radio business and 40 per cent telephone business.

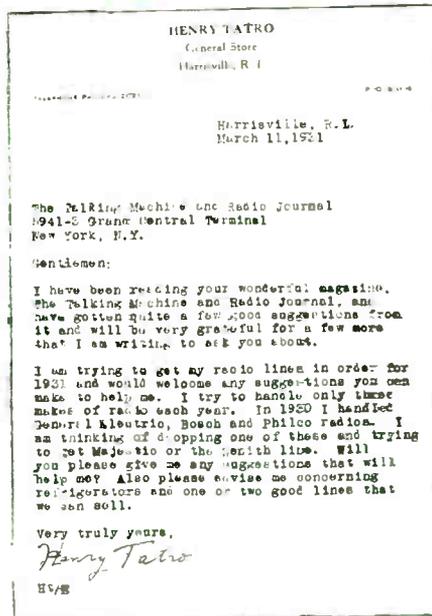
The company has been unusually successful in providing continuous employment for its workers. The drop in volume which occurred during the last half of 1930 made employment conditions very difficult, but the company has succeeded in providing at least three days of work per week throughout the fall and winter for the major part of its employees.

C. E. Carpenter Heads Philco Tube Division

C. E. Carpenter has been appointed manager of the tube and dry battery division of Philco. His headquarters will be at Philco's main offices in Philadelphia.

He will supervise sales of the complete line of Philco tubes and the just-announced Philco dry battery. He has been connected with the company for thirteen years, starting as assistant to the secretary and working up through the ranks

Ask Us!



Every month we receive and answer hundreds of letters like this. Ask us!

Nicholas RCA Sales Manager

*Consolidation of RCA and Victor
Brings Many Important Promotions*

Announcement has just been made of the following promotions and appointments in the sales and advertising staffs of the RCA Victor Company, in Camden. E. A. Nicholas, formerly head of the distributing company bearing his name, has been appointed general sales manager in charge of all sales excepting the foreign field, and succeeding H. C. Grubbs, resigned; Ernest H. Vogel, formerly manager of Radiola sales, has been promoted to manager of domestic sales; Pierre Boucheron, who for eight years was advertising manager of the Radio Corporation of America, and later in charge of the Atlanta district office, has been appointed manager of advertising and sales promotion; L. W. Yule, formerly Pacific Coast district manager, has been made assistant manager of domestic sales; William F. Arnold has been appointed manager of record sales; Walter W. Clark formerly manager of the record department has been placed in charge of artists and repertoire; E. M. Hartley is manager of service department, and B. Aldridge and A. R. Beyer have been placed in charge of distribution order routine and general distributor contact.

The new appointments mark the completion of a reorganization consolidating the Victor and RCA Radiola Divisions of the RCA Victor Company.



E. A. Nicholas

50 More Dealers Add Stromberg-Carlson

An increasingly pronounced swing on the part of dealers and consumers toward quality receivers is one of the outstanding developments in the radio market since the first of the year, according to a bulletin just issued by the Stromberg-Carlson Telephone Manufacturing Company, of Rochester, N. Y. This statement is borne out in two conspicuous ways:

1. Stromberg-Carlson has accepted more than 50 new dealers for its quality products since January 1st to meet a spreading demand for radios in the higher price class.
2. The Stromberg-Carlson No. 14 Multi-Record Radio (automatic radio-phonograph combination), priced at between \$600 and \$700, is one of the company's biggest sellers.

The Stromberg-Carlson roster of dealers contains many of the largest radio retailers in this country and Canada which feature quality merchandising, including such companies as: Wentworth Radio & Auto Supply Co., Ltd., Toronto, Montreal, Hamilton; T. Eaton Co., Ltd., Toronto, Montreal; J. Donat Langelier, Ltd., Montreal; Acolian Co., New York; Sherman, Clay & Co., San Francisco, Oakland, Seattle, Portland; Knight-Campbell Music Co., Denver, Colorado Springs; Grinnel Brothers, Detroit, Toledo, Grand Rapids, Lansing; Edward J. Walt Music Co., Lincoln; Edmund Gram, Inc., Milwaukee; Homer L. Kitt Co., Washington; Otto Grau Piano Co., Cincinnati; Levis Music Co., Rochester; C. C. Harvey Co., Boston, Brockton; G. A. Barlow's Son Co., Trenton; Heaton's Music Co., Columbus; Robelen Piano Co., Wilmington; J. W. Greene Co., Toledo; H. C. Prange Co., Sheboygan; Hunt's Leading Music House, White Plains; United Music Co., Brockton, New London; W. J. Dyer & Bro., St. Paul; Metropolitan Music Co., Minneapolis; Davega, Inc., New York, and Des Moines Music Co., Des Moines.

Winslow West Coast Centralab Manager

Central Radio Laboratories, of Milwaukee, Wisconsin, announce William B. Winslow as their manager of West Coast Sales. Mr. Winslow will headquarter at a direct factory branch at 2149 E. Sacramento, Los Angeles, California.

Centralab products have been represented on the West Coast for the past eight years by the sales agency of Spector & Company. The change to a direct factory branch and factory trained salesman has been found desirable because of the increase in radio set manufacturing on the West Coast and the increased variety of products manufactured by Centralab. These products now include the carbon type of fixed resistor in a full range of sizes and resistance values in addition to the many types of volume controls for which Centralab has always been well known.

Mr. Winslow will take over the West Coast territory April 1st and will devote his entire time to selling Centralab products.

Reopens Refrigerator Plants

*Majestic Announces Production Started
and Already Shipments Are Being Made*

The refrigerator plants of the Grigsby-Grunow Company have been fully reopened and first shipments have been made. These great Northwest-side plants had been closed for about three months.

About two thousand people were given employment and, as production of refrigerators is increased, additional hundreds of unemployed will be added daily. When capacity production is reached a total of about fifty-five hundred will be employed in the refrigerator plants alone.

"I am more than pleased that our plants are again in production," said President Grigsby, "and we shall push production to the plants' capacity as fast as possible.

Trupar Dealers Meet at the New Yorker Hotel

New York and New Jersey dealers selling Trupar electric refrigerators were guests of a banquet at the Hotel New Yorker, New York City, during March, when the manufacturing company and the distributors entertained them. The affair combined pleasure with some instructive information about selling refrigerators.

John Wirtz, refrigerator sales manager of the Sam S. Glauber Co. was toastmaster for the evening. He introduced Wm. Meyers, treasurer and sales promotion manager of Trupar, who gave an interesting discussion of what lay ahead of the industry. Other speakers included: Mr. Geyler, vice-president and chief engineer of Trupar, Mr. Brandt, service manager; Duke Deringer, of Naedele-Janney; Al Walker of Trenton; Mr. Burman of Liberty, New York; Mr. Mills of the Case Co., Brooklyn; and Milton Goldsmith, vice president of the Sam S. Glauber Co.

Arthur Bryan Returns to Montreal

Arthur E. Bryan, who was for many years Canadian Trade Commissioner in Japan and who later resigned from the Canadian Government Service to become associated with Louis Sterling as assistant managing director and vice-president of the Nipponophone Company, Ltd., Japan, which is the name under which the Columbia organization is known there, has just resigned his directorship and is soon returning to this side for a few months. Mr. Bryan will arrive in Montreal the first of April and friends may get in touch with him by addressing him care Canadian Chamber of Commerce, Board of Trade Building, Montreal.

Four New Colonial Agents

Colonial Radio Corporation announces the following appointments as manufacturers' agents:

Despres & Jacobs, 25 Warren St., New York City.

David B. Kopp, 735 Statler Bldg., Boston, Mass.

Ben Stevens, 3242 No. 17th St., Philadelphia, Pa.

H. B. Parke, 305 Seventh Ave., Pittsburgh, Pa.

Automatics

To automatic phonograph-radio combination makers: to go one step beyond the furnishing of enough records for the initial loading of the instrument by giving twelve coupons good for two records, monthly, in order that interest may be sustained in the purchase regardless of the attitude of the owner. Another method would be to include in the original price of the instrument the value of these additional twenty-four records, with the records being sent from the factory by the manufacturer. No customer will receive a package each month without opening it, which means the insurance of the continuous playing of the combination. Each method above has its advantages, the former plan being to give the dealer a sale each month, and it would be a mighty slow guy who wouldn't sell at least one additional record each month. A working plan could be created from either suggestion, and if utilized by combination makers, is bound to insure interest by the owner as well as to develop the record business. It looks to *The JOURNAL* as if the hitch in a faster growing combination volume is due to putting the new customer on "his own" as to continued interest and record purchasing, and we believe he must have a "training" along the foregoing lines in order to sustain his record interest. "A year's Free Records" will work as an "inducement," too.

Proudfit Co. Is Majestic Jobber in Montana

The R. S. Proudfit Company has taken over the distribution of Majestic radios and refrigerators for the state of Montana. Offices, display rooms and warehouse have been located in Great Falls, Montana. Both refrigerators and radios are on the way and shipments can be made immediately from Great Falls, announces Frank S. Proudfit, vice-president.

S. E. Ely, formerly of Naponee, Nebraska, has moved to Great Falls and will be the manager of the new enterprise. Mr. Ely has been with the R. S. Proudfit Company for the past 28 years and is conceded to be one of the best business men in the state of Nebraska.

The Montana branch will operate as a distinct unit from the Lincoln Company, and all of its affairs will be handled from Great Falls.

For Testing Pentodes

New Tube Developments Call for Adapters to Present Equipment

Many radiomen, who have investments in radio testing equipment, are interested in the adaptability of this equipment for the new test requirements imposed by the new power pentode tubes. The new variable mu tubes will not apparently introduce any problem by way of design limitations in present testing devices.

In general appearance, the new power pentode tube is similar to the type '65, there being no top or side terminals. The base prongs or terminals correspond to the terminal arrangement of the type '27, except that the "space charge grid" of the new tube utilizes the terminal which corresponds to the cathode prong of the type '27. The space charge or pentode potential may be ascertained with present analyzers or testers in the manner prescribed for measuring cathode potentials, provided the meter range connected to the cathode switch contacts is adequate for accommodating the higher space charge poten-

tials. These potentials will probably be about 250 volts.

The Supreme Instruments Corporation has announced to the service trade that the Supreme Set Analyzer is adaptable without modification for measurements of all potentials involved in the new power pentode tubes. This adaptability is automatically provided by the switching arrangement which permits the optional connection of any range of the meter across any tube circuit; so that cathode or power pentode potentials may be read on meter ranges of 3, 9, 30, 90, 300 and 900 volts. The power pentode tests will best be accommodated on the 300-range.

Adapters are being furnished for all Supreme tube testing devices, so that these may be immediately adaptable for the new power pentode tests. The average tube test reading of the new tubes will be published by the Supreme Instruments Corporation as soon as available for the information and guidance of all concerned.

Columbia-Gramophone Merger

Two Largest British Record Companies Merge, with RCA Holding 27% Interest

After three years of periodic negotiations the contemplated merger of the Columbia Graphophone Co., Ltd., with the Gramophone Co., Ltd., the two foremost phonograph companies in Great Britain, crystallized into fact. A new company is to be formed, with a total capitalization close to \$30,000,000 to purchase the entire issued capital of both firms by an exchange of shares, this new company to have a status abroad on a par with that of the Radio Corporation of America in the U. S. A 27% interest in the consolidation will be owned by RCA, which will exchange technical information and patents with its British parallel. The merger brings the British-owned Columbia company under RCA's wing. The Gramophone Co., Ltd., is a subsidiary of RCA and RCA also controls its American parent organization, The Victor Talking Machine Co.

Alfred Clark, chairman of the board of the Gramophone Co., and Louis Sterling, managing director of Columbia, made the announcement of the consolidation plan

from London. Each company before the merger will pay a dividend of three shillings a share, less tax, on ordinary shares, it is said. The combined issued capital of the two firms is \$24,614,355, the Gramophone Co.'s capital totals \$16,700,000, of which only \$500,000 is in preference shares and the remainder in ordinary shares, and Columbia's capital is \$7,914,355, of which \$1,500,000 is one pound preference shares and the remainder is ten shilling ordinary shares.

The familiar trade-marks of the two companies will not, it is expected, be affected by the merger. It is understood that "His Master's Voice" and the two music notes forming Columbia insignia are to continue to be used separately. The merger does away with duplication and while the retention of the trade-marks indicates competition still in future the organizations will not find it necessary to record the same works and this outcome alone means savings of no small stature.

Assets of the two companies were \$44,316,000 on June 30, 1929.

Electric Carillon Is Demonstrated in N. Y.

Not so long ago the Theremin made its appearance as the precursor of the electrical instruments that will entrance the music lovers of tomorrow, and late last month the electric carillon, the newest musical device of the futuristic school, was heard at the engineering auditorium of the New York Electrical Society. Developed under the supervision of C. J. Young, of the RCA Victor Co., Inc., the new device, which, it is said, achieves a volume louder than the famous bells of the Kremlin as well as a whisperry tinkle, was presented by Dr. Alfred N. Goldsmith, vice-president and general engineer of RCA, who coined a phrase for the instrument: "a flexible lion which can be made to sound like a lamb."

Mr. Goldsmith's address dealt with "The

New Music of Electric Vibrations." "The Musical score of the future," he said, "will require new symbols and new instructions before it can be successfully used by the musicians of those remote days. Most of all the new electric music will require a new group of great composers capable of fully utilizing the capabilities of emotional expression contained in electric music." The electric carillon consists of a series of small steel chimes, which, when struck by tiny electric hammers actuated by a keyboard like that of a piano, produce tiny tones, the pianissimo or forte tones being produced from the small electric vibrations that come from the tapping of the steel chimes. Amplified a million fold by a vacuum tube amplifier, these feeble currents are made gigantic and are reproduced from a church tower or from a giant loud speaker.

Clarion Distributors Meet

*New Pentode Models Featured at
Convention of TCA Distributors*

Clarion jobbers throughout the country attended a two-day conference, March 22 and 23, at the Gracmere Hotel, in Chicago. The distributors were shown the new Clarion models which incorporate Pentode high-gain super power tubes, automatic volume control, variable-mu tubes, and full vision dial.

The convention was opened by Mr. Siragusa, who informally extended a hearty welcome to all present and briefly defined the purpose of the meeting. James A. Delaney, director of finance, officiated as chairman and introduced W. Irving Bullard, vice-president of Central Trust Company of Illinois and a national authority on economics. E. J. Doyle, vice-president in charge of engineering, explained the technical features of the new Clarion line and related what the new

circuit and new tube arrangement meant to radio distributors, dealers and purchasers. Joseph H. Finn, first vice-president of McJunkin Advertising Company, outlined TCA's national advertising plans for the coming season. E. J. Dykstra, general sales manager, presented the new models and commended distributors' organizations for their splendid work during the past year in making Clarion a leader in the industry.

Other speakers were Edward J. Merrin, and the following officers of Transformer Corporation: J. J. McCarthy, vice-president in charge of production; C. J. Callahan, director of advertising; L. H. Ragsdale, assistant sales manager, and E. S. Fisher of the sales department, and R. M. MacGregor, service manager.

MIDGET CONSOLE PRICES.

Looking over Detroit newspapers for the past three months, it is noticed that all advertising on console radio sets for October was in the vicinity of \$89.50, complete with tubes; November, the average on consoles was about \$69.50; December, the low mark was \$39.22; January, low mark was \$29.75. These prices are for consoles, not midgets. No one in The JOURNAL office dares to figure the midget prices from Detroit newspaper advertising.

\$3,000,000 Majestic Bonds Subscribed

Three million dollars of the \$5,000,000 six per cent bond issue of the Grigsby-Grunow Company recently approved by stockholders has been subscribed for by creditors of the Majestic Household Utilities Corporation, now consolidated with Grigsby-Grunow Company, and by distributors and stockholders of the parent corporation, according to Don M. Compton, vice-president and general manager.

"At the close of business last night, Grigsby-Grunow Company had a cash balance of one and one-half million dollars," said Mr. Compton. "With the success of the refinancing program now assured," he said, "company has reopened the refrigerator plant, and the forward departments of the refrigerator are in production. We are scheduled to start turning out finished refrigerators on Monday, March 31st.

"Sales of radio sets by distributors to dealers showed an increase last week for the fourth consecutive week. Production of radio sets continues at 3,500 daily. Sales on radio sets and tubes for the month of March will run between three and three and one-quarter million dollars."

Dick Practises for St. Moritz

"Big Dick" Smiley, well-known Ken-Rad sales manager, has taken up ice skating since he moved to Kentucky, and is rapidly reaching a point of doing a mile in quicker than that. Recently his friends gave him a pair of gold-plated skates, tested for 1500 hours, and it might truthfully be said that Dick is now cutting a big figure on ice.

Soule Sales Manager Radio Master

George Soule, formerly with the Pacent Electric Company, Inc., and the Pacent Reproducers Corporation, as general sales manager, has resigned to accept the position of general sales manager of the Radio Master Corporation of Bay City, Michigan.

McCarthy Sylvania Sales Head

*Popular Executive, Experienced in
Trade, Made General Sales Manager*

The sales activities of the Sylvania Products Company are now under the direction of E. H. McCarthy, whose appointment to the position of general sales manager has just been announced.

Mr. McCarthy has had twelve years' experience as a sales executive in the phonograph and radio business. His first position in this capacity was with the Columbia Phonograph Company. He later organized the Royal Line Sales Corporation, wholesale distributors of phonographs, radio, and accessories throughout New England.

He was immediately offered, and accepted, the position of vice-president in charge of sales with the Symphonic Sales Corporation, manufacturers of reproducers, speaker units, radio cabinets, and other accessories. In this connection Mr. McCarthy organized a national selling organization, appointing representative jobbers throughout the country.

Weisser on Pacific Coast for Atwater Kent

F. E. Basler, general sales manager of the Atwater Kent Manufacturing Company, announced the appointment of Charles O. Weisser as Pacific Coast divisional sales manager of the company.

Mr. Weisser is a well-known figure in the radio industry, having been connected with the Atwater Kent Company for several years in various sales capacities. Most recently he has held the position of territorial supervisor in the Boston area.

Tom White Prepares for Trade Show

A post card received from Thomas A. White, from Leipzig, Germany, shows a barrel of wine in the Auerbachs Keller, which probably implies that this is a spot for drinking wine. Tom says this barrel of wine is being brought over for visitors at the Jensen Speaker booth, at the R. M. A. Trade Show, in June. Tom probably means he is going to bring it over in himself.

Westinghouse Dealer Uses Intensive Tie-Up

A great tieup was recently promoted by the Westinghouse dealer at Stamford, Conn., Arthora, Inc., who not only had a window display of the Westinghouse Columaire, but they exhibited a Columaire at the Palace Theater near by the store, and at the same time induced the manager of the theater to run a motion picture short, featuring the Columaire in the Mammoth Cave, Kentucky, getting broadcasting from New York. This three-angle tieup showed an alertness on the part of this Westinghouse dealer that is worthy of admiration throughout the country.

Fada Appoints New Research Engineer

Frank Andrea, president of the FADA Radio Company, has announced the appointment of Charles J. Hirsch to the staff of the FADA research laboratories.



YOUR BUSINESS

Where Will It Be in 1940?

Leaders of the Radio Industry Tell You in

RADIO AND ITS FUTURE

Twenty-nine of the best minds in the radio industry have collaborated to give an authoritative picture of the probable development of the radio industry as a whole. What the leaders are thinking, what they expect of the future, and how they are making plans to meet that future is of immense value and interest to you in your business.

David Sarnoff, President of the Radio Corporation of America, tells of the art and industry of radio. Frederick A. Kolster discusses the laboratory and factory. William C. Grunow, Vice-President of the Grigsby-Grunow Co., explains radio production. O. H. Caldwell, former Member of the Federal Radio Commission, outlines future markets.

In addition to presenting the commercial side of radio, the book also delves into broadcasting, communications, regulation and scientific aspects, including the development of television.

Price \$4.00

Price Quoted on a Cash-with-Order Basis Only.

Book Department

Talking Machine & Radio JOURNAL
5941 Grand Central Terminal, New York, N. Y.

Please Send Me "Radio and Its Future," for which I enclose my check for \$4.00.

NAME

ADDRESS

MINNEAPOLIS "OPEN" FOR MANUFACTURERS!!!

An established manufacturers agent in the Minneapolis trade territory is seeking a new line.

He has had ten years selling experience in this territory entirely with the music and radio trade. Has close personal friends and acquaintances (retailers in all lines) in every worth while trading point in this section.

Will give consideration to any line of merchandise that will make a profit for the dealer—no "Fly by Night" unestablished promotional schemes will be considered.

Can show a fine record of accomplishment.

Address:—

Post Office Box 746
Minneapolis, Minn.

WANTED *IRISH RECORDS

Any make—old and new recordings. Also in the market for a large quantity of *VICTOR PHONOGRAPHS.

We Pay Cash—Write or Wire

PETER J. BLUM

350 East 78th Street New York City

MAY DISTRIBUTORS OF PHILCO BALANCED UNIT RADIO

MAY
RADIO CORP.

393 New St.
Newark, N. J.

Sole Distributors in
Northern New Jersey
and Staten Island of
Philco Radio

MAY
DISTRIBUTING CORP.
122 Bleecker St., N. Y. C.

Sole Distributors in Manhattan
and Brooklyn of Philco Radio.

MAY DISTRIBUTORS, INC.
351-353 Atlantic Ave., Brooklyn
Sole Distributors in Brooklyn, Queens,
Nassau and Suffolk Counties for Philco
Radio.

D. W. MAY, INC.

393 New St.
Newark, N. J.

Sole Distributors in
Northern New Jersey
and Staten Island of
Philco - Transitone
Auto Radio, and
Philco Tubes.

D. W. MAY, INC.

34 - 36 W. Houston St.
N. Y. C.

Sole Distributors in Manhattan
and Brooklyn of Philco-Transi-
tone Radio, and Philco Tubes.

Variable Mu Tubes Types 551-235

Described by CeCo

As a result of close cooperation between the set manufacturers and radio tube engineers, two new screen grid tubes are offered which are a decided improvement over the 224 screen grid. The Variable Mu tubes are designed primarily to reduce cross modulation and modulation distortion in radio frequency amplifiers. The result has been accomplished by a change in the grid voltage mutual conductance characteristic. The constants of the 551 are such that this tube can be used, with very slight changes in some cases, in circuits designed for the commonly known screen grid tube, type 224. The 235, however, has distinctly different characteristics, which require extensive changes in the receiver design.

TYPE 551 VARIABLE MU CHARACTERISTICS

Filament Voltage, 2 1/2
Filament Current, 1.75
Plate Voltage, 180
Screen Voltage, 90
Grid Voltage, —3
Plate Current, 5.3
Screen Current, 1/3 of plate current
Plate Resistance, 400,000 ohms
Mutual Conductance, 1,050

APPROXIMATE INTERELECTRODE CAPACITANCES

Grid to Plate, .010 uuf maximum
Input Capacitances, 5 uuf
Output Capacitances, 10 uuf

OVER-ALL DIMENSIONS

Length, 4 11/16 inches to 5 1/4 inches
Diameter (Maximum), 1 13/16 inches
Cap, 0.346 to 0.369 inch.
Base, UY
Socket, UY

TYPE 235 VARIABLE MU CHARACTERISTICS

Filament Voltage, 2.5 volts
Filament Current, 1.75 amperes
Plate Voltage, Recommended, 180 volts
Screen Voltage, Recommended, 75 volts
Grid Voltage, —1.5 volts
Plate Current, 9 milliamperes
Screen Current, not over 1/3 of plate current.
Plate Resistance, 200,000 ohms (approx.)
Mutual Conductance, 1,100 micro-ohms

APPROXIMATE INTERELECTRODE CAPACITANCES

Grid to Plate, .010 uuf, maximum
Input Capacitance, 5 uuf
Output Capacitance 10 uuf

OVER-ALL DIMENSIONS

Length, 4 11/16 inches to 5 1/4 inches
Diameter (Maximum), 1 13/16 inches
Cap, 0.346 inch to 0.369 inch.
Base, UY
Socket, UY

Jordan Joins Gulbransen

Announcement is made by the Gulbransen Company that E. J. Jordan will handle the distribution of both Gulbransen pianos and Gulbransen radios in California, Oregon, and Washington.

Pentode Tubes

Described by Arcturus

The purpose of the pentode, in comparison to triode power output tubes, is to provide a tube having a high mutual conductance, and a high power sensitivity.

Because of its high power sensitivity, the pentode delivers an output of 2.5 watts with 11.7 volts input, as compared to the '45 triode, which delivers a maximum output of only 1.6 with an input of 35.4 volts. This factor permits the operation of the pentode at maximum output, directly from the detector tube.

The amplification factor of the Type PZ Pentode is 95, as compared to 3.8 with '45 power output triodes. Both of these factors increase the amplification sufficiently to obtain maximum power output with a single a.f. stage, as compared to the usual two stages.

The characteristics of the Arcturus Type PZ Pentode are:

Filament voltage, 2.5 volts.
Filament current, 1.5 amperes.
Plate voltage, 250 volts.
Plate current, 32.5 volts.
Central grid bias, 16.5 volts.
Space charge grid potential, 250 volts.
Space charge grid current, 7 milliamperes.

Cathode grid potential, 0.* (*As the space charge grid is connected to the center of the filament, the potential is substantially zero.)

Plate Impedance, 38,000 ohms.
Transconductance, 2,500 micro-ohms.
Amplification factor, 95.
Power output, 2.5 watts.

The pentode, it is stated, is four times as sensitive as the '45 power tube,—a property of no small economic importance when considering output, detector over-load, and per-amplification.

Majestic Tie-Up Is Put Over with Druggists

A hugely effective tie-up between Majestic dealers of Jersey City and the 18 local drug stores of the Independent Druggists' Alliance is an outstanding stunt now being put over by North Ward Radio Co., Majestic wholesalers. First prize in the city-wide contest is a Majestic No. 22, featured widely in each drug store and in the local newspapers in connection with the largest sale of drug store merchandise ever conducted in Jersey City. Besides two full pages of ads, there were 43,000 broadsides distributed, and the presentation of the Majestic set to the winning contestants will be made at the local Fox Theatre.

North American Sales Co. Buys Sparton Parts

Sparton replacement parts can be purchased only through The American Sales Co., New York City, according to S. Klepper, firm head, who recently concluded a deal with the Sparks-Withington Co., Jackson, Mich., whereby he obtained all the transformers, condensers, three-volt Sparton tubes, resistances, chokes, etc. As Sparks-Withington is concentrating on the production of its new line, Messrs. S. and H. Klepper saw the opportunity for purchasing the Sparton parts inventory.

14 Carloads of Tubes in 23 Days

E. A. Tracey, vice-president of National Union Radio Corporation, issued a statement recently which would indicate that the vacuum tube business is distinctly on the up grade.

"In the past 23 days," says Tracey, "we have shipped fourteen carloads of National Union tubes. Our factories have been working on an overtime schedule for several weeks, and have been unable to accumulate a warehouse stock in excess of immediate demand. We are most assuredly in an optimistic frame of mind regarding the business outlook for the balance of this year. We feel that the present situation bears out a statement we made eleven months ago, when we acquired the services of Dr. R. E. Myers and his staff of technical aides, to the effect that business would naturally flow in the direction of the manufacturer who made a uniformly precise product."

The carload shipments made have been to manufacturers of radio sets who are using National Union tubes as standard equipment.

Let Us Prove It

Dear Glad:

What I think, is that the National and Columbia Broadcasting Company have darn little consideration for the radio retail shops and salesman who have built up, largely the audience of listeners, to make it possible for them to charge the pretty penny that they do, for advertising.

What I think, is that they should advise every station hook-up to identify themselves, at least, every ten minutes and give the salesman a chance, when on a sale trying to demonstrate the selectivity of a set.

Manufacturers have spent millions of dollars telling the people about selectivity and when the set is on demonstration, there is no way to prove it.

"Something ought to be done about this"

Yours truly,
ZERWECK'S
S. K. GERHARDT.

New Zenith Distributors

A. T. Haugh, general sales manager of the Zenith Radio Corporation, announces that the following new distributors have been appointed to exclusively sell Zenith and Zenette radios and Zenith tubes:

Adirondack Radio Corporation, Albany, N. Y., exclusive distributors for eastern New York.

Auto Equipment Company, Omaha, Nebraska, has been appointed to serve the state of Nebraska.

Benjamin Fisch, Newport News, Va., will operate in Newport News, Va., and adjacent territory.

Star Radio Company, Richmond, Va., will operate in Richmond and adjoining territory.

W. Reid New Universal Salesman with Wilson

W. Reid is the latest addition to the staff of Landers, Frary & Clark salesmen working with E. M. Wilson & Son, in Northern New Jersey, in the merchandising of the Universal line of appliances.

THE TRUE STORY OF AN AMAZING 11 MONTH RADIO TUBE RECORD!

Unknown 11 months ago, TODAY The National Union Tube is Standard Equipment in more sets than any other.



Dr. R. E. Myers
Vice-President in charge of Engineering



TO THE RADIO TRADE: This is a true story of success. Amazing success. Rapid... but built on the firm foundation of performance and acceptance. It's the story of how in 11 short months the National Union Tube came from out of the mass of unknown independent tubes and is now Standard equipment in more sets than any other tube.

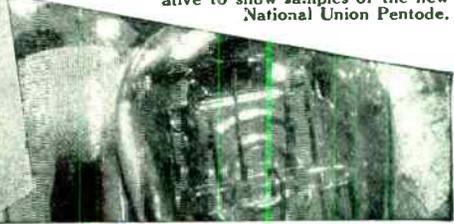
It was in March, 1930, when National Union brought out their first tube. It was a tube that was designed to be the finest tube that money could buy. The finest group of engineers had been assigned to produce it. And produce it they did. Thanks to the genius of Dr. Myers and his staff, the fifteen experts who had been his assistants at Westinghouse.

And now at the end of only eleven short months National Union has reached an enviable position in the radio tube industry. Proof of this lies in the fact that set engineers have approved National Union Tubes as satisfactory equipment for their sets.

Such an acceptance is the result of a product of unusual excellence, fair policies and vigorous sales assistance. Does not the 11 month record of National Union assure a still greater year in 1931?

This is the Tube Set Manufacturers select for their sets upon which their reputations and fortunes depend. You should know about it. If you have not investigated this exceptional quality tube you should by all means do so at once. Write to us today.

PENTODE TUBES—Have you seen the new National Union Pentode Tubes? They have performed amazingly in laboratory tests. All tests indicate that our engineers have perfected a Pentode Tube that is superior not only to former American style Pentodes but also the European creations. Ask your representative to show samples of the new National Union Pentode.



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

To secure the best service to your reply, be sure to mention



what do you think?

Here is the radio and music trade's arena of controversy, where anything (nearly) can be said on any subject without even being shot at. What is your "pet" aversion or your opinion on a trade topic? All dealers have a certain number of problems, and here is the space in which to discuss them. Editor—The Journal.

Whose Monkey Wrench?

Dear Glad:

We are subscribers, and have been for some time, to the Talking Machine & Radio Journal, and from time to time have been quite interested in reading your editorials entitled, "As We See The Business".

We are just in receipt of the February issue, and from reading same we will say, "No, the radio wholesalers are not contented to run things like war scouts, each one strictly on his own individual merits and please remember that I am writing you strictly from a Western Canadian condition, in a Province where it takes us over 16,000 miles to contact the 880,000 people in this Province, making the cost of marketing radio very high.

It is not the wholesalers or the retailers that have been continually throwing the monkey wrench and a couple of steam rollers into the radio marketing machinery, as I will try to show you.

First, I will say that it has been too much of the iron heel on the part of the manufacturers towards the jobbers, each manufacturer for himself springing at the throat of the other manufacturers, trying to outstrip each other in sales volume by first many of them doing their utmost to overload the jobber, and after they have loaded the jobber to the gunwhale until he can't take any more radio merchandise, and then many of the manufacturers selling the rest of the stock on hand wherever and at what price they could obtain. This is exemplified in your editorial.

The result is that I am not surprised at that part of your editorial in which you state "the manufacturers are nodding their heads." I believe that the very best thing that can happen the manufacturers is to invite them to cut out the jobber and go direct to the dealer, and give them a taste of the grief and loss that the jobber has heretofore experienced.

It is true that some of the radio manufacturers can go direct to the retailers and get a considerable volume of business, especially in congested areas.

I would also like to point out that some of the manufacturers who sell their products to jobbers in Western Canada, also seem to think that it is ethical and proper for them to also sell their merchandise to mail order houses, who have no regard for the maintenance of price, and who also sell on time without interest, and cut the heart out of the price, and still those manufacturers seem to think that the jobber should still be loyal to them after cutting their throat.

THE RELATION OF JOBBER'S BUYING PRICES TO THE EVER INCREASING DISCOUNTS TO THE RETAIL DEALER

We commenced to distribute radio as jobbers in 1925. From 1925 up to the present time, the average jobber's buying price has been and still is 50 and 10 and 5%, and 50 and 10 and 5 and 5%.

whereas the discount to the retail dealer in our territory were as follows:

In 1925—30%.
In 1926—33 1/3%.
In 1927—35% and 35 and 5%.
In 1928—35 and 5% and 40%.
In 1929—40% and 40 and 5%.
In 1930—40 and 10% up to as high as 50%.

And they still expected the jobber to maintain an A No. 1 service department with a staff of experts on that margin of profit.

In other words, Mr. Henderson, you know as well as we do that the troubles of which you speak, in order to be eliminated, that the correction should start at home—the source of supply, and that's with the manufacturer. If the very few manufacturers at the present time who amount to anything in radio, cannot get together and agree on a list price so that they can make more money than they are making, and at the same time give the jobber a longer discount so that he can at least play even and make a little money, and then agree on a set schedule of discounts to the retail dealer, and see that they are maintained, and if the manufacturers can't put in a manufacturing program that will eliminate this everlasting dumping, then how in the world do they expect the jobbers to refrain from taking such action as they think best in protecting their profit. Mind you, we have never dumped radio.

It may be a little bit interesting for you to know that as the result of these extremely long radio discounts, that the dealers in Western Canada have been getting, that it has resulted in just about 20 percent of the sets being sold at the regular list, and no one has profited thereby except the ultimate consumer.

Sincerely yours,

MONARCH RADIO ELECTRIC, LTD.

BY: H. A. ATKINSON.

Pres.

Did You Say "Midgets"?

Dear Glad:

You might be interested in the attached bulletin we recently sent to our dealers on the subject that is taking so much attention of merchandisers in the radio industry, namely: Low priced unit sales. We, in our daily work, particularly on the credit situation see the very distressing effect on the dealer, wrought by the constant driving down of his unit of sale.

The good work that your publication is doing in pointing this out in issue after issue, in editorials and other publicity should be commended and considerably broadened. I really believe that the few larger manufacturers who have gone into making these real low priced units have been forced to it much against their will and better judgment.

It is a serious step backwards in the industry, particularly as it ultimately will severely affect public desire to listen to

better broadcasting. More and more people will claim that programs are inferior because they cannot possibly on these low units receive broadcasting as it is rendered. Fortunes that have been invested to date in advanced broadcasting equipment as well as in finer and better programs are being particularly wasted through the increased number of people buying and owning the types of radio sets that cannot possibly "deliver the goods." What encouragement is there to be found in such a condition, (not only bad as it is but growing worse), to broadcast stations further to improve their equipment and to broadcasters to further enhance the quality of their renditions. The serious effect on the industry as a whole is a danger that every one interested in constructive programs should take some action against.

With very best wishes, I am

Sincerely yours,
GROSS-BRENNAN, INC.
BY: BENJAMIN GROSS.

BULLETIN TO DEALERS

- 1—In 90 days there will be from TWO to THREE times as many dealers handling radio as now.
- 2—This tremendous increase will include drug stores, tire shops, automotive accessory suppliers, jewelers, garages, hardware stores, etc., etc.
- 3—A large drug chain (Walgreen); a tremendous tire company (Goodrich); one of the largest watch makers (Bulova); and others are already awaiting delivery or taking bids on midgets and peewee consoles.

C A S H and C A R R Y
No service
\$19.50 \$29.50 \$39.50

That's the new competition—but only if you want it to be.

The smart dealer realizes that he cannot face that competition and must get rid of his midgets and peewees immediately—and will be sure he sells none of them on time.

A bold and united front on the part of radio dealers organized to destroy this menacing and unprofitable business, will bring conditions in our industry back to normal quicker than any other remedy.

This means that every dealer should not only refuse to handle unprofitable merchandise but should deliberately and aggressively discourage its purchase by the public. Tell the truth about such sets—tell them they are equivalent to 1926 radio standards—tell it in your windows—tell it in your advertising—tell it in your circularizing—tell it by word of mouth to every one you meet and last, but not least

WORK FOR YOURSELF

not
for the midget builders

Yours very truly,

GROSS-BRENNAN, INC.

Vote Wet or Dry—but Now!

Will you please fill in the questions below and mail this back to us immediately? We want this information so that we will know even more definitely what you're up against in your store. Then we can give you greater help in solving those problems. Please rush this back to us.

Name

Address

City State

1. What makes of radio do you sell?
2. What makes of tubes do you sell?
3. What is the most salable price range of sets?
4. Do you sell Midgets?
- 4-A. Which shape sells best—square or gothic?
5. Is the trend toward lower or higher radio prices?
6. Are your profit margins satisfactory?
7. Is your radio department as profitable to you as other departments of your business?
8. What profits are made from midget sales?
9. Do you sell or install centralized radio equipment?
10. Indicate by numbers (1 to 8) what you consider to be the relative importance of the following appeals and inducements in selling:
 - Tone
 - Price
 - Design (Beauty)
 - Distance
 - Reputation
 - Manufacturer's Adver.
 - Easy Terms
 - Trade-in Allowances
11. What percentage of your radio sales are made to replace old radio sets? What percentage to new users?
12. What, in your opinion, are the obstacles which have to be overcome before more sets can be sold?
13. Approximately how many sets do you sell a year?
- Tubes?
14. How long have you handled your present line or lines?
15. What type of dealers are your hardest competitors in radio?
16. Which of the above type of dealers do the most business in radio in your city, in your opinion?
17. If the line you are selling has been dumped, do you continue selling it?
18. In your opinion should the retail price be given in a radio manufacturer's national advertising?
 - Yes
 - No
19. What type of advertising co-operation do you consider the most useful which a manufacturer can give you? (Indicate your 1st, 2nd, 3rd, and 4th choice)
 - National advertising
 - Local Adv. helps, such as newspaper electros
 - Direct mail and consumer literature
 - Window and store display material
20. Do you have exclusive sale of your lines in your town?
 - Yes
 - No

Would you like to have?

 - Yes
 - No
21. Have you any general comments to make regarding the radio market, competition, advertising, merchandising methods, etc.? Your general comments will be helpful and greatly appreciated:
22. Do you sell refrigerators?
- Vacuum Cleaners?
- Clocks?
- Washing Machines?
- Electric Appliances?
- Home Movies?
- Would you like to receive catalogs, and about what?

Please rush back to

THE TALKING MACHINE & RADIO JOURNAL

5941 Grand Central Terminal

New York, N. Y.



ANNOUNCES A NEW LINE OF
“DE WALD”

SUPERHETERODYNE AND ULTRA SENSITIVE
 T. R. F. RECEIVERS

FOR ALTERNATING OR DIRECT CURRENT
 LICENSED BY R.C.A.

WRITE FOR ADVANCE INFORMATION AND
 SEE OUR LINE AT THE CHICAGO TRADE SHOW

PIERCE-AIRO, Inc.

113 Fourth Ave., New York City

MANUFACTURERS OF FINE RADIO SETS FOR TEN YEARS

WITH THE JOURNAL ADVERTISERS

THROUGH THIS PORTAL PASSES THE MOST PROFITABLE
 RADIO & MUSIC PRODUCTS FOR DEALERS & WHOLESALERS

DEFEED

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JRC RADIO TUBES

Thoroughbreds of Radio ZEV

PUT JRC tubes in your demonstration set and leave the rest to the tubes. Invite your customers to listen to them with a critical ear. They hear the finest reception radio tubes can give — and they “pay off” on what they hear.

JOHNSONBURG RADIO CORPORATION
JOHNSONBURG, PA.

NEW YORK: 55 West 42d Street CHICAGO: 28 East Jackson Blvd.

HOME RECORDING Means More Profits For You



LIST PRICE
\$25.00

less microphone
Microphone as illustrated, \$10 additional

SOMETHING that every customer will want—THE PACENT RECORDOVON. Phonograph records made at home with professional results and without the necessity for expensive apparatus. Tell your customer it will provide a permanent album of the voices of his family and friends or radio programs he wishes to preserve.

THE PACENT RECORDOVON assembly consists of the RECORDOVON, furnished with clips, a special adapter and the selector switch illustrated above, together with the necessary connecting cords. Price \$25.00. The hand microphone illustrated will be supplied only when requested, at an extra cost of \$10.00 list.

THE PACENT RECORDOVON is designed to operate with the pre-grooved type of records which are available everywhere at a small cost. It is a quality product, made by the manufacturers of talking picture equipment now operating satisfactorily in over 2,000 theatres throughout the world.

Public Address System Manual containing last minute data on amplifiers, microphones, loud speakers, together with useful information concerning the planning of sound systems will be sent free of charge upon request.

PACENT ELECTRIC CO., 91 Seventh Ave., New York, N. Y.

Pioneers in Radio and Electric Reproduction for over 26 years.

Licensee for Canada: White Radio, Ltd., Hamilton, Ont.

PACENT

Always show the Customer the Centralab VOLUME CONTROL

Radio sales managers who appreciate the value of sound sales arguments always instruct their crews to stress the fact that CENTRALAB volume controls permit of smoother, and more noiseless reception.

It's easier to sell a CENTRALAB equipped set to a customer . . . easier to sell the line to a dealer.

There MUST be a reason why more than twenty million CENTRALAB Volume Controls have already been sold.

Centralab

Send for the new Volume Control Guide showing how you can make replacements on most all new and old sets with a handful of Centralab Volume Controls.

MAIL COUPON NOW

CENTRAL RADIO LABORATORIES
932 Keefe Ave.
MILWAUKEE, WIS.

Enclosed find 25c for new VOLUME CONTROL GUIDE.

Name

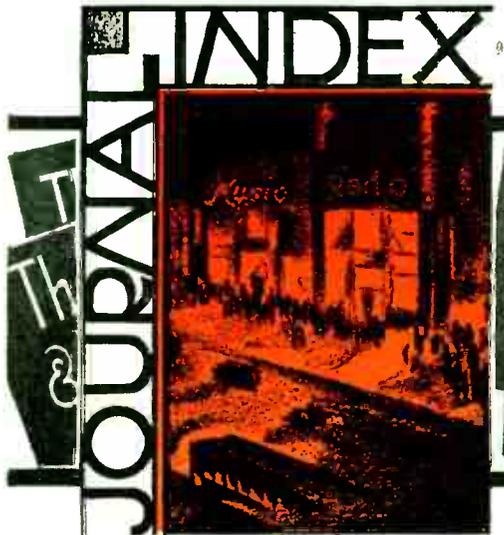
Address

City State

TM&RJ

To secure the best service to your reply, be sure to mention





MORE THAN 20,000 CIRCULATION



ARTICLES, FEATURE STORIES, TRADE NEWS

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Tie-Up

EXPLOITATION is sadly lacking among radio dealers today. Why doesn't the radio dealer exploit the air programs just as the film exhibitor exploits the pictures on his screen? There's something on the radio every day that's worth a sign or two in the windows and there are special broadcasts that should be played up by the dealer with all the vim and vigor at his command.

How can he capitalize on these programs? He can do it, not only by displaying cards and signs in his windows every day and by transmitting his programs to the people outside his store, but by placing a little ad in the papers, by sending out some inexpensive literature to every name in his prospect file—there are many ways of doing it. The recent Vatican broadcast, for instance, offered dealers a splendid opportunity to tie in with it, and yet how many actually utilized this program as a means of attracting attention to their store windows and merchandise?

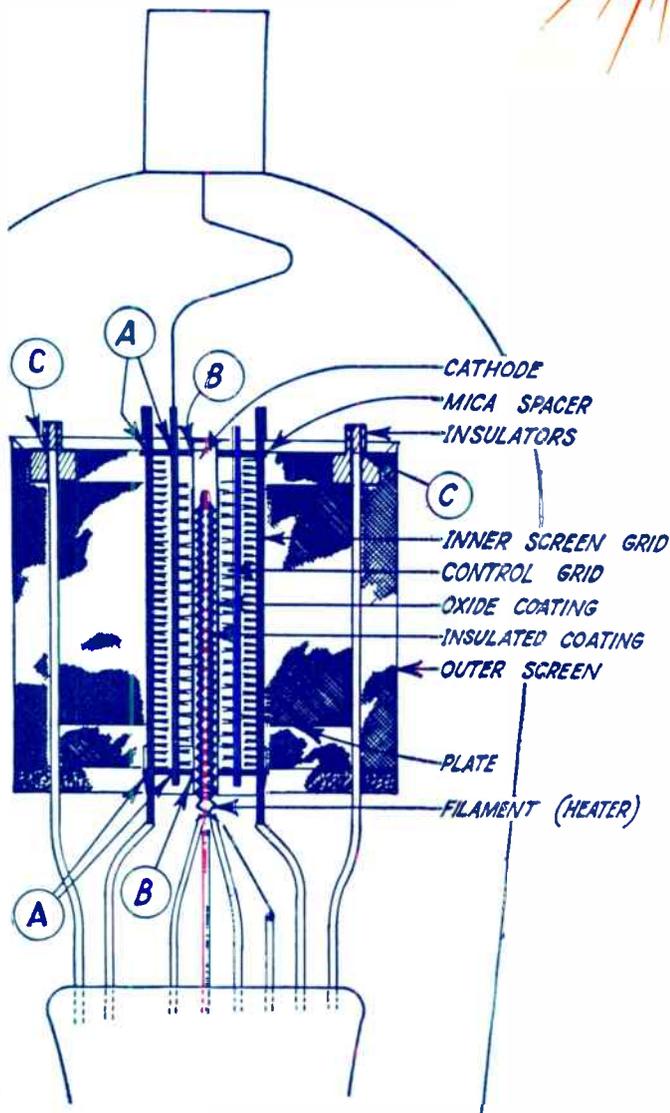
Have a change of bill daily—just like the theatres. List your "coming attractions" in the window—the newspapers are constantly tipping you off about the good programs. Play this thing up for all it's worth, so that the passer-by will begin to look regularly at your display cards, which remind him of the special and worthwhile programs.



H. M. Lippe
President
Essex Distributing Co.

APRIL BUSINESS EDITORIAL

This "quick-heater" has stood the gaff



TUNG-SOL TUBE 224

A and C in this diagram show fixed spacers which not only prevent the elements in this tube from changing position but allow all shock and vibration to be absorbed in the lead wires.

Regardless of what happens below the elements, the cathode, control grid, screen grid plate and the outer screen retain their identical relations.

The diagram also shows that the filament has a special insulated coating—allowing it to contact with the cathode sleeve for almost its entire length and so eliminating noise and hum at this point.

Note also that the control grid is supported by an additional post—two posts instead of the usual one.



RADIO PANEL BULB

Tung-Sol Panel Bulb for dial illumination on radio cabinets. Either A. C. or D. C. Its sturdy construction insures the user of excellent dial illumination.

THERE'S nothing like a quick-heating tube for demonstrations, for clinching sales—*provided that tube stands up under vibration, knocks and jolts.*

But how many "quick-heaters" can run the gauntlet of hard usage? How many can give perfect tone—in the shop before the sale and in the home afterwards?

Two years ago Tung-Sol realized the high mortality among quick-heating tubes. They set about to give dealers a *fast* tube that would last—*be dependable at all times.* In January, 1930 they brought out the present Tung-Sol Tubes 224 and 227—the *first fast-heaters to be humless, non-microphonic, quiet.*

224 and 227 are constructed with built-in spacers. These spacers prevent the elements from changing position when the tubes are subjected to any undue vibration or shock.

These tubes heat in six seconds. They give perfect performance despite the punishment that tubes invariably receive.

TUNG-SOL

RADIO TUBES

One of the Famous Tung-Sol Products

Made by TUNG-SOL RADIO TUBES INC., Newark, N. J.

Licensed under patents of the Radio Corporation of America

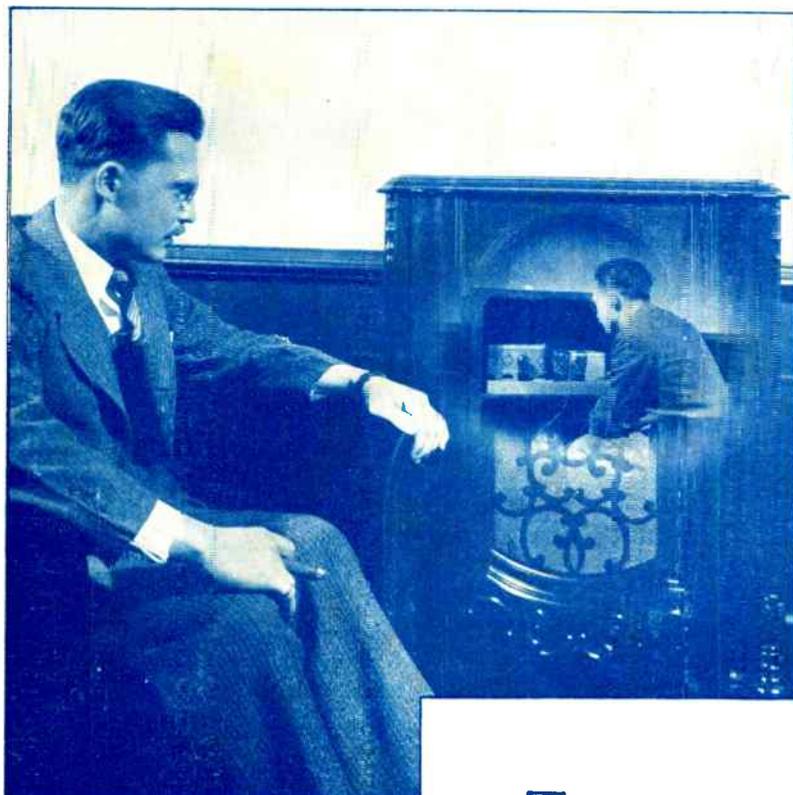
Sales Divisions

Atlanta	Boston	Cleveland	Kansas City	New York
Baltimore	Chicago	Detroit	Los Angeles	St. Paul

To secure the best service to your reply, be sure to mention



"Make Certain Your New Set is Equipped with Radiotrons"



[THE TWICE-WEEKLY MESSAGE TO
MILLIONS OF RADIO SET OWNERS]

and Countless Set Buyers Do!



Every Wednesday and Saturday night, John S. Young, popular announcer for the RCA Radiotron Varieties, sends this message to set owners from coast to coast.

"Why gamble with your radio enjoyment? When you buy one of the marvelous new sets now being offered, be sure to look inside the cabinet and make certain the set is equipped with RCA Radiotrons. RCA Radiotrons cost no more than ordinary tubes."

THE BUYER of any of the good sets on the market today deserves the kind of reception which the manufacturer of his particular set has built into it. The dealer who guarantees this by equipping the set with RCA Radiotrons deserves to capitalize on that point.

Twice a week, every week in the year—through the popular Radiotron Varieties—the RCA Radiotron Company suggests to millions that they look inside the cabinet before buying a new radio set—to make certain it is equipped with RCA Radiotrons.

Even inexperienced set buyers are heeding the advice. They are looking inside the cabinet. Be ready for them. Equip your sets with RCA Radiotrons.



RCA RADIOTRON CO., INC. ~ HARRISON, N. J.
A Radio Corporation of America Subsidiary

RCA RADIOTRON COMPANY, INC. * * * HARRISON, N. J.

RCA Radiotrons

THE HEART OF YOUR RADIO