

WESTERN Music and Radio Trades JOURNAL



**NOW . . . a real
radio in miniature**

dwarf goes the rest of The Way
JJ RADIO JJ

\$49⁵⁰

COMPLETE

(Carrying Case extra)

SPECIFICATIONS:

5-Tube all electric
3 screen grid tubes
Tuned radio frequency circuit
Illuminated dial
Full Dynamic Speaker
Phonograph jack
Table space 11"x7"
Height 12½"
Weight 16¼ pounds

DWARF, the world's smallest fine Radio, begins where the Midget left off. And it goes all the rest of the way, in size . . . in tone quality . . . and in price. That way lies more sales for every Radio dealer. What Midget did a year ago, DWARF is doing now . . . and DWARF will hew to the line; it will stay what it started out to be . . . the world's smallest fine radio.

**2/3 THE SIZE, 1/2 THE WEIGHT OF THE AVERAGE
MIDGET**

DWARF has the tone quality of a console and ample volume. It is as compact as a lady's wrist watch . . . and as fine. An ornament to any room . . . 100% portable. Handsome carrying case at a slight additional cost. Screen grid, of course, five tubes, phonograph jack. Phone GRANite 0969 for demonstration. Prepare to be agreeably surprised.

DWARF RADIO MFG. CO., LTD.

6725 SANTA MONICA BOULEVARD, LOS ANGELES

MARCH 1931

Ken·Rad

Fine Radio Tubes

*Compare YOUR
Tube Set-Up with
the IDEAL*



How do you *know* that you have a tube set-up as good as Ken-Rad offers? You *can't* know until you check up and see! And you owe it to yourself to make this check . . .

KEN-RAD OFFERS THE IDEAL		KEN-RAD	CHECK YOUR TUBE SET-UP
QUALITY	The finest tubes made, assuring better demonstrations.	✓	
UNIFORMITY	The least variation in characteristics of any tubes.	✓	
REPUTATION	A background as old as the radio industry—an established reputation for quality and fair dealing.	✓	
STRENGTH	A financial rating of AAA-1—a position that is further strengthened by the company's old established lamp business.	✓	
ENGINEERING	A <i>licensed</i> tube—produced under the direction of one of the most able engineering departments.	✓	
SALES POLICIES	A merchandising plan that builds a profitable business for you and protects you on the business you build.	✓	
PROFITS	An attractive margin, and co-operation that enables you to make a profit.	✓	



You can make more money on Ken-Rad Tubes—and you can add further to your profits with Ken-Rad Incandescent Lamps. Write us for all the reasons why.
THE KEN-RAD CORPORATION, Incorporated, OWENSBORO, KY.
Licensed Radio Tubes and Incandescent Lamps



Now...let's all pull together!

Now is the time when the whole industry needs as never before the sincere co-operation of dealer, jobber and manufacturer. We believe that our dealers and jobbers know that they can depend on Brunswick. We believe that we can depend on them . . . and we invite

inquiries from other dealers who are seeking a quality line, strongly merchandised, with a clean reputation of three generations of men behind it.

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 4 screen-grid tubes and two 45's in parallel. Uni-Selector and Illuminated Horizontal Tuning Scale. Tone Control. Cabinet of seasoned and selected hickory with carved front panels. **\$139.50**
 Other models \$170 up (less tubes)

BRUNSWICK RADIO

Entered as Second Class Matter January 24, 1928, at the Postoffice at Los Angeles, California, under Act of March 3, 1879, \$2.00 a year. Western Music & Radio Trades Journal, Vol. XII, No. 3. Published monthly at 1220 Maple Avenue, Los Angeles, California.

RADIETTE'S NEWS

These New Radiettes!

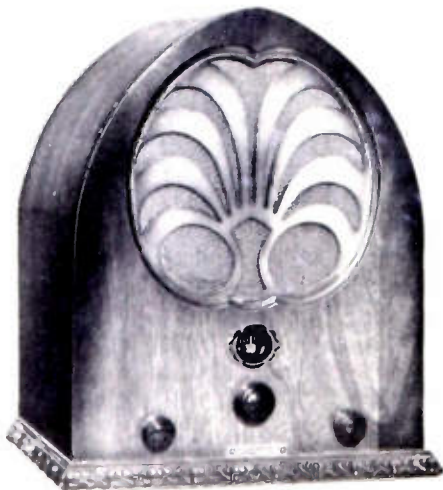
These new RADIETTES are the products of an old, reliable firm, which has pioneered the Midget set and which specializes in the construction of Midgets. There is no experimenting in the design or construction of these marvelous RADIETTES. They are produced under the direction of experienced engineers by trained employees who pride themselves on building the world's finest midget radio sets.

Here Is Sensational • Model 50 •

If you want to get the surprise of your life, sit down with this little bit of T. N. T. for just ten minutes. We'll bet the limit you will agree it has **MORE PUNCH PER CUBIC INCH THAN ANYTHING IN THE RADIO BUSINESS.**

No fooling, this big surprise in the small package will start a parade into your front door so fast you'll forget such a thing as a depression ever existed.

This cabinet is only 8 x 10 x 13 inches, but it contains a full 8 INCH ELECTRO-DYNAMIC SPEAKER and a 5 TUBE, 3 SCREEN GRID radio set that will make your cash register sing the prettiest song you ever heard.



Model 50

*Tone Control,
Phonograph Jacks
and everything.
Size 8x10x13 in.
Shipping Wt. 25
pounds.*

\$49⁵⁰



The New Beautiful Super-Heterodyne

To give the proper indication of the capabilities of the RADIETTE SUPERHETERODYNE we ought to put it in a cabinet 14 FEET WIDE AND 18 FEET HIGH instead of only 14x18 inches. Seriously speaking, WE'LL MATCH THIS SUPER AGAINST ANY RADIO SET AT ANY PRICE! For TONE, DISTANCE, VOLUME, SELECTIVITY and beauty IT'S SUPERIOR JUST DOES NOT EXIST.

Radio buyers are keener today than ever—they know radio values, and you've got to give them more than their money's worth if you expect to keep the profit parade moving in your direction. Here is more dollar for dollar value than anyone has dared dream of!

SPECIFICATIONS:

9 Tubes, 245's Push Pull, 4 Gang Ball Bearing Condenser, Carefully Shielded, Antenna Pre Selector, Local-Distance Switch, 10 Kilocycle Separation, Velvet Drive Vernier Dial, Kilocycle Markings, Dial Light, Tone Control, Phonograph Connection, No Harmonics, No Radiation, Size 10 x 14 x 18 Inches, Shipping Weight 35 pounds.

TANDEM DETECTORS—greatly improving tone and giving greater volume without distortion.

"LITZ" COILS—Radio engineers agree that "Litz" wire for coils increases efficiency 400%.

EVERY RADIETTE

KELLER-FULLER MANUFACTURING

SUPER-HETERODYNE

The Super-Heterodyne
Retailers at

\$79⁵⁰

WITH

Powerful **9** Tubes

• Model 60 •

1931's Biggest Money-Maker

• • •

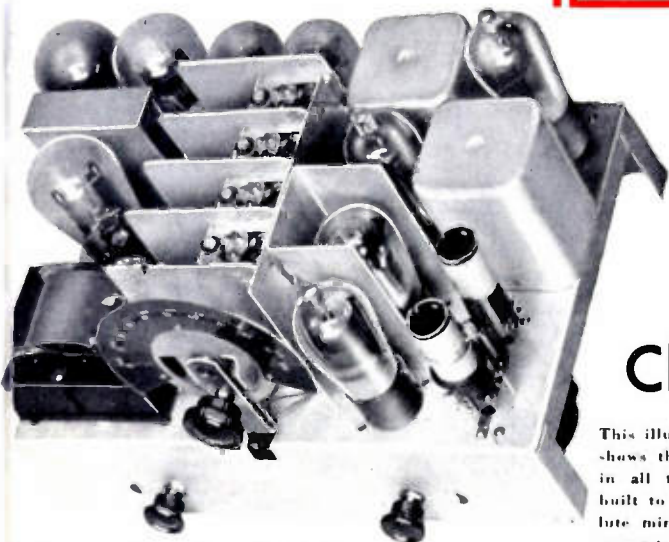
The full, rounded tones, remarkable power and unbelievable distance getting ability of this model are items of its performance which have endeared it to its thousands of owners all over the world. This is the standard model, much improved and refined. You can have no conception of its possibilities until you actually hear it.



\$59⁵⁰

Complete

- 6 Tubes (4 Screen Grid, 245, 280)
- Full 8-in. Electro-Dynamic Speaker
- Illuminated Vernier Dial
- Perfectly Shielded
- Cadmium Plated Steel Chassis
- Ball Bearing 4-Gang Condenser
- Tone Control
- Phonograph Connection
- Power Detector
- 3 T. R. F. Stages
- Size, 9 x 13 x 17 inches
- Shipping Weight, 30 pounds



The Chassis

This illustration of the Super chassis shows the type of construction used in all three models. Radiettes are built to reduce servicing to an absolute minimum. Parts and tubes are guaranteed ninety days.

HERE IS AN INTERESTING STATEMENT FROM ONE OF OUR DISTRIBUTORS: "WE HAVE ONLY ONE SERVICE MAN, WHO SERVICES OVER 2,000 RADIETTES IN CITY AND STATE,—AND STILL IS NOT BUSY."

(Name on Application)

All of the above models have 110-125 V. 50-60 Cycle power transformer, with fuse, self-healing electrolytic condensers, laced cable wiring, and all are fully shielded.

Prices for special voltages and frequencies on application.

TO LARGE BUYERS... We are in a position to quote you VERY INTERESTING PRICES ON CHASSIS of all these models for use in your own cabinets. The 9 tube Super is particularly well adapted FOR USE IN CONSOLE CABINETS. You can bank on its performance surpassing anything you have heard at anywhere near its price.

FULLY LICENSED

FACTURING CO., 1573 WEST JEFFERSON LOS ANGELES

RADIO IS NOW GOING



The New
SPARTON ENSEMBLE
Model 235

A 12-record, fully automatic, combination radio-phonograph, Sparton-built throughout, for

\$280 less tubes

Western and Canadian prices slightly higher

RREAL CLASS is telling as the radio industry reorganizes itself. Price still plays a big part, but price plus VALUE is becoming the outstanding sales factor as it eventually does in every industry. Dealers have learned that the margin of profit must be a true margin instead of a paper margin. The public has learned that it gets exactly what it pays for. Both, through hard experience, are realizing that a good name goes hand in hand with a good product. The good names of radio are automatically attracting the good dealers and the profitable customers. If you are the kind of merchant who has already seen this trend, we can get together and do it profitably.

THE **SPARKS-WITHINGTON** CO., JACKSON, MICH., U. S. A.

{Established 1900}

Pioneers of Electric Radio without batteries of any kind

Only SPARTON has the *MUSICAL BEAUTY* of

SPARTON RADIO

"Radio's Richest Voice"

(613)

WESTERN MUSIC and RADIO TRADES JOURNAL

"Published in the West for the West"

CONTENTS

Western Viewpoint	9
And on the Side (<i>Don McDowell</i>).....	10
Invest in an Electric Refrigerator.....	12
Money, Money! These Letters Get It.....	14
Know Your Super (<i>K. G. Ormiston</i>).....	16
Wise and Otherwise (<i>Shirley Walker</i>).....	19
California News.....	20
Mountain States Activities.....	22
People Who Do Things.....	35
Doings in the Industry.....	36
Record Reviews for March.....	38
Seattle and Washington.....	40
New Merchandise from the Factory.....	50

The publishers are happy to announce the purchase of Radio Doings, the oldest and most popular radio fan magazine in the West.

We feel that in taking over this publication, and selling the program behind the instrument, the trade will be immensely benefited, and a long-felt want will have been fulfilled.

With the first issue, the new Radio Doings will be inaugurated as the "Movie Magazine of the Air," with an abundance of "It" and fan appeal. In this novel form, it brings to thousands of Western radio owners a vital, sparkling monthly periodical never before provided.

Any dealer who is interested in the new Radio Doings may write us, and we will be glad to forward a sample copy with our compliments.

WALLACE M. BYAM.

March, 1931



BYAM PUBLISHING COMPANY

Publishers of the Radio Dealers' Blue Book

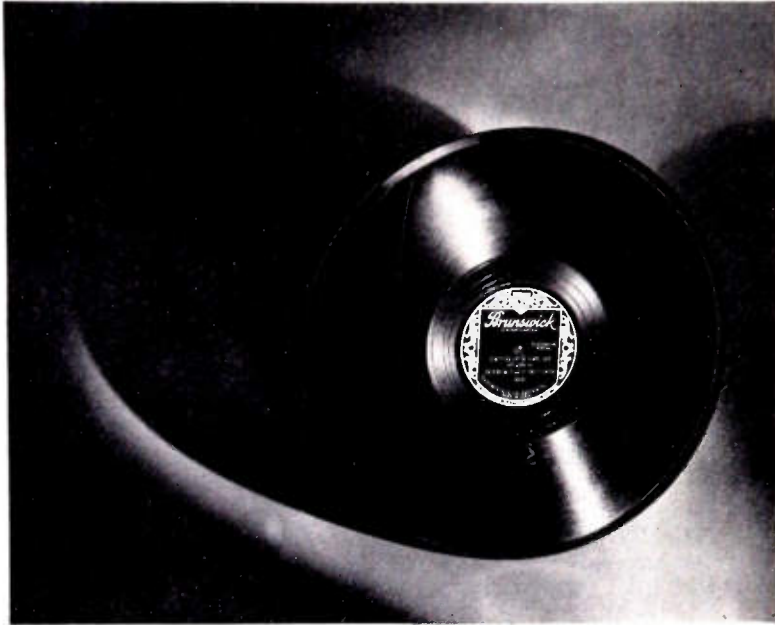
WALLACE M. BYAM

MARION E. BYAM

1770 MAPLE AVE., LOS ANGELES, CALIFORNIA Phone WEStmore 1977

New York C. A. Larson 251 W. 31st St.

Editorial Offices Maintained in San Francisco, Portland, Seattle, Salt Lake, Denver



- 6023 JUST A GIGOLO Fox Trot
THE RIVER AND ME Fox Trot
BEN BERNIE AND HIS ORCHESTRA With Vocal Chorus
- 6024 THE SLEEPY TOWN EXPRESS Novelty Fox Trot
THE KING'S HORSES (And the King's Men)
BEN BERNIE AND HIS ORCHESTRA Novelty Fox Trot
- 6018 When You Fall in Love FALL IN LOVE WITH ME Fox Trot
TRULY (I Love You) Fox Trot
OZZIE NELSON AND HIS ORCHESTRA With Vocal Chorus
- 6015 LONESOME LOVER Fox Trot
YOU'RE JUST A DREAM COME TRUE Fox Trot
ISHAM JONES' ORCHESTRA With Vocal Chorus
- 6016 BLUE AGAIN From the Musical Comedy "The Vanderbilt Revue"
HE'S MY SECRET PASSION
Comedienne with Orchestra, MARION HARRIS
- 6014 BLUE AGAIN From the Musical Comedy "The Vanderbilt Revue" Fox Trot
WHEN KENTUCKY BIDS THE WORLD "GOOD MORNING"
LORING "RED" NICHOLS AND HIS ORCHESTRA Fox Trot
With Vocal Chorus
- 6013 LADY PLAY YOUR MANDOLIN Fox Trot
SAY "HELLO" TO THE FOLKS BACK HOME Waltz
NICK LUCAS and HIS CROONING TROUBADOURS
Vocal Refrain by NICK LUCAS
- 6002 COME A LITTLE CLOSER Fox Trot
YOU'RE THE ONE I CARE FOR Fox Trot
TOM GERUN AND HIS ORCHESTRA With Vocal Chorus
- 4987 YOU'RE DRIVING ME CRAZY (What did I do?) Fox Trot
I MISS A LITTLE MISS (Who Misses Me in Sunny Tennessee)
NICK LUCAS and HIS CROONING TROUBADOURS Fox Trot
Vocal Refrain by NICK LUCAS
- 4934 "AFRICAN LAMENT" (Song Of The Slave) Rumba Fox Trot
THE PEANUT VENDOR Rumba Fox Trot
ANGLO-PERSIANS, Direction of Louis Katzman
- 4992 HURT Fox Trot
THEM THERE EYES Fox Trot
HAL KEMP and HIS ORCHESTRA With Vocal Chorus
- 6026 ON REVIVAL DAY (A Rhythmic Spiritual) Parts 1 and 2 Fox Trot
RED NICHOLS AND HIS FIVE PENNIES
With Vocal Passages by Jack Teagarden

MORE
RECORD
HITS FROM
BRUNSWICK

THEY WILL MAKE
MORE
PROFITS FOR YOU!

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

Brunswick Records

Western Viewpoint

As Important As Licenses

THE ANNUAL FLURRY OF RADIO PATENT discussions is again rampant in the western trade and differing little from the same sort of discussions that have been with the radio industry since it began.

There are fourteen licensed manufacturers in Los Angeles and approximately half a dozen unlicensed manufacturers that may be classed as fairly good sized, and possibly a dozen more so small as to be difficult of classification. The licensed manufacturers feel that they are not getting full protection from their licenses because so many unlicensed manufacturers are allowed to operate. As the license costs on an average of \$3.00 and as radio selling prices are already cut to the bone, these claim that \$3.00 added to the manufacturing cost may mean the difference between making or losing a sale or a profit.

The licensed manufacturers have been holding meetings. The unlicensed manufacturers have been holding meetings. And the manufacturers' agents and parts manufacturers have been holding meetings. The Radio Corporation has brought suit against one of the unlicensed manufacturers and against one large Los Angeles retailer.

On the whole, it appears that the matter of licenses owned by the radio corporations is a problem for the radio corporation to settle and a duty that they would owe both to themselves and to the manufacturers who pay them for the privileges and protection that a patent ordinarily gives. It seems unfortunate that these patents have not been brought to a decision in the highest courts long before this.

The agitation in Southern California is working very much to the betterment of the industry. Manufacturers in working shoulder to shoulder together in their mutual problems are developing merchandising plans, production methods, and engineering principles that will make the radio manufacturing industry of the West move forward solidly on a firm foundation and with more profit, and prosperity for all concerned; manufacturers, jobbers and dealers alike. It is exactly what the midget manufacturing industry has needed since its beginning.

* * *

An International Convention

RADIO AND MUSIC MEN OF THE WEST are extending their sympathies to President Kelly and the Canadian officers of the Western Music and Radio Trades Association. When Vancouver came to the convention last year with their bid for the 1931 convention they explained that special arrangements had been made with the Canadian customs whereby American-made radios and musical merchandise could be shipped into the Vancouver Hotel for exhibition purposes at the convention and shipped out without red tape or customs expense.

Recently, however, it appears that some of the Canadian manufacturers have objected to having American merchandise exhibited before Canadian dealers at prices very, very much lower than charged for the same or similar products in Canada. And certainly there is a side to their story. They appealed to the Canadian patent authorities and to the Canadian customs with the result that the decision was made not to allow American merchandise to cross the border for exhibition purposes at the Convention unless the usual tariffs were paid, which are of course prohibitory for convention purposes.

The Vancouver officers feel that a convention without a trade show in conjunction would stand possibilities of only being a minor success and have therefore asked the board of directors of the Western Music and Radio Trades Association for their advice.

It appears that two western American cities would like to have the convention, and in case the convention is shifted to one of these cities it seems probable that the officers elected last year will continue to function as association officials in the American city, giving an added international aspect to the western convention.

* * *

Is It a Pentode Year?

THERE ARE INDICATIONS THAT A Pentode year is coming up over the horizon. It has all the earmarks of the screen grid year of two years ago. Its success depends entirely upon how heavily the Pentode is merchandised and advertised by the leading manufacturers. Lyric, Atwater Kent, and Clarion have already announced Pentode models. Tube manufacturers are being swamped with Pentode orders. If these manufacturers back the Pentode with a heavy advertising campaign to make the radio trade "Pentode conscious," the new tube will go over the top. It will be a new interest to sales activities that the industry can use to advantage.

Not that the Pentode is very much better than the tubes we now have, for although it is much more powerful and has widely different characteristics than the screen grid, sets using it are little different or better than other sets. Time may make it better. It is something new to sell and the radio public always has and always will clamor for the NEW in radio. Two California manufacturers have Pentode sets in their laboratories.

* * *

EUGENE FARNY, PRESIDENT OF THE All American Lyric Corporation, says:
"The Western manufacturers just about upset the apple-cart of the nation's radio merchandising picture last year, but you've got to hand it to them for one thing, they have taught all of us how to make better sets for less money. They were the nation's radio laboratory."

Radio Is the Main Thing

While there is undoubtedly an attractive profit to be made in the merchandising of allied lines, don't forget that radio comes first. The real money for the radio dealer is in his radios, and he can't afford to neglect them.

Sell side-lines AS side-lines, and keep them in their places. Most of these lines are very well suited to be handled in radio stores, and radio dealers are in a good position to sell them.

THE EDITOR.

• • • • •
ON • THE

More and More Dealers
Find These Side Lines
Keep Sales Humming!

AND still they come! On all sides radio dealers are taking on sidelines to bolster up sales during slack season.

One of the latest additions to the radio store is the automatic dishwasher. This is a promising piece of merchandise, calculated to save the housewife the tedious job of washing dishes by hand three times a day, retailing for about \$65.

The new dishwasher runs on water power alone, there being no electrical or mechanical machinery. A section of hose is connected to the hot water faucet and to the intake on the washer, and the water does the rest. Dishes are stacked vertically in a circular wire rack, which turns on a pivot as a strong spray of hot water hits the dishes from the side. Two other sprays cover the top and bottom surfaces of the dishes, cleaning every portion.

Hand-drying of the dishes is unnecessary. When the faucet is turned off, the rack continues to spin a few moments in the hot, steam-laden air, and when the dishes are removed, they are nearly dry.

The machine is small, compact, and attractive, being finished in pastel shades of porcelain, with nickel trimmings. There is nothing

to wear out about it, no cost of upkeep, and dealers find that they can go out and demonstrate it and sell it readily.

Midget Clothes Washer

In direct step with the general trend toward "midget" merchandise, the small, vacuum-controlled, electric clothes washer and dry cleaner is becoming a popular sideline.

Its compact size, economy, and general handiness to the housewife are all attractive points for the aggressive dealer to sell. Manufacturers of these "midget" washers suggest to dealers that they contact such prospects as apartment dwellers, newly-weds, owners of summer beach or mountain cottages, school teachers, bachelors and housewives who already own a large machine, but have need for a small, convenient one for daily use. Cleaning fluid can be used in the machine, instead of water.

Some enterprising dealers watch the birth columns in daily newspapers, and write letters to the new parents. One of the biggest selling points advocated for the machines is their use in washing baby clothes.

Glass demonstrating machines are furnished by some of the manufacturers to dealers, so that the customer can see the washer work. These demonstrators are found to be excellent window displays and attention-getters. One of these machines recently introduced into the West, weighs only 19 pounds, empty, and retails for \$37.50.

While the field in standard size washers has been pretty well covered, there are many dealers who carry them and make money out of them. This line is sold entirely through the house-to-house specialty set-up, and depends on aggressive outside selling alone, according to veteran washing machine authorities. One Eastern dealer says they are his best selling sideline.

Electric Clocks Popular

The electric clock is an article that is becoming more and more prevalent on the radio dealers' shelves. Of all sidelines, with the possible exception of radio lamps, the electric clock, from all reports, is the best seller.

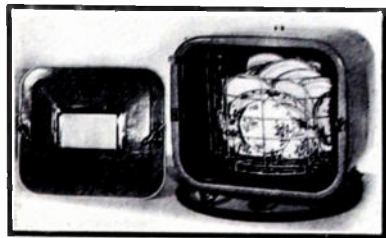
"And yet," says an electric clock distributor, "In one town we have

... AND • • SIDE

By DON McDOWELL

two dealers. One has a fine large radio store, and the other runs a filling station. The one in the filling station has been known to sell fifteen clocks a week, to the big dealer's three. But the little fellow is a go-getter. Whenever anyone drives in for gas, he's right there with an electric clock to show him before he drives away. If that radio dealer had half that fellow's push he'd be on Easy Street."

The development of strict, timed broadcast programs has made the electric clock a good companion line to radios. Clock manufacturers are now electric clocks on the market that will turn the radio on and off, at any set time. Another line has a model with an automatic calendar on its face, that turns itself one day



Water-power dishwasher

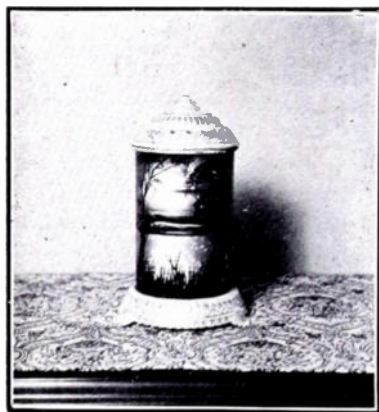
ahead at 12 o'clock midnight. Prices of electric clocks range from \$6.75 up, with a 35 or 40 per cent profit for the dealer.

An article that is included in several dealers' allied lines is a combination electric food mixer and juice extractor. Built on the order of an electric malted milk shaker, the compact machine includes an appliance that mixes pancake batter, beats eggs, whips cream, mashes, mixes drinks, and extracts fruit juices. This mixer lists at \$19.00.

Moving-Scene Lamps

Moving-scene radio lamps continue to be a good source of profit as a sideline. More than 1,500,000 have been sold in the last seven months, it is reported. These lamps retail at six or seven dollars, and cost the dealer between three and four.

The lamps come in various designs—forest fire scenes, Niagara



Moving-scene lamp.

Falls, marine scenes, Japanese Twilight scenes and other outdoor scenes that can be represented in motion. The mechanism is simple. There are two transparent cylinders inside; one fixed, and the other revolving by the heat waves of the bulb striking a thin horizontal propeller in the top. Both cylinders are painted in streaks and blotches, and when the light shines through, an appearance of realistic scenes in motion is given through the painted scene on the outside. They are also used as perfume lamps.

And of course the electric refrigerator is now established as a regular companion line to radios.



Clothes washer and dry cleaner.

Dealers are organizing their sales plans to meet the aggressive outside selling requirements of the refrigerator, and are well under way in the new line.

Radio dealers who are situated near the coast or close to lakes are even taking on outboard motors and electrical boat supplies, in preparation for the summer outing season. Marine radios and portable sets are also being stocked in this connection. Automobile radios are another line being sold to the vacation trade in particular, as well as to the general public.

Among the other electrical appliances that are carried by radio dealers at present are ironers, sun lamps, sandwich toasters, candle-flashlights that light when lifted, vacuum cleaners, percolator sets, waffle makers, cigar lighters, bridge lamps, and household incandescent lamps.

The president of an outstanding Eastern radio company, has this to say about electrical sidelines:

"The radio dealer must wake up to the fact that he is living in the twentieth century. He must acquaint himself with those products which are best fitted to be placed in the modern home. He must learn how to merchandise them at a profit to himself. The time-tried sales methods of successful and dominant manufacturers of electrical appliances are at his beck and call. If he is enthusiastic, if he knows his products, and is sold on the household items he handles, he can't fail to turn them into a very profitable business for himself. We live in a time when we must be up and getting—not going!"



Prove to her by simple arithmetic that an electric refrigerator will pay for itself, and actually be an investment.



By MERLE DAVIS

OF all the advantages afforded the housewife by the electric refrigerator, Economy and Convenience are the strongest selling points.

This fact was brought to light in a recent questionnaire census conducted by the National Electric Light Association, in conjunction with the Woman's Home Companion and several other organizations. More than 25,000 women were contacted personally and asked to list the things that appealed to them most in an electric refrigerator, in the order of preference.

When the answers were checked up, it was found that the factor of Convenience headed the list. Then came Food Preservation, Cleanliness, Health, Economy, Frozen Dishes, Ice Cubes, Modernism, and last, Pride of Ownership.

It is generally conceded by refrigeration sales experts that, true though these results may be, at first glance they are misleading.

For the investigation further brought out the fact that, although 77 per cent of the housewives preferred and desired electrical refrigerators, and 66 per cent gave Convenience as their reason for preference, 69 per cent wanted them, but thought they couldn't afford them.

"Can't Afford Them"

"This is extremely significant," says one dealer. "In the first place, it means that, if 69 per cent of the women think they can't afford them, we have to show her where the refrigerator will save her money—in other words, sell Economy. In the second place, if Convenience is what appeals to her most, we must hammer away at that angle, too, before we start talking about Cleanliness or Health.

"Here's how I sell Economy," he continued. "I prove to a housewife that an electric refrigerator will practically pay for itself in 18 months, and show her in black and white how it does it. According to statistics gathered by the government Bureau of Economics,

"Invest in an electric refrigerator"

The nation's sales cry to economical housewives!

the food bill of a family having an income of \$1500 or less is \$629.00. It is further shown that 10 per cent of all food bought for table use is thrown in the garbage pail. That's about \$63.00 a year.

"Through buying in quantity, made possible through electrical food preservation, say, another \$63.00 is saved. The difference between the average family's ice bill and refrigeration electricity cost is about \$30. The total is \$156 saved in one year through owning a refrigerator. Add half of that, \$78, and you have \$234 saved in 18 months, the usual term of contract. The electric refrigerator has practically paid for itself."

To further the cause of electric refrigeration, the National Electric Light Association has voted to set aside one million dollars for educational advertising this year, supplementing another million being appropriated by electric refrigerator manufacturers for the same purpose. The slogan adopted by the N.E.L.A. for the campaign is "Invest in an Electric Refrigerator."

A Sound Investment

Proving the refrigerator to the housewife as a sound investment, that actually brings in cash returns, is now the watchword of all refrigeration sales experts.

One dealer bases his whole selling plan on this one fact. By simple arithmetic, he shows the housewife who says she "can't afford one," that the money she puts into a machine is as good as if it were in a bank drawing interest.

He figures all savings on a minimum, so that there will be no doubt that his facts are true. The average ice bill of a family is around four dollars a month, he finds. Food wastage is figured in conservatively at five dollars a month for a family of four, though it is often twice that amount. With monthly payments at \$10, and a saving of nine, it is only costing the purchaser one dollar a month at the most, to buy a machine, aside from the down payment. And after the payments are completed, the nine dollars a month is all clear. As the dealer tells the housewife, "and the money comes out of the garbage pail."

Other Selling Points

After the dealer has sold a housewife on the Economy of buying an electric refrigerator, and proved to her that it is in reality a sound, dividend-paying investment, he starts in with the lighter artillery of Convenience, Cleanliness and the others.

Many of these factors are really not separate, but can be obtained under the same head. It is convenient for a woman not to have to clean up after an ice man. The



Demonstrate clearly the inconveniences of the ice-box, and the time and effort that can be saved with an electric.

fact that there are no drain pipes to get clogged up and swabbed out also saves her much trouble and effort. No mopping the floor when an ice pan runs over. No waiting for an ice man or setting out an ice card. There are scores of points brought out to show a woman how much more convenient an electric is.

Under Cleanliness and Health, a certain dealer uses a trump card that never fails to "get under the skin" of any woman. Here is a sample of the sales talk he uses:

"Mrs. Jones, have you ever noticed how your ice man always carries the ice in on a gunney sack, lays the chunk down on the sack while he clears the box and carefully wipes the floor after him? He is sincerely trying to keep your floor clean and save you work, but what about the ice itself? After he has repeated this operation at fifteen or twenty homes, what happens to the dirt from floors that accumulates on his wet sack? It goes on your ice, Mrs. Jones; that's a good thing to remember the next time you lay some vegetables or meat on top of the ice."

The recipe book is another important means of creating a woman's desire for a machine. Most manufacturers supply their dealers with attractive, well edited recipe pamphlets for frozen dishes. And there is a psychological angle to this that cannot be overlooked. Most of the recipes are such that they cannot be made up with an ordinary ice box.

Recipe Book Valuable

"If I had my choice of all the literature concerning a refrigerator there is to be had, I would take the recipe book," declares a dealer. "I figure that there are two things a housewife prospect will do with it—either she will keep it, or she will throw it away. If she throws it away, it means that she would have discarded any other literature I might have sent to her. But if she keeps it, there is a good chance that sometime she will refer to it.

"I keep up on the domestic science columns in newspapers, and often I write down a particularly good recipe, clip it to one of my business cards, and mail it to one of my customers. This always adds a little more good-will."

This dealer finds that most women elect to keep a recipe book, no matter how many others they may have. And even the

▼

RESULTS OBTAINED—

In a census of 25,000 housewives:

- .. 77 per cent of the housewives desire electric refrigerators to ice boxes.
- .. 66 per cent prefer them because they are more convenient.
- .. 69 per cent want electric refrigerators, but feel they "can't afford them."

▼

woman who has no intention of buying an electric, at some time or other, probably will look over the recipe book, and often will attempt to try some of the recipes in her own ice box. And when she finds out that it is impossible, she will be all the more interested in an electric machine.

In this connection, it is well to note that more and more dealers are schooling themselves in cooking and domestic science. Knowing something about the inner workings of a cook book is getting to be a part of the refrigerator dealer's regular business routine. He must be able to answer questions about food and food problems, such as bacteria growth, mold, food prices, various kinds of dishes, and cooking terms in general.

And the general opinion among dealers who are acquiring this knowledge, is that it is not hard to learn, and is extremely valuable information. Many of them have had their wives teach them, and found out all they need to know, right at home. Domestic science classes in schools and department stores are other sources of information.

But the fact remains that, if the figures gathered by the N.E. L.A. are indicative, Economy must be stressed first, and Convenience next. As one salesman put it, "If I knew that a man was interested mainly in the economy of buying an automobile, I'd certainly be seven kinds of sap if I tried to sell him on the fact that the car had beautiful wind-wings or could do ninety miles an hour!"



\$ MONEY These Letters

This series will squeeze the dough out of the toughest "dead-head"

THIS is used as a first notification on good accounts and should be always signed by the cashier. It serves the double purpose of checking any mistake or calling attention to the account. No one will take offense because we assume the payment has been made. In most cases you will find that a payment will be sent in at once with a notation that the matter had been overlooked.

Balance \$.....

Dear Mrs.....

Your regular monthly payment, which ordinarily should have reached us several days ago, has not yet been credited to your account.

You realize, of course, that we have a large number of customers and where names and initials are often similar it occasionally happens that we credit a payment to the wrong account.

If your payment has been sent in this month, will you please fill in the blank spaces below and return to me. This will enable us to promptly correct any error made in this office.

Date you made payment..... Amount \$.....

Did you send check, money order or pay at store?.....

Under what name was payment made?.....

Thanking you in advance for your trouble in helping me, I am,

Yours sincerely,

Cashier.

This is also used as a first letter—usually on a new account, and it will promptly check any disagreement regarding terms. It has brought excellent returns and without giving offense. Balances should be filled in on all letters for purpose of comparison. This saves the necessity of inclosing a statement.

Balance \$.....

Dear Mrs.....

Will you be good enough to let us know if there is any misunderstanding in regard to the payments on your account?

While our records show that your account is slightly past due, it is possible that we have made some mistake. We have hundreds of accounts and although a certain number of errors are unavoidable, we try to keep them down to as few as possible.

If you will write us promptly, it will enable us to immediately correct any mistake and thus save any further misunderstanding. If you have simply overlooked the payment, we will appreciate your sending the amount now due on your account.

Thanking you for your co-operation and with good wishes, we are,

Sincerely yours,
BLANK MUSIC COMPANY,
Accounting Department.

This is used as a second follow-up and is usually sent out about five days before the second installment will be past due. The object, of course, is to bring both payments with this letter. We ask them, courteously, to notify us in advance if it is necessary to delay future payments. They are also given the questionnaire to fill out and you will find that this helps to bring a reply.

Balance \$.....

Dear Mrs.....

Did you receive our letter, mailed about ten days ago, in which we reminded you that your payment had not reached us?

We are inclined to think that the letter was not delivered to you personally as we are confident that you would have given it prompt attention. Will you please send the payment now due and, if convenient, also include the next one, which will fall due within a few days.

In the future, will you please notify us, in advance, in case it should be absolutely necessary for you to delay payment? It is necessary for us to follow a definite plan in handling a large number of accounts and it helps us materially if payments are made promptly.

Please fill in the spaces below the exact way in which you want your mail addressed so that we may be sure our records are correct. Return this to us for comparison.

Name..... Street No.....
City..... State.....

Sincerely yours,
BLANK MUSIC COMPANY,
Collection Manager.

This is a second follow-up but might actually be used as a first letter. Where it is used as a first notice, the customer will invariably reply and state that the first letter was not received. It impels an answer because the customer wants to correct the statement regarding the other letter and we give him an easy way out because we assume that it did not reach him.

Balance \$.....

Dear Mr.....

Our cashier informs me that there was no remittance from you in this morning's mail.

Thinking that perhaps our reminder sent about ten days ago did not reach you, I thought it best to write you this letter personally as I am sure you would not intentionally neglect the small amount now due.

Just pin your check to this letter and drop it in the mail today.

Thanking you in advance and with good wishes, I am,
Cordially yours,

Credit Manager.

This is used as a third notice or as a second notice where the customer has had to be notified previously

MONEY rs Get It.....!



Now that it's Spring, and house-cleaning is in order, it is a good time to clean up those old accounts. With these letters for a broom, dealers can make a clean sweep.

about payments. Send it by registered mail and request a "return receipt." Our attitude is still friendly—the letter is fair and reasonable, and we take away from the customer any excuse about being hard up by our explanation of unusually small payments.

Dear Mrs.
Balance \$.....

You doubtless have our last letter and have fully expected to give it attention. Something more important perhaps has claimed your time. While we do not wish to seem unduly insistent about the small amount past due on your account, still when you consider that we have a large number of installment accounts, you will realize that we must ask every one of our customers to remit promptly.

Our terms were purposely made as low as good business methods will permit and we feel that the terms are so reasonable that even temporary financial embarrassment should not interfere with the regularity of your payments.

You are requested, therefore, to send to us today the small amount now due and to make a special effort to send the future payments as they fall due. We know you will cheerfully comply with these two requests.

Yours sincerely,
BLANK RADIO COMPANY.

The following letter has proven to be unusually effective in collecting small balances which are often the source of considerable trouble—the account involved may be very small but you want it cleared up so that the customer will feel free to come in and buy again and also, of course, to save any loss on the account.

Balance \$.....

Dear Mr.

Will you be good enough to send us by return mail a remittance covering the small balance on your account?

We are sure that you appreciate the fact that the amount is past due and that you will let us hear from you at once. With thanks in advance for prompt payment, we are,

Collection Manager.

I enclose \$..... payment in full of above balance.

Your name here.....

We have dropped the friendly opening and now use "Dear Sir" or "Dear Madam"—their attention being called to the definite provisions of the contract and that we will not carry the account of any other basis. This letter has been used successfully in bringing the payments in on accounts that are inclined to slip behind.

Balance \$.....

Dear Mrs.

In an absolute spirit of fairness, we must insist upon your sending us each and every month the amount agreed

upon in your contract with us. You can not reasonably ask or expect us to carry this account for you on any other basis. The terms extended to you were liberal.

This obligation represents a definite agreement as to price and terms. You knew just what you would have to pay each month. It is not something which has come up unexpectedly but on the contrary it is an obligation which you should have planned ahead to meet promptly every month.

We shall expect you to send the amount now due on your account by return mail and to take care of all future payments promptly upon the day they are due.

Yours sincerely,
BLANK MUSIC COMPANY.

This letter "gets under the skin" of the customer and carries several definite appeals—their credit, fairness, right sort of person, pay part, make good.

Balance \$.....

Dear Mrs.

Every day we have been expecting a remittance from you.

Somehow we cannot believe you would have us deliver our merchandise to you after we had cheerfully extended credit to you—and then neglect to pay us.

You cannot say we haven't been patient with you. No harsh collection methods have been used because we believe you are the right sort of a customer and will pay.

If you cannot possibly pay the amount due, PAY PART OF IT, and your application for extension of time will be given prompt consideration. Write us today, making partial remittance, at least, so that we may know that you intend to make good.

Surely, you won't let us wait any longer.

Sincerely yours,

This is a special letter to a customer who has placed more than one order and where all but the last has been paid up. It carries a personal appeal which has proven very effective.

Balance \$.....

Dear Mrs.

You are an old customer at this house and we are at a loss to understand why you have not paid the balance on your last order.

The company holds the credit department responsible for all accounts, and I personally O.K.'d your last order for delivery.

My monthly report to our board of directors is now being made up, and even if you will send even a small payment at once it will enable me to report your account in good standing.

Will you oblige me, personally, by making a payment not later than four o'clock tomorrow afternoon?

Sincerely yours,

(Continued on Page 46)

We are pleased to announce the appointment of Kenneth G. Ormiston to the staff of Western Music and Radio Trades Journal as technical editor.

He needs no introduction to the trade, for he is one of the best known and most capable radio technicians in the country.

TECHNICAL SERVICE

If dealers or service men have any technical problems or questions, they can obtain free advice promptly, by writing to Mr. Ormiston, c/o Western Music and Radio Trades Journal, 1220 Maple Ave., Los Angeles.

The Publishers

KNOW

Your Ears And A Screw-driver Alone Won't Do

By K. G. ORMISTON

COLD shivers run up and down the spine as the mind's eye conjures up a picture of a radio service man balancing a super- by the use of one screw driver and one ear.

In those dear, dim days beyond recall when sets were only t. r. f., it sufficed that some station down among the sardines was tuned in, and all loose and available screws juggled until a maximum of sound issued forth from the loud speaker. The set was then considered balanced, and believe it or not, would probably function thereafter to the satisfaction of the owner.

The t. r. f. receiver boasted three, or four, or five tuned circuits. The condensers were ganged together, all tuning identical circuits to the same frequency at the same time. What could be simpler? "Unt comes it now" the superheterodyne, and we have from seven to ten tuned circuits, tuned to three different frequencies. And to make matters worse, circuits which operate at different frequencies are ganged together!

Needless to say, the trusty screw-driver and ear will no longer suffice. The radio-dealer's service department must acquire certain equipment and apparatus heretofore only found lurking in the mysterious cubby-holes wherein ideas sometimes develop and more often not, to-wit: the laboratory.

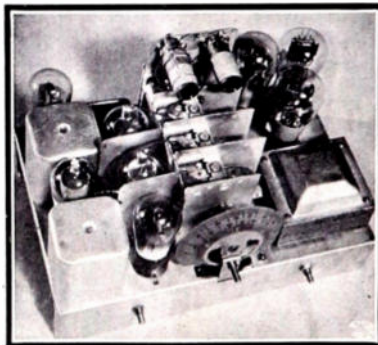
Can't Balance Superhets By Ear

Seriously speaking, any attempt to balance a superheterodyne by ear, and without the use of a modulated, calibrated oscillator and output indicating device can result only in disaster. The purpose of this article is to impress upon every radio dealer and service man the vital importance of acquiring suitable equipment and the knowledge necessary to intelligently adjust the various circuits of the type of receiver which is bound to be the big seller this year.

Before taking up the question of servicing the super, let us first discuss the reasons for its sudden push to the forefront of the radio market, and briefly analyze the circuits of a typical receiver.

The great advantage of the superheterodyne is its ability to tune in more stations without interference, than any

other type of set. But it is a fact that the great majority of set owners are not interested in reception from distant stations, so it seems strange at first glance why practically all of the radio manufacturers in the country are now concentrating on the design and manufacture of sets whose chief asset is their ability to play far distant stations with volume.



A very compact eight tube superhet chassis.

DX Interest Will Revive

The public has not been demanding greater sensitivity and selectivity. Generally they have not been anxious to tune between the locals and hear DX stations. But the manufacturers, in the rivalry between themselves, have increased efficiency and performance until now in the modern supers we have sets with sensitivity so great that part of it is useless because of the ever-present natural noise level; the tuning so sharp that the Federal Radio Commission may now crowd stations closer together whenever they feel like it; volume enough to fill a young theatre, and the kind of tone that does funny things to your diaphragm.

Mr. John Public will want and buy the superheterodyne for the same reason that the timid driver buys the high-powered automobile,—because he wants all he can get for his money. Just as the T. D. knows that he can go 80 miles an hour if he romps on the throttle, so J. P. knows that he can play the whole darned 96 channels with his

superheterodyne if he wants to! And there's a lot of comfort in that.

And another thing,—take one of these "don't care for DX" chaps and give him a modern super to play with on a quiet night, and he'll be muttering to himself next day about the chain stores in Shreveport, whiskey prices in Juarez, and what-not.

A Typical Superhet Circuit

The schematic diagram illustrates the complete circuit of a modern eight-tube super. In order to better understand the balancing problem, let us start at the antenna and briefly describe the action which takes place.

The antenna coil is of concentrated high-inductance to automatically peak the antenna circuit below the broadcast band in frequency, and to prevent changes in antenna values from effecting the following tuned circuit. Between the antenna coil and the grid of the first tube we find two loosely coupled tuned circuits, comprising a "selector stage."

The first of these circuits is sometimes called the "link circuit," while the second is, of course, the tuned grid circuit of the first tube, which is an r. f. amplifier operating at the signal frequency. The r. f. and selector stages ahead of the first detector or translator tube, are vitally necessary in order to eliminate "image frequency" interference.

"Image Frequency"

Let us see what is meant by image frequency. Supposing we are tuned to a signal of 900 kilocycles. The oscillator would necessarily be tuned to 1075 kilocycles, in order that the heterodyne between these two frequencies would result in the 175 Kc. intermediate frequency. Now, with this oscillator setting, it is obvious that an incoming signal of 1250 kilocycles would also be heterodyned to produce the intermediate frequency of 175 Kc. The second station will appear in the background of the first. This is called image frequency interference.

Again, assume that we are tuned to 600 Kc. and that this is a DX channel. The oscillator will be set 175 Kc. higher, or 775 Kc. Now, if a powerful local is operating on 950 Kc. and can reach the

YOUR SUPERHET!

It Takes Skill, Facts and Equipment To Adjust and Balance the Superheterodyne

translator tube, it is obvious that 950 and 775 will heterodyne to produce 175 Kc. and the 950 Kc. local will appear in the 600 Kc. channel and prevent reception of the proper station.

It is obviously imperative that sufficient selectivity be incorporated ahead of the translator tube to prevent any radio energy 350 Kc. from the desired signal reaching the translator. Otherwise the locals will appear in a second spot on the dial, clogging another channel, and preventing reception of a DX station, or spoiling reception of another local.

The r. f. amplifier and selector stages introduce two tuned circuits of high selectivity, and at the same time afford a decided gain in r. f. signal strength. Incidentally, they also eliminate cross-modulation, which occurs when a nearby and powerful local modulates the r. f. carriers of other stations to which the set may be tuned by predominating in the grid circuit of the first tube regardless of the selectivity which may be incorporated thereafter.

Super Has "Clean" Tuning

In brief, these circuits ahead of the translator tube, make the super "clean" in its tuning characteristics. Nothing is more annoying than to have local stations show up in two or more spots on the dial. To wait for a DX announce-

ment and then find that it is a weak, wobbly, static-ridden "repeat" of your nearest local!

In the set described the ratio of the image frequency to signal energy is on the order of 1 to 200,000. The plate circuit of the signal frequency amplifier stage is of high impedance in order to gain a maximum of amplification, and is coupled capacitively to the grid circuit of the translator tube which follows. Also coupled to the grid circuit of the translator tube we find the circuits of the oscillator. The oscillator circuits are so designed that the frequency is at all times 175 kilocycles higher than the signal frequency to which the translator, r. f. and selector stages are tuned. The values of inductance and capacity are so chosen and adjusted, that the oscillator section of the four-gang condenser may be identical with the other sections.

The translator tube now has in its grid circuit the signal frequency and the oscillator frequency, the two differing by 175 Kc. They "beat" together to form the intermediate frequency of 175 Kc. to which the plate circuit is tuned. (This phenomena of two frequencies "beating" together to form a third, or resultant, frequency which is equal to their difference, is called "heterodyning," hence the name "heterodyne." The "super" idea was added when somebody trumped the original inventor's ace.

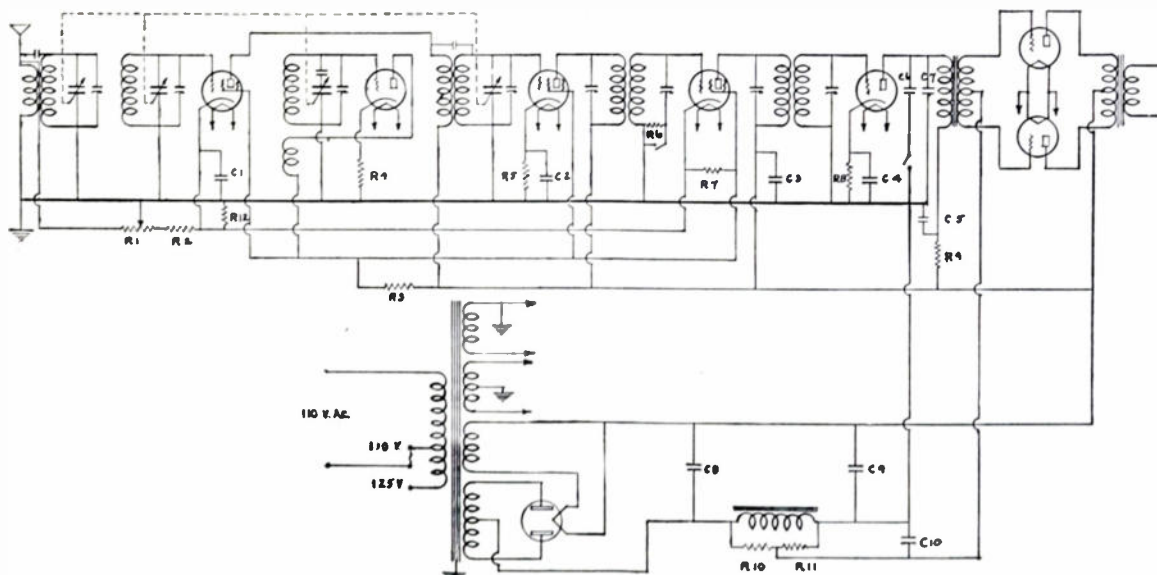
Why 175 Kc.?

The reasons for selecting 175 Kc. as the intermediate frequency, is based on the fact that image frequency interference is minimized by the use of a high value. However it is necessary that the third harmonic of the intermediate frequency be outside the broadcast band, otherwise it will have sufficient strength in the second detector circuit to cause a great deal of interference.

It follows that 180 Kc. (third harmonic, 540 Kc.) is the highest value that can be used with the above in mind. This value is not satisfactory, however, for the reason that it is a multiple of 10, and since broadcast stations are separated by 10 Kc. there are likely to be stations separated by this frequency in any locality. It is therefore advisable to use 175 Kc. to simplify the problem of keeping the super "clean."

There now follows one or two stages of amplification working at the 175 Kc. frequency. Using Litzendraht coils, the gain of one stage is quite sufficient to give the set an overall sensitivity of a small fraction of one micro-volt per meter, and two stages are out of the question. Using intermediate coils which result in a lower gain per stage, two stages may be used. In the typical set being described here, the intermediate transformers are wound with Litz, as are

(Next Page)



Schematic diagram of an eight tube superhet circuit. Incorporating tuned selector stage, signal frequency amplifier, separate oscillator, translator, one intermediate frequency amplifier, power detector, push-pull output stage.

the inductances in all of the eight tuned circuits of the set.

Therefore, we find one intermediate stage, with two coupling transformers. Plate and grid circuits both are tuned sharply to 175 Kc. as well as the plate circuit of the translator and the grid circuit of the detector following. This makes four circuits tuned to 175 Kc.

Local-Distance Switch

A resistance is arranged in the grid circuit of the intermediate amplifier tube to reduce the gain and broaden the stage for local reception. A switch shorts this resistor out of the circuit for DX reception. In some sets, a double pole switch simultaneously shunts the plate circuit coil of the translator for local reception.

The detector tube is next in line. It operates with very high plate voltage and is suitably biased. Its output is sufficient to drive the push-pull audio stage which follows. A push-pull input transformer couples the detector to the power tubes, and a similar output transformer feeds the voice coil of the dynamic speaker.

In the set illustrated, the field coil of the speaker constitutes the sole inductance in the filter system of the power supply. A resistance-capacity filter in the detector plate circuit minimizes hum. Bias voltage for the power tubes is obtained by center-tapping a resistance bridge across the speaker field. The volume control operates to decrease the grid bias on the r. f. and intermediate tubes from an inoperative point to normal value. Simultaneously it functions as an antenna shunt.

Tone control is accomplished by shunting the primary of the input audio transformer with a small condenser, its purpose being to by-pass the higher frequencies. In some receivers, tone control is variable, through the use of a variable resistance in series with the condenser.

Adjusting the Intermediate Condensers

Both the primary and secondary coils of the intermediate transformers are shunted by small tuning condensers which are adjusted for capacity by turning a screw, accessible either through the top or bottom of the shield cans housing the transformers. A bakelite screw driver not more than one-quarter inch in diameter should be used for making the adjustments. Never attempt to adjust these condensers without using a modulated oscillator, calibrated accurately to 175 kilocycles, and an output meter.

Connect the output lead of the oscillator to the control grid cap of the translator tube, removing the normal grid lead. The ground terminal of the oscillator should be connected to the ground terminal of the radio set. Set the oscillator accurately at 175 Kc. Connect the output meter as specified by its manufacturer. This may be to the plate of one of the power tubes by means of an adapter, across the voice coil of the speaker, or in whatever manner is best suited to the type of indicating device used.

Turn the set on and adjust its volume control and the output control of the oscillator until the oscillator signal is audible in the speaker and indicated on the output meter. Be sure that the "local-

distance" switch is in the "distance" position. Then adjust the condenser screws of the intermediate couplers for maximum output. Decrease the oscillator output or set volume control, or both, as necessary to keep the output meter needle within the range of its scale. This is the procedure where all circuits are peaked at 175 Kc. and the coupling is not such that a band-pass effect is intended.

In the latter case, as in Radiola types, it is necessary that the second and third transformers should be adjusted to provide a flat peak 5 Kc. wide. After peaking both primary and secondary, move one adjusting screw in and the other out slightly, until a fairly constant reading is maintained on the output meter while the oscillator is rocked from 172.5 to 177.5 Kc. A little practice is necessary to center the flat top at 175. In the majority of supers, however, a sharp tuning of all of the intermediate circuits to 175 Kc. is suggested.

Adjustment of Tuning-Gang Condenser Trimmers

The selector, r. f., translator and oscillator circuits must be carefully lined up together by adjustment of the trimmers across the condenser sections. This requires a modulated oscillator which is variable in frequency from 550 to 1500 kilocycles, and equipped with attenuator and dummy antenna. In the set described, the padding condenser in series with the oscillator tuning condenser is fixed, hence there are but the four trimmers on the main tuning gang to adjust.

Connect the output of the oscillator to the antenna and ground posts of the set, and the output meter as before. Set the oscillator at 1400 Kc. Set the receiver dial at 1400 Kc. Then adjust the oscillator, translator, r. f. and selector trimmers in the order named, for maximum output. Decrease the oscillator output or volume control of set or both as required to keep the output meter needle within the range of its scale. The trimmers are then left in this position, and the tracking of the condensers is refined by plate bending.

Advance the tuning shaft until the first vane of the split-rotor plates is about three-fourths meshed with the stator plates. Tune the oscillator to the corresponding frequency, and then bend the vanes either in or out to obtain maximum output. Repeat this operation for each of the vanes of the rotors.

We are assuming that the dial has not been shifted on the shaft since it was locked by the manufacturer, and that the dial kilocycle calibration is correct. The operation to re-establish the correct condenser shaft position for the 1400 Kc. starting point is somewhat complicated, and should seldom be necessary on the part of the service man. It is a factory adjustment, that can only be altered by a shift of the dial on the shaft.

In supers having an adjustable padding condenser the oscillator may be tied down at 600 Kc. as well as 1400 Kc., before starting the plate bending activities. However, in the majority of new sets, the variable padding adjustment has been eliminated.

La Jolla Radio Shop has been established at 7855 Fay Ave., La Jolla, Calif., by W. J. Shafering, formerly of Chicago.

Dealers Win In Suit Over Unfair Methods

A law suit of nation-wide interest has just been successfully prosecuted by radio dealers in Milwaukee, Wis.

North Central Distributors, Inc., exclusive Victor distributors for the states of Wisconsin, Minnesota, and Dakotas, has a large number of Victor radios in stock. General business depression greatly decreased the sales being made by the retail outlets.

A special discount plan was outlined to the Milwaukee Victor dealers, stating that the special sales program and discounts would be in effect from December 20 to February 1. Practically all of the dealers subscribed to the plan, and purchased sets prior to January 1, as required by the offer.

On January 12, the wholesaler sent word to the retailers that "something was about to happen." No explanation was made, but the dealers were informed that in order to protect themselves, all of the Victor sets of any kind they had on hand should be returned to North Central Distributors. All of the dealers complied, and all of the sets had been returned by January 14.

At ten that morning, a big full-page ad appeared in a Milwaukee paper that stated: "YOU CAN'T BUY IT FROM YOUR VICTOR DEALER. HIS STORE IS EMPTY OF SETS. NOW—WE, AS VICTOR WHOLESALERS FOR THE ENTIRE NORTHWEST, OFFER VICTOR RADIOS DIRECT TO THE PUBLIC AT LESS THAN WHOLESALE."

Everyone connected with the radio trade in Milwaukee was immediately up in arms. The secretary and president of the Wisconsin Radio Trades Association conferred with attorneys within a half-hour after the ad appeared. The question of law was confusing. Precedents were lacking. Finally, a case was built on the statement in the statutes that "Unfair trade practices shall be prohibited." The stumbling block, however, was the danger of laying themselves open for damages, if an injunction was brought.

A special meeting of the board of the association was called and by unanimous vote, the association offered its entire funds, \$10,000, to indemnify the plaintiffs. An injunction was brought against the wholesaler.

At the trial the plaintiff claimed the wholesaler had obtained a "monopoly by trick," and that the statement in the ad that sets would be sold at less than dealers' cost, constituted "fraudulent advertising." The court issued a permanent injunction restraining North Central Distributors from selling Victor radios to the public at wholesale for six months, and restrained them from continuing their campaign.

Two important factors are demonstrated in this case: first, that fair trade practices must be followed to establish the industry on solid footing, and that the courts may be resorted to when necessary; second, and perhaps most important, the advantage of cooperation of the members of an association, well-managed, and well-financed.

Sheridan Music Company, Sheridan, Wyo., has been sold to the D'Amico brothers of Billings, Mont., owners of the Melody Shop there. Angelo D'Amico is the manager of the Sheridan store.



WISE and OTHERWISE



BUSINESS needs a tonic—and that tonic is ART, not Finance. Business needs, not business men, but artists to create new ideas, new color schemes, new containers, new displays. Everyday merchandise needs a new physical appearance. That's what ails business—old merchandise and idealess advertising have turned the public's stomach. The present day purchaser demands to be intrigued, cajoled and dazzled. Business must take the "art tonic"—or many businesses will die.

* * *

If you want a line in which there is little or no competition, go out and sell battleships, merry-go-rounds, dry-docks or lion cages. These lines and others are so limited as not to arouse competition—they are likewise so restricted in their possibilities that their sales do not attract he-salesmen. There is no use arguing about it—competition is the life of trade. It puts zip into selling—which speeds up production—which necessitates the opening of new fields for the product.

Competition may be keen on quality and still keener on price—but the salesman who gives practical resale suggestions to the dealer, or if selling to the ultimate consumer, gives ideas as to uses which give pleasure or save effort—these salesmen are using an unbeatable weapon against competition which talks only details of material and construction or low price.

* * *

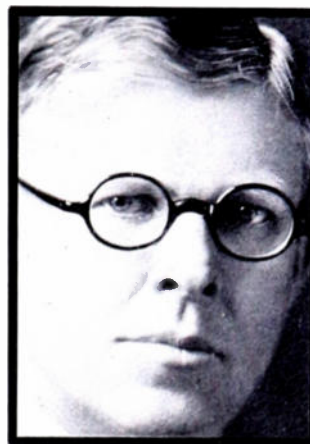
The United States District Court for the Eastern District of South Carolina, recently handed down a decision that the tax which South Carolina had imposed on Radio receiving sets is unconstitutional.

This nips in the bud the plans which other States had to levy a tax on Radio. The findings held that a broadcasting station is engaged in interstate commerce—that the sets in South Carolina are essential to the reception of communications from stations in other states. The United States Supreme Court has repeatedly held that Congress alone has the right to regulate interstate commerce and no state has the power "to lay any burden in any form, by taxation or otherwise, upon interstate commerce or its instrumentalities."

* * *

And Now—Sponsored Movies

The sponsored motion picture came into the field late in 1930 and promises to cut down expenditures in other media during 1931. The reception of audiences to pictures sponsored by such companies as General Motors, Liggett & Myers, The Texas Company and Lehn & Fink, has been predominantly favorable.



By **SHIRLEY WALKER**
Associate Editor

Advertisers have laid plans, it is said, for spending \$12,000,000 through the medium of sponsored moving pictures in 1931. Carl Laemmle of Universal, comes forth and prophesies adversely concerning their ultimate value to the film industry. He says it is a serious mistake to figure out that because the radio broadcasts certain advertising, that it is all right for the movies to do it.

"Believe me," he says, "if you jam advertising down (the public's) throats and pack their eyes and ears with it, you will build up a resentment that will in time damn your business." In the meantime Warner Brothers announced that their director of marketing for subsidized subjects, Robert A. Winthrop, would speak before the advertising clubs of 26 cities, in a campaign designed to win the approval of local advertisers for sponsored movies.

* * *

In printed advertising linage during 1930 the magazines fared better than the newspapers. In certain categories such as food, beverages, toilet goods and tobacco, the magazines actually registered increased linage, though the totals for all categories were only slightly over the 1929 totals. The newspapers lost about 12 per cent in linage in 1930 as compared to 1929. One reason for the decreased newspaper linage was undoubtedly the remarkable increase in national radio broadcasting. The expenditures of 16 groups of stations covering 93 cities, amounted to \$26,819,156, an increase of 43 per cent over the total of 1929.

* * *

Invents "Reading Machine"

Extensive adjustments in the radio and phonograph fields are likely to result from the commercial development of a home entertainment and educational device known at present as a "reading machine," which it is understood will soon be put on the market by the Radio Corporation of America.

This invention of Dr. Byron Eldred uses film of standard talking picture width. Since no pictures are needed, the space usually taken up by them allows room for 50 sound tricks. The film runs back and forth through the device and in this way, the reading of a complete novel can be recorded on 30 feet of film, an opera on 15 feet, a symphony concert on three feet. It is understood that the device can be attached to either a radio or phonograph. Here is a new field of business to cultivate, you radio and music dealers.

NEWS FROM CALIFORNIA

Patent Suits Brought Against May Stores and Westerner Mfg. Co.

Four patent infringement suits have been filed in the United States District Court, Los Angeles, by the Radio Corporation of America, General Electric Company, and the American Telephone and Telegraph Company.

Two of the suits were brought against the May Department Stores, Los Angeles, and the other two against Forest R. Smith, doing business under the name of Westerner Radio Manufacturing Company, Los Angeles.

It is the contention of the plaintiffs that the May Department Stores have infringed several of their patents, by selling sets manufactured by the Westerner Radio Manufacturing Company without license under the patents. It is further claimed that Westerner has in-

fringed the patents in manufacturing the sets sold by the May company.

The suit is for an injunction and an accounting of damages and profits to cover all sets already made and sold.

The following patents involved are General Electric patents, under which RCA has the exclusive license and right to grant sub-licenses:

Alexanderson issued Feb. 22, 1916; White issued Aug. 22, 1916 Hull issued Dec. 25, 1917; Langmuir issued Mar. 17, 1919; Rice and Kellogg issued Sept. 17, 1929.

The rest of the patents are owned by the American Telephone and Telegraph Company, under which RCA has exclusive license and sub-licensing rights:

Lowenstein issued July 3, 1917; Arnold issued Jan. 17, 1922; Arnold issued Aug. 21, 1923.

Allen Branch Moves

The Wiley B. Allen Company, represented in Lynwood, California, by H. Putnam, and formerly located at 3316 Imperial Highway, has moved to 11450 Long Beach Blvd.

The change was made in order to provide larger and more effective display and sales facilities.

Appoint Visionola Distributors

W. E. and W. H. Jackson, with offices and warehouse at 255 Ninth St., San Francisco have recently been appointed northern California distributors for the Visionola. Fey and Krause are Southern California distributors at 1616

So. Figueroa St., Los Angeles. The Visionola is manufactured by the Visionola Manufacturing Corporation, 60 East Forty-second St., New York. It has an attractive cabinet housing a combination radio, talkies, and phonograph.

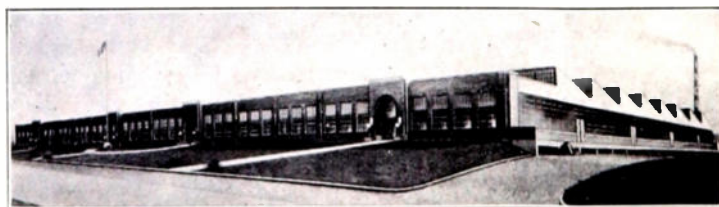
Buy Half-Interest in Store

Half-interest in the Crown City Music Company, 901 Colorado St., Pasadena, Calif., has been purchased by Mr. and Mrs. Charles Segar, from Mr. and Mrs. Oliver Owens.

The Crown City Music Company handles pianos and musical instruments, and operates a complete repair department.



Western Inca factory, Los Angeles. The building comprises 20,000 feet of floor space. During peak season, more than 500 persons are employed.



Eastern Inca factory, at Ft. Wayne, Ind., having a payroll of 1700 employees.

New Set Manufacturer

Manufacturing radio sets is a new industry in Arcadia, Calif. J. R. Allen, of the Arcadia Radio Supply Company, 18 N. First Ave., is building two models; one, a midget retailing at \$37, and a lowboy console at \$65. The new radio is called the "Allen."

Bakersfield Shop Moves

Myer's Radio Shop, which has been located at 1411 Chester Ave., Bakersfield, for the past two years, is in new quarters at 1640 Chester.

Pomona Store Enlarged

Because of increased business, H. B. Tucker, manager of the Wiley B. Allen store, 434 W. Second St., Pomona, Calif., has leased the adjoining shop for additional display rooms. The building has been remodeled and decorated to harmonize with the main store, and an arched doorway has been built between the two.

Inca Head to Survey Western Factory Progress

G. A. Jacobs, president of the Inca Manufacturing Division of National Electric Products Corporation, Fort Wayne, Ind., will visit the Western plant, 1547 Venice Blvd., Los Angeles, in April.

His purpose in coming to the Coast is to make a survey of the progress which has been made at the branch factory, according to D. W. Smith, branch manager.

When the growth of the midget manufacturing gave the radio industry a decided impetus, starting on the Pacific Coast, Inca officials began plans for establishing a factory for their copper-wire products in Los Angeles, to serve that growing field. Feeling that it would be a step to save much expense and commercial activity, they took over a smaller concern, the S and L Manufacturing Company, whose personnel was already well-known to the trade. It was established for two reasons—to take care of the existing demand, and to prepare for the potential demand made by future developments.

In less than a year, the Western factory has grown from a small plant employing four men, to a payroll of five hundred employees, and is the only coil-winding and transformer factories of its kind in Southern California.

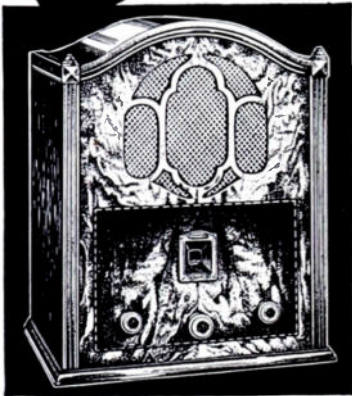
The former S and L Manufacturing Company, within four months after its establishment, increased its business to such an extent that a move to larger quarters was necessary. At this time the number of employees had grown to 225.

A very modern stock of equipment is maintained by the factory, including many testing devices. Among the most recent of these elaborate instruments is the Oscilloscope, the only device of its kind in the West. It is particularly valuable in set designing and testing, as it detects minutely qualities of balance of component parts, irregularities of wire turns on a transformer, and below par equipment.

The Inca Manufacturing Company at Los Angeles is headed by D. W. Smith and L. W. Howard, founders of the former S and L Manufacturing Company.

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**



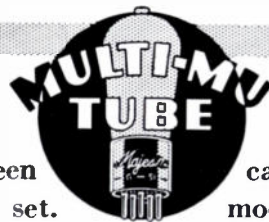
● NEW 8-TUBE MAJESTIC SUPERHETERODYNE chassis in a beautiful Tudor lowboy. Panels of matched butt walnut. Sold complete only with Majestic tubes, \$119.50; **\$97.80** less tubes



● 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

• MOUNTAIN STATES ACTIVITIES •

Knight-Campbell Subsidiary

Knight-Campbell Music Company, Denver, has organized a new company to be known as the Mid-Western Distributors, Inc. The address of both concerns is the same, 1608 Wyncoop St., Denver, Colo. The new company is a subsidiary to Knight-Campbell, and specializes in wholesaling Victor products. James Robinson, former Colorado district manager for Victor, is its sales manager.

Mayflower Refrigerators Distributed in Utah

The Western Supply Company of Salt Lake has taken over the distribution of the Mayflower refrigerator of the Tru-par Company of Dayton, Ohio. Incidentally H. W. Eskuche of the Western Supply company and H. W. Richardson of Callaway-Hook and Francis have just returned from a trip to the coast on business.

Phoenix Firm Incorporates

Rex Grayner Radio Company of Phoenix, Ariz., recently filed articles of incorporation with the state corporation commission.

Rexford Grayner, Daniel H. Alley, and Orpho A. Grayner, of Phoenix, were named as incorporators of the firm, which has an authorized capital stock of \$300,000.

Felt Store Moves

Felt Radio Company, Salt Lake City, has moved from its location at 134 State St., to smaller quarters at 40 Main St. Victor Felt, proprietor, has kept a smaller store at 118 State St., to take care of the trade in that section, but is devoting most of his efforts to the new Main Street location.

Discontinue Manufacture of Midget Sets

Western Industries, manufacturers of radios and radio equipment in Salt Lake, are discontinuing their manufacture of Peter Pan midget sets, according to Murray Godby, manager. They are going into the making of units for small motion picture theatres, particularly catering to the ward amusement halls of Mormon churches throughout Utah and Idaho, most of which give weekly picture shows.

A very reasonably priced unit applicable for ward halls has been designed by Godby.

Their entire stock has been purchased by the Paris and Dinwoodey companies of Salt Lake, who are closing out this line for them at reduced prices.

The Echophone Distributing Company, with offices at Midvale, Utah has been distributors for Western Industries for the Minuet midget set. The announcement of Godby that his company is making no more midget sets will likely affect this company. They have handled the entire western territory and they still have a supply on hand enough to take care of present market trade.



HAROLD H. JENSEN

Western Music and Radio Trades Journal
correspondent in Salt Lake City.

Select Great Falls, Mont., As Majestic Distributing Center

Great Falls, Mont., has been selected as a branch distributing center for Montana, by the R. S. Proudfit Company, Majestic radio and refrigerator distributor of Lincoln, Neb., according to George Proudfit, president of the company.

The choice of Great Falls was made after a through study of transportation facilities in Montana by Proudfit, in conference with various local industrial officials. Several shipments of merchandise have been made to the new branch office, where sufficient storage space has been obtained to supply the entire state, Proudfit said. At least three men will travel out of the branch headquarters. S. E. Ely has been appointed branch manager, and is assisted by C. W. Armstrong of North Platte, Neb., and Harvey Ross, of Great Falls.

Knight-Campbell Branch Closes

After doing business in Cheyenne, Wyo., for about 25 years, the Knight-Campbell Music Company has closed its doors.

The present manager, Charles B. Reed, who has been with the Cheyenne store for the past six years, has resigned, and has moved out to his ranch near Eagle, Colo. Donald L. Fisher, who has been in charge of radio sales for several years, remained with the company, and has headquarters at the main store in Denver.

Service Club Joins Ass'n.

The Colorado Radio Service Club, a local institution consisting of radio service men, is making rapid progress, and their membership is increasing rapidly. The latest news received from the secretary is to the effect that they are now affiliated with the Colorado Radio Trades Association.

School Credits Given For Private Music Study

A noteworthy step in the promotion of school credits for private music study is reported by the National Bureau for the Advancement of Music as having been taken in Arizona, where the State Music Teachers' Association has had adopted by the State Board of Education a plan it has been advocating for the granting of such credits to pupils of certified teachers. The certification is done by the Teachers' Association itself, thus avoiding the objectionable features of a licensing system.

From time to time during the past three or four years individual members of the profession in Arizona have written the Bureau concerning the establishment of a credit system in their state and have received its literature on the subject.

The two most recent states outside of Arizona to have established plans for accrediting work done by teachers properly certificated by a state music teachers' association are Virginia and Montana. In both cases those active on behalf of the idea were in touch with the Bureau and benefited by the information it had available.

Mr. Tremaine, director of the Bureau, considers that the extension of the credit movement is one of the important means of encouraging among children the study of the piano, violin and other instruments.

Denver Company Moves

The Intermountain Majestic Company, Denver, distributors for Majestic radios and refrigerators, have just moved into new quarters. They are now located at Broadway and Walnut, having moved from 1257 Broadway.

This move has been made for the purpose of eliminating the warehouse storage and excess trucking expense. The new location is ideal for this company, housing the offices on the second floor, with warehouse and track facilities on the ground floor, which covers a large area of ground. Thomas Savage is president and general manager of the company.

Service Station Sells Radios

It may be true that oil and water will not mix, but oil, gasoline and radios are being mixed successfully, according to E. V. Fugatt, president of the Firestone Stores, Inc., Denver. Radios are being sold by the Firestone Stores, in a new super-service station which they have built at 880 Speer Blvd.

It is Fugatt's opinion that the handling of oil, gas and service runs parallel to that of radios, and as most sets are sold on the time-payment plan, it brings the radio customer back month after month to make his payment. As he states, "it brings them mouth to ear with Firestone service."

A set is always kept on display on the service station floor, and while the customer is having his battery tested or his tires changed, he is invariably attracted to the instrument, according to Fugatt. Mace Warner is in charge of the department.



General Motors RADIOS have outstanding value

The nine models now offered by General Motors Radio present values truly outstanding. Aided by the vast resources and unlimited research facilities of its parent organization, General Motors, this company has created new, higher standards of radio performance and beauty within a price range adaptable to any purse.

The Little General, at \$74.60 including Radiotrons, won immediate popularity when introduced last fall. Small in size—a giant in performance. Six tubes (4 screen grid); electro-dynamic speaker; Tone Selector. Three attractive finishes—natural butt walnut, ivory lacquer, green lacquer.

Console radio models include the Hepplewhite, \$136; the Sheraton, \$152; and the Late Italian, \$172. Radio-phonograph consoles—the Queen Anne, \$198, and the Georgian, \$270. Readily salable where outside current is not available is the Pioneer, whose self-contained power unit operates 1000 hours without power renewal. Price, \$136. All prices include Radiotrons.

Learn the unusual profit advantages of a General Motors Radio franchise. Write or wire for full information.

GENERAL MOTORS RADIO CORPORATION
DAYTON, OHIO

Los Angeles, 801 Bendix Building; San Francisco, 74 New Montgomery St.; Seattle, 586 Skinner Building

UNDER THE GAVEL

—Association News—

N.F.R.A. and R.W.A. to Raise Fund For Promotion of Industry

The National Federation of Radio Associations and the Radio Wholesalers' Association has gone unanimously on record as endorsing a program involving the immediate raising of a \$10,000,000 fund to be used in the promotion of the radio industry. The money would be spent in national advertisements and in newspapers and would supplement the millions of dollars being spent at the present time by broadcasters and radio manufacturers.

"The history of American business is replete with advantages of cooperative advertising work," stated J. Newcomb Blackman, chairman of the board of the Federation. "The radio industry can well afford to profit by the example of the other industries by raising such a fund and expending it in the creation of good-will throughout the nation. The radio can bring a greater amount of actual joy and entertainment into the homes of American people than any other thing, and such a promotional plan would increase its immediate importance to the listening public and be a very important factor in the promotion of education and world peace."

Engineers to Convene in Chicago

The Sixth Annual Convention of the Institute of Radio Engineers is to be held at the Hotel Sherman in Chicago June 4 to 6. A large attendance is anticipated in view of the fact that the Radio Manufacturers' Association will convene in Chicago for a five-day session beginning June 8. Programs now in process of preparation will be ready for publication in the next issue.

Oregon League Fights Interference

Definite plans for the clearing up of interference in radio reception have been made by Klamath Falls, Ore., radio dealers, at a meeting of the Radio Listeners League, recently organized.

R. E. DeWeese has been elected president of the League; Claude Davis is vice-president, and the board of directors include H. J. Winters, Randall Bargelt, Paul Kohnson, Howard Uhlig, and Kenneth Klahn.

The radio dealers voted contributions of \$10 each as an initial fund to start the association. Articles of association are being drawn up by District Attorney T. R. Gillenwaters, legal consul. The board has selected a girl to act as treasurer and secretary. She is bonded and maintains an office where reports of radio disturbances are kept in file, by zones. A service man is employed to shoot trouble and correct interference causes, in cooperation with the city electrical inspector.

So far, great enthusiasm of the new project among the dealers and the residents has been reported.

Jennings Accepts New Position

Harold S. Jennings, secretary of the Mountain States Music and Radio Trades Association has been selected as executive secretary of the Utah Manufacturers' Association. Jennings was chosen from more than thirty applicants for the position which was recently vacated by J. S. Kuhn, who resigned.

He is well-known in the radio field, and in addition to the position he held in the Music and Radio Trades Association, was secretary of the Intermountain Plumbing and Heating Bureau, and secretary of the Intermountain Produce Dealers' Credit Association. Jennings stated that the new position would probably make it necessary for him to give up his offices in the other organizations.

For many years he has held a place of prominence in the radio association. He was largely responsible for its organization, and has been secretary ever since. It was largely through his management of the radio show held in Salt Lake during the convention of the Western Music and Radio Trades Association several years ago, that enough money was realized to enable the Mountain States Association to carry out many important projects which would have been impossible otherwise. A free radio school, the employment of an interference expert, and the sponsoring of national radio week advertising are among its accomplishments.

Minnesota Interference Bill

Declaring radio interference a public nuisance, and providing for the appointment of a Radio Commission of five members in each county, a bill has been introduced in the Minnesota legislature by Senator Adams of Duluth.

The bill proposed by Senator Adams has the active support of the Northwest Radio Trade Association, which suggested the plan. This plan does not require a taxation of any sort on radio set owners or on dealers and jobbers. At the same time it provides a law in the general nuisance class intended to be very helpful to interference workers.

If the bill goes through, Minnesota will be the first state to adopt a state radio interference law.

Adopt By-Laws and Elect

The Service Managers' Association on both sides of the San Francisco bay recently adopted a new set of by-laws and elected new officers. San Francisco officers are: J. Edward Jones of Leo J. Meyberg Company, president; N. E. Borch of the Pacific Radio Trades Association, vice-president. The East Bay officers include: Thomas E. Digby of John Breuner Company, president; and Jack Weis, also of the Breuner company, vice-president.

Mountain State Ass'n. Elects New Officers

At a meeting of the board of governors of the Mountain States Music and Radio Trades Association, Salt Lake City, C. M. McDonald was chosen president, succeeding Robert Nevins, who has served his year.

McDonald has charge of the radio department for the Intermountain Electric and occupies a peculiar position in that he is both wholesaler and retailer, which makes him ideally fitted for the job. He has been one of the most active members of the association since its organization.

J. C. Dwyer was chosen vice-president. Dwyer has charge of the radio department at the Standard Furniture Company and is a retailer. Victor P. Felt, president of the Felt Radio Company was chosen treasurer. He also is a retailer. Harold W. Jennings, who has served so long and faithfully as secretary resigned his position and stated that he would be unable to act, as his new duties as secretary of the Utah Manufacturers' Association would take all his time.

At a meeting of the board of governors of the association the matter of changing dues to \$2.00 a year for active members was taken up and passed upon. Formerly \$15.00 a year had been the membership fee, which was considered too high by many. The matter will be voted on at the next regular meeting of the association.

Music Merchants' Convention To Follow That of RMA

Immediately following the Radio Trade Show at Chicago in June, and at the same hotel, The Stevens, the National Association of Music Merchants will hold its Thirtieth annual convention, beginning June 15.

The directors of the Radio Manufacturers' Association have agreed to cooperate in holding over many of their exhibits for the Merchant's Convention. For the first time, it will be possible for music merchants to attend their convention and have the benefit of an opportunity of seeing the latest radio product exhibits, without spending two weeks in order to cover both events.

According to present plans, the Radio Manufacturers' Association will not hold a banquet during the Trade Show week, and it is possible that some of the radio dealers may stay over for the Merchants' banquet, which will probably be held earlier in the convention week than usual.

Arrangements will be made to secure the reduced round trip railway fare. Officials ask that reservations be made as early as possible with the hotel or the Executive Office of the Association, at 45 West Forty-fifth St., New York.

Colorado Ass'n Elects

At a meeting of the Colorado Radio Trades Association held in Denver, the following officers were elected:

Claude B. Beidler, president; R. A. Jacobs, vice-president; George Flanagan, secretary; and S. Kugler, treasurer. The board of directors is composed of J. H. Blinn, W. D. Reynolds, C. M. Pettet, C. Gleason Scott, and Roy Thompson.

the new...

CARDINAL

... Super-Heterodyne ...

Model 60



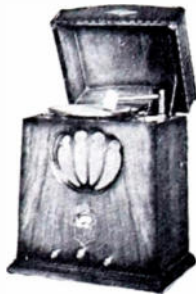
Model 91

Brings to you the new modern type of T. R. F. receiver. The Midget Deluxe... An Eight Tube Chassis using four 224's, one 227, two 245's and one 280; four tuned stages of radio frequency, two stages of audio. As true with all of our models, the full size Magnavox dynamic speaker is used.

\$69.50

... And now ... Cardinal presents its new super-heterodyne ... Nine tubes ... carefully circuited to give each tube full strength! Built with quality material ... by the best workmanship. Distance, selectivity, sensitivity and tonal qualities are the prime essentials of the super heterodyne circuit ... the new Cardinal has

them all! The chassis contains a 224 in the first detector stage; 227 oscillator; 224 R. F.; 224 Intermediate; 227 second detector; 227 first audio; two 245's in push-pull amplification and a 280 rectifier. Full vision dial, one stage of band-pass filter, local-distance switch. Beautiful dual toned walnut cabinet, 17 inches high, 15 inches wide, and 10½ inches deep.



The famous midget combination that has made the Cardinal radio such a popular leader in the radio industry. Retail at \$99.50.

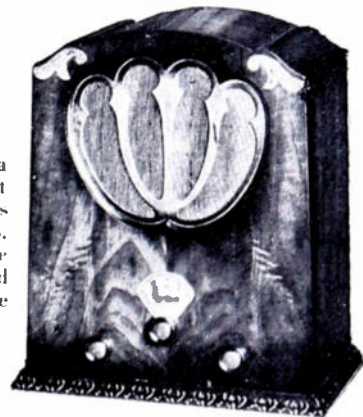
\$74.50

Complete

Model 82

As shown on the right is a beautiful little midget cabinet in two toned walnut. It has five tubes, namely, three 224's, one 245 and one 280. Tone control, Magnavox speaker and retailing at the popular price of \$49.50.

Model 82
\$49.50



CARDINAL RADIO MANUFACTURING CO.

2812 SO. MAIN STREET

LOS ANGELES

East Bay Ass'n Adopts Business Practice Code

Fair profit is the most necessary item in the retail radio business; all standard practices are based on that foundation. After a study of the retailers' costs and methods of doing business, the following recommendations are made as being fair to the customer and dealer alike and in keeping with good practices in other lines of business.

WE SUGGEST:

1. That prospective customers shall not be allowed a free trial or home demonstration in excess of 48 hours.
2. That an interest charge of at least one-eighth per cent on all time payment contracts and that contracts should not extend beyond one year in the interest of good business. These are standard practices in all other forms of time payment selling.
3. That when an outside aerial must be put up when a set is installed a charge of at least \$10 be made to meet the cost of time and materials.
4. That it is suggested that a charge for other wiring and connections be based on time and materials.
5. THAT NO FREE SERVICE, INCLUDING TUBES, be rendered after 3 days. In case of defective parts in the radio receivers after the 30-day free service period, if the manufacturer's warranty covers free replacement, and if the instrument has not been tampered with, the dealer should replace these parts, charging only for the labor involved.
6. That if the free service period has expired a minimum service charge

of 1.75 be made. If the call is of half-hour or more duration, that a minimum rate of \$3 per hour plus cost of material be charged.

7. That when it is necessary to take the set or chassis to the shop for service, a minimum charge of \$2.50 be made when the set or chassis can be handled by one man. When necessary to use more than one man in order to handle the set, a minimum charge of at least \$3.50 be made. These charges to include the service call.
8. That when it is necessary to install a shielded lead-in aerial, a minimum charge of at least \$15 be made. This does not include filters.
9. That truth in advertising must be observed to preserve the good reputation of the individual dealer and the entire trade and that the code of ethics of the National Better Business Bureau on radio advertising be followed.
10. That the allowance on instruments offered for trade-in be based only on their fair cash market value.

Regulations for Radio Ads

Misleading advertising in New York was dealt a serious blow when a conference of radio distributors, representing most of the leading manufacturers, and representatives from 22 daily papers, resulted in the proposal of a series of regulations for advertising.

Here are the proposed regulations: That only the comparative prices assembled by the manufacturer will be accepted, and must refer to the last list price issued; that sets made by other

than the manufacturer must state the yearly model of the chassis, that the set is not been wholly built by the chassis manufacturer, that the word "complete" must mean complete; that prices less tubes does not mean any obligations on the part of the buyer; no ambiguous trade-in allowances accepted; the duration of a sale must be stated; "No Down Payment" must mean what it says; the model numbers of obsolete sets must be given; juggling ad layouts to make it appear that the sale price goes with a set not on sale prohibited, and other limitations to advertising matter. Adoption of the proposed regulations is probable.

Plans for Music Week

Headed by President Hoover, eight state governors have accepted membership in the Honorary Committee of Governors for the Eighth Annual Music Week to be held May 3-9. Nine national organizations will cooperate in the activities, and wide interest is being shown officially by numerous other organizations throughout the country.

The first meeting of the executive committee of the board of control of the National Bureau for the Advancement of Music was held, 45 West 45th St., New York, recently, at which the activities and purposes of the Bureau were outlined to representatives of the music trade and educators. First among these is the promotion of group instruction in piano-playing, the organization of municipal symphony orchestras, preserving school instruction in music by providing musical activities for high school graduates.

Still Going Strong

Your PRICE \$17⁹⁵_{Net} COMPLETE WITH TUBES F.O.B. L. A.



Height 12½", Width 9", Depth 7½"
The Metropolitan Receiver

**Tone Quality
Plus**

Here is a long-felt want that you can fill for the customer who wants an attractive Midget receiver at a moderate price. This receiver has no list price so far as we are concerned, and can be sold under your

own trade name. So—here is a wonderful opportunity for a cash and carry proposition—In large quantities we can furnish this receiver in a cabinet of your own design. It would be your exclusive model. DO IT NOW—send for sample.

FEATURES:

- Screen Grid Detector.
- 45 Power Output .
- Single Dial Control.
- Phono Jack.
- Dynamic Speaker.
- (Full Size—Not the Peewee)
- Walnut Cabinet.

Money Back Guarantee:

All samples are subject to a refund in full if returned within three days of receipt of same, shipment to be returned express prepaid.

More power and volume per tube than has ever before been produced .

All four tubes are operating at 100% efficiency, against the average 50% efficiency of the ordinary radio.

EXTRA + EXTRA + EXTRA

THE WALTHAM FIVE

The Big Brother to the Metropolitan

Beautiful Walnut Low Boy Console with Matched Butt Walnut Panel as shown in cut

DISTANCE WITH EASE SELECTIVITY 100%
TONE QUALITY PLUS

Features:

- | | |
|--------------------------------------|------------------------------|
| Screen Grid Detection | Low Loss Condensers |
| 45 Power Output | Phone Jack |
| Single Dial Control | Dynamic Speaker |
| Individual Shielding | Steel Shielded Chassis |
| Precision Coils | Equipped with Licensed Tubes |
| Tubes—3 Screen Grid, 1 280 and 1 245 | |

Here is a receiver that means added profit for the progressive dealer.

Here is a Radio you can guarantee to your buyer, with a feeling of security. Our unconditional 90-day guarantee on both workmanship and material.

List Price
\$59⁵⁰
Tubes Included
Complete

**Your Guarantee Is Backed By
THE HOUSE OF WALTHAM**

Waltham Radio Corp., Ltd.

JOBBERS	Wire Write or Phone for particulars and Discounts	DEALERS
4228 S. Vermont Ave.	Los Angeles, Calif.	
Phone VErmont 2809	Cable Walrad	



People Who Do Things

George Soule, formerly with the Pacent Electrical Company, Inc., and the Pacent Reproducers Corporation as general manager, has resigned to accept the position of general sales manager of the *Radio Master Corporation*, Bay City, Mich., it was announced by F. B. Ward, president of Radio Master.

Grover T. Bacon, former collection supervisor for the California division of *Sherman, Clay, and Company* has been made manager of the Fresno store. He succeeds *George Hoskings*, who resigned. Bacon has been with *Sherman Clay* for 12 years, in the bay region principally, and has been connected with the music trade on the Pacific Coast since 1913.

LeRoy L. Rosenfeld has been appointed sales manager and his brother *Morris W. Rosenfeld* has been made sales promotion manager, for the *Audiola Radio Company*, 430 South Green St., Chicago, manufacturers of radio apparatus.

"*Ted*" *Lewis*, radio salesman, is now actively engaged with the *Sampson Music Stores* in Idaho, as manager of their radio department. "Ted" was for years with *Victor Felt*, of the *Felt Radio* company in Salt Lake.



DON'T FORGET

There is Only One
"BABY MIKE"

... and it is built by
UNIVERSAL MICROPHONE CO.
Microphone Specialists!

A real microphone of amazing quality—not a toy. Used with radio or amplifiers. Endless home entertainment—a ready, waiting market for live dealers. Single button carbon microphone—exclusive circuit adjusting screw (patents pending). Truly damped diaphragm eliminates "feed back".

Handsome bronze case, 3/4 inches high. Packaged with 25 ft. cord, prong adapter and detailed instruction sheet. Better stock now! **\$7.50** List Price Complete

Other models \$5 to \$350. Also cables, plugs, transformers, mountings, stands, etc. Get complete catalog.

UNIVERSAL MICROPHONE CO., Ltd.
1163 Hyde Park Blvd.

INGLEWOOD

CALIF.

James T. Fitzgerald, pioneer music merchant and well-known Los Angeles business man has retired from active business. The firm which he established as a small one-room violin shop in 1892, and which has since grown to be one of the largest stores of its kind in Southern California, has been dissolved, and the stock sold out.

Fitzgerald has sponsored many brilliant musical events during his career, and brought such celebrities as *Godowsky*, *Leo Ornstein*, and *Moiseiwitch*. Encouragement to the advancement in musical careers and appreciation was extended to teachers, artists and students by him liberally.

Harvey Holland, formerly of *Huntington Park, Calif.*, has moved his residence to *Santa Maria, Calif.* where he is manager of a new store, *Rudolph's Radio Shop*, 1040 West Church St. The store handles *Majestic* radios.

J. W. Bingham, radio technician and expert, 5840 Foster Road, *Portland, Ore.*, has incorporated a number of original ideas in the invention and construction of a new radio testing device which he is using in his shop.

D. Dunham, licensed technician, has been placed in charge of the electrical department of the *Harper Radio and Electric Appliance Store*, in *Arcadia, Calif.* He takes care of house wiring, static elimination and electrical installations.

Charles L. Johnson, formerly of *Boise, Ida.*, has taken over the management of the *Sampson Music Store* at *Buhl, Ida.* He has been with the company for two years.

Wallace Hall, manager of the *Platt Music Company*, 4590 *Whittier Blvd.*, *East Los Angeles*, has been transferred to the main *Platt* store at 832 *South Broadway, Los Angeles*. He is succeeded by *Clifford L. Cox*, formerly with the *Huntington Park* branch of the company.

H. A. Rayner, of *Bushnell and Rayner*, 212 *Ninth St.*, *San Francisco*, manufacturers' representatives for *Sulmock Radio Cabinets*, *Jensen* speakers, and other lines, has withdrawn from the firm, according to *L. H. Bushnell*. *Bushnell* will continue operations, under the same firm name, *Bushnell and Rayner*.

J. E. Ripley, who calls himself "Believe It Or Not" and was well known on the coast where he worked for the *Radio Exchange of Los Angeles*, is now with the *Felt Radio Company* of *Salt Lake* having charge of their *State Street* store where he is making a specialty of what he terms "Hams' Paradise" and bargain radios.

H. W. Clough has been appointed sales manager for the *Belden Manufacturing Company*, *Chicago*.

RADIO DEALERS and SERVICEMEN GT NOW! GENUINE GOLD TEST Replacement Condensers Transformers & Resistors

GOLD TEST Replacement Parts, which are designed to allow the largest amount of safety in the space allowed, are manufactured to duplicate the original parts as to hook-up and external size.

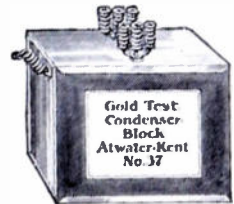
GOLD TEST PARTS are GUARANTEED

All parts used in assembling **Gold Test Replacement Parts** are manufactured and tested in the *Wellston Radio Corporation* factory. **GOLD TEST** Parts are guaranteed. We specialize in the manufacturing of replacement parts, and by means of our large production, are enabled to quote prices as low as possible, consistent with our high grade material and workmanship. All parts are made of new material. We do not use surplus or salvaged condensers, therefore, do not confuse our replacement parts with those that are made from salvaged and obsolete radio material.

GOLD TEST

Replacement Block for Atwater Kent No. 37

This unit contains the proper chokes and high voltage condensers. All flexible wire colored leads identical to the original.



Fully Guaranteed, Ea. \$4.95

FREE CATALOG Every Service Man should write NOW for our Replacement Part Catalog No. 11—it contains dozens of real bargains.

Pacific Coast Quick Deliveries

Can Be Had From

Bushnell & Rayner

212 9th St., Oakland, Calif.

Factory Representatives Who Carry a Complete Stock

MANUFACTURED BY MAKERS OF
GOLD TEST AERIALS

Wellston Radio Corp.

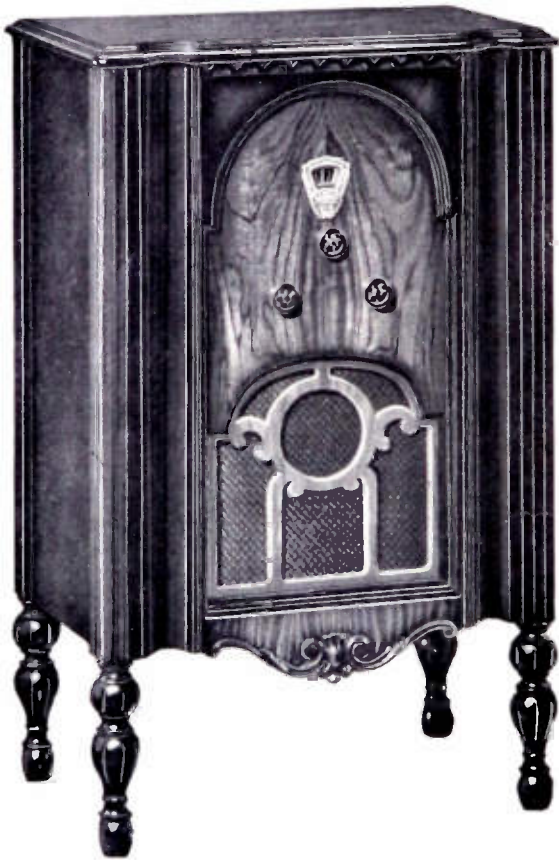
Dept. 117, St. Louis, Mo.

**SUPER
SENSITIVE !!
SUPER
SELECTIVE !!**

Sensational!

**Patterson
SUPER-H**

RADIO'S GREA



Model 91 with our standard 9-Tube chassis and Magnavox Dynamic Speaker in beautiful butt walnut Deluxe Console. Height 33 1/2 inches . . . width 22 1/2 inches . . . depth 14 1/2 inches. Shipping weight 65 lbs.

\$89⁵⁰ WITH TUBES

Sell this Super-Value Superheterodyne Console to your better trade . . . and in doing so you can CASH IN ON SUPERHETERODYNE ADVERTISING.

- NINE TUBES required to give true superheterodyne performance.
- FOUR SCREEN GRID TUBES, providing tremendous and efficient amplification.
- TWO 227 TUBES used as oscillator and second detector for greater audio output.
- TWO 245 TUBES in Push-Pull, affording powerful, smooth tone.
- ONE 280 RECTIFIER TUBE, assuring steady, even power.
- COMPLETELY SHIELDED to eliminate external pick-up.
- ELECTROLYTIC TYPE CONDENSERS for pure filtering and freedom from hum.



The New Patterson Superheterodyne has created an overwhelming dealer response. From all sides the report is, "People are buying the New Patterson Superheterodyne right now." . . . and is there any wonder. Never before has so much dollar value been built into a receiver by any manufacturer. Here is a 9-tube superheterodyne with no dead spots on the dial. Consider the sales-appeal that you can make without reserve or fear of contradiction. The Patterson Superheterodyne has more volume and distance than any receiver known to us. It is, we believe, the most sensitive, the most selective, and the finest toned receiver in existence today.

No set . . . even the most costly . . . ever before gave such perfect reproduction.

Manufactured by the Patterson Radio Company under patents of the Radio Corporation of America and affiliated companies.

A Low-Priced Super
With Every Known "h"

This is a . . .
SUPER-HETERODYNE YEAR

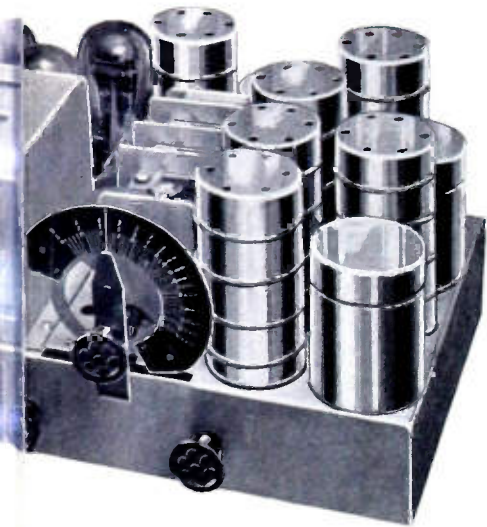
Patterson Radio
239 South Los Angeles

PATTERSON SUPERHETERODYNE

**SUPER
POWER!!
SUPER
TONE!!**

BEST VALUE!

Lower in Price!



- DIAL GEAR DRIVEN, no slipping provides ease of tuning.
- TUNING shadow line . . . kilocycle calibration.
- FOUR GANG CONDENSER provides the utmost in selectivity.
- POWER DETECTION freedom from hum; sharp, flawless tone; volume to spare.
- TEN TUNED CIRCUITS, placing enormous power at your command under perfect control for distance reception.
- BAND PASS FILTER . . . TONE CONTROL . . . NO HARMONICS . . . NO RE-RADIATION . . . TEN KILOCYCLE SEPARATION.



Make "BIGGER PROFITS" by merchandising a Patterson Chassis, with a Dynamic Speaker and Tubes in a cabinet of your choosing. An Escutcheon Plate with your own Trade Name will be furnished. Prices quoted.

The New Patterson Superheterodyne is a marvel of efficiency. It sells itself and stays sold . . . without the usual servicing required of most radios on the market today. Hear its marvelous performance and compare with your own ears its superlative value. It's easy to see that selling is easier when you're backed by this sure-fire superheterodyne line. Order today . . . don't delay. Get your share of the profits from this new fast selling line and be on the crest of the wave. This is a Superheterodyne Year.

Junior Model 90 contains our standard 9-tube chassis and Magnavox Dynamic Speaker, encased in a beautiful cabinet of butt walnut. Height 17 inches, width 14 inches, depth 9 1/2 inches. Shipping weight 38 lbs.

\$74⁵⁰ WITH TUBES

Here is a miniature radio that will operate in any locality where radios in any price field will operate. Do not by any stretch of the imagination confuse the PATTERSON with the innumerable so-called midgets now on the market. Patterson has been building quality radios since 1920. Remember this: "There is no substitute for quality."

Don't "SIGN UP" for any radio until you see and hear the New Patterson Superheterodyne. Write—phone—or wire for information.

TUBES

Super-Heterodyne
"High-Priced" Feature

Patterson Radio Co.
1234 Main Street, Los Angeles

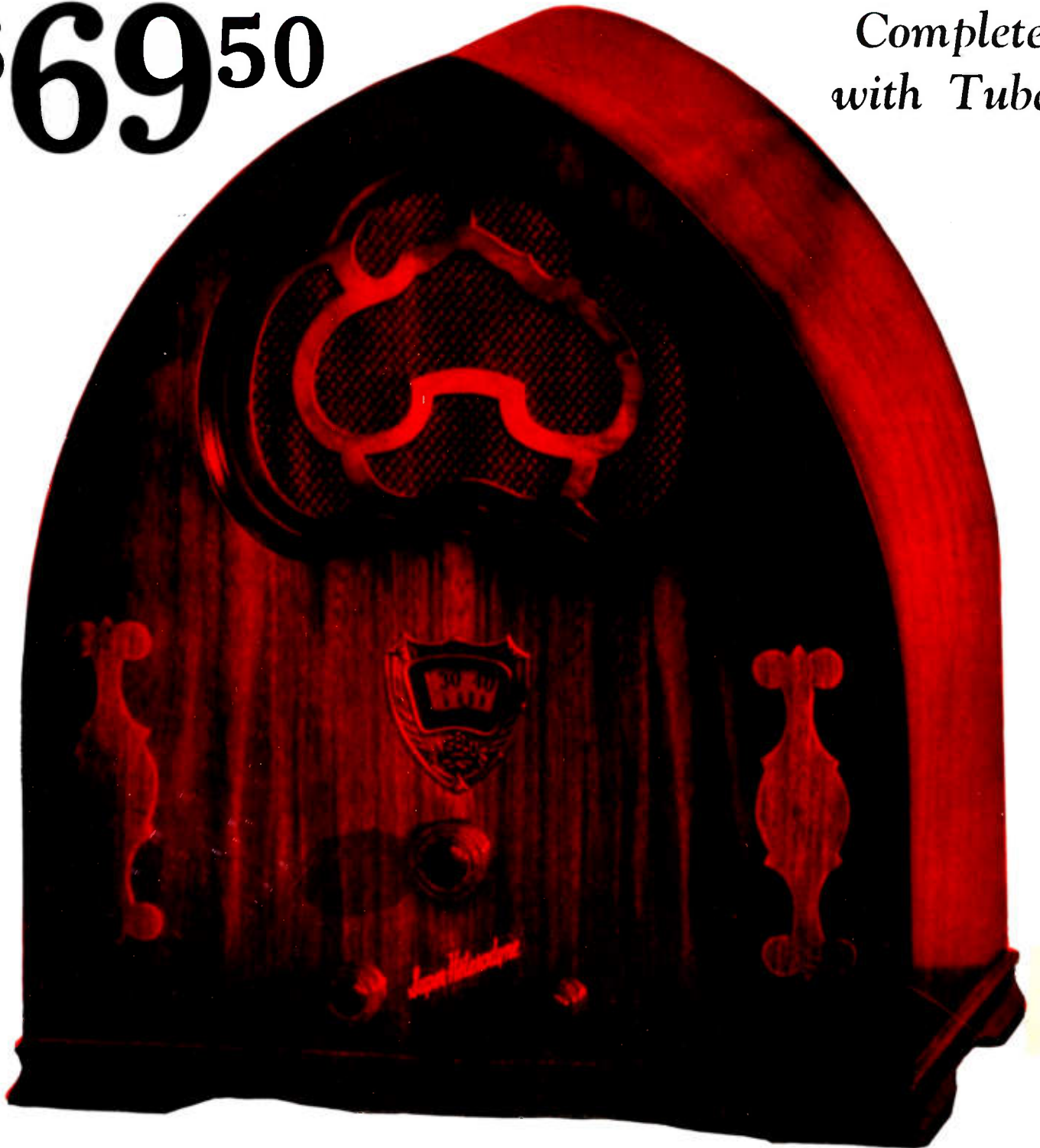


Builders of Quality
RADIO SINCE 1920

ANGELUS 9 TUBE SUPER-HETERODYNE

\$69⁵⁰

*Complete
with Tubes*



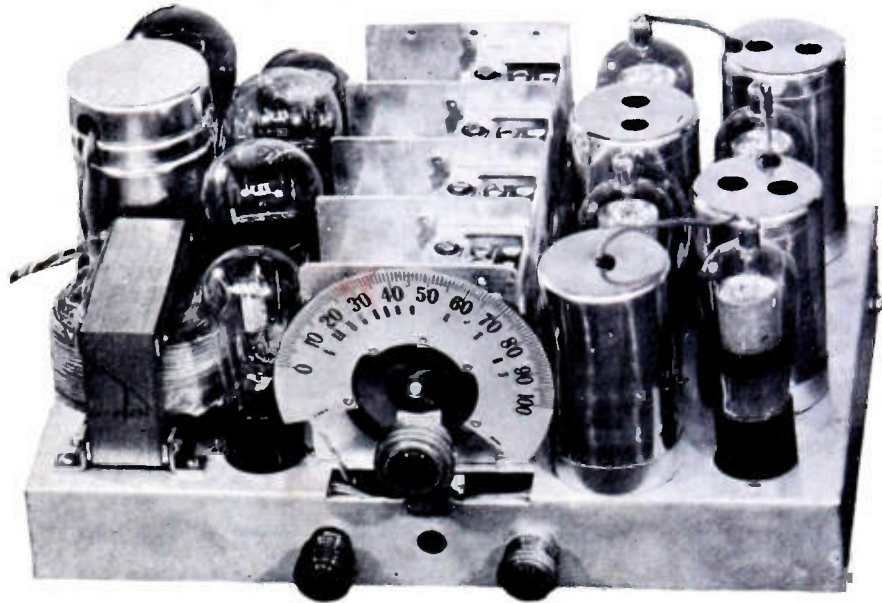
DAVISON-HAYNES MFG. CO.
717 MATEO STREET . . . LOS ANGELES, CALIF.

SENSATIONAL ANGELUS

9

tube

Super-Heterodyne CHASSIS



OUTSTANDING FEATURES

CIRCUIT

The Product of Davison-Haynes' laboratory, introducing a revolutionary circuit, taking the fullest advantage of the Super-Heterodyne system of reception. Eliminating the disadvantage heretofore encountered in the old tuned radio frequency receiver; yet maintaining the same simplicity of operation and construction.

A 9 tube set using four screen grids, two 227's, two 245's in Push-Pull, and one 280 Rectifier. A pre-selective circuit has been incorporated with 10 tuned circuits!

CHASSIS

Chassis of a heavy cadmium steel plated, extremely sturdy, built to stand hard usage. All parts of the finest quality, assuring long life.

SPEAKER

Specially designed MAGNAVOX matched to this circuit, tone quality never before attained in this type of set. A Tone Control that makes a midget tone a rival to large consoles.

TUBES

This radio can be furnished with all leading brands of tubes with full replacement service.

DISTANCE

Limited only to the suitability of your location. With even a poor aerial or ground, remarkable distance may be enjoyed; from stations of foreign lands to small, low powered U. S. stations from coast to coast.

SELECTIVITY

An enjoyable sharpness in cutting and separating the strongest local and distant stations. This is achieved by using a Multi-gang condenser and 10 tuned circuits. Enjoy your favorite program without the interference or harmonics, all with ease of operation.

ACCESSIBILITY

Chassis fully shielded yet may be removed from cabinet in two minutes. All adjustments made without removing chassis from cabinet.

OUTSTANDING FACTS

The Angelus Super-Heterodyne was designed and engineered to out-perform any Super-Heterodyne that enters the field. Its performance is superior to even the highest priced nationally advertised set. Our staff of engineers has tested each part to each coordinating part with other Super-Heterodyne chassis and has selected each resistor, each condenser, the transformer, and each coil that more than meet the acid test which it required to produce this dynamic Super-Heterodyne!

Only through Davison-Haynes' strict policy of quality production has it been possible to bring to the field such a chassis.

DEALERS

Write, wire, or phone immediately your nearest Angelus Distributor for delivery of this Dynamic Super-Heterodyne Receiver. If distributor is unknown, write to the factory direct. As a progressive and shrewd merchandiser you will hear Angelus first and last . . . then sell Angelus. Don't pass up this one great opportunity to be the first in your territory with this outstanding SUPER-HETERODYNE.

OTHER MODELS \$79⁵⁰ and \$84⁵⁰

Tell Everybody you will
Sell the Angelus Super-
Heterodyne!

DAVISON-HAYNES MFG. CO.
717 Mateo Street Los Angeles, Calif.

Don't be misled by in-
ferior Super - Hetero-
dynes.

Super-Heterodyne's Greatest!



\$79⁹⁰

Complete
WITH **8** TUBES

QUALITY

PERFORMANCE

UNIFORMITY

Only made possible by advanced engineering and the highest grade of materials and workmanship. We invite comparison with any radio receiver, regardless of price.

TIFFANY = TONE

Built by
HERBERT H. HORN
RADIO MANUFACTURING CO.

The units employed in the manufacture of the Tiffany-Tone Superheterodyne are produced by the manufacturers of the highest quality parts obtainable. These units are built to very rigid specifications prepared by the engineering staff of the Herbert H. Horn Radio Mfg. Co.

The following manufacturers furnish parts for Tiffany-Tone receivers, and each is an acknowledged leader in his respective field.

- CHICAGO TEL. & SUPPLY CO. Volume and Tone Controls
- DE JUR-AMSCO CO. Variable Tuning Condensers
- EBY MFG. CO. Tube Sockets
- MAGNAVOX COMPANY Dynamic Speakers
- MICAMOLD RADIO CORP. Mica Condensers
- NATIONAL ELECTRIC CORP. Power and Audio Transformers
- OHIO CARBON CO. Carbon Resistors
- P. R. MALLORY & CO., INC. Electrolyte Condensers
- RADIO COIL & WIRE CORP. Litz R. F. Coils and Intermediates
- TRIAD MFG. CO. Tubes

HERBERT H. HORN

RADIO MANUFACTURING CO.

1625-29 South Hill Street Los Angeles, Calif.

WEstmore 0121

better than 10 knob-type selectivity.

DX Range limited only by static.

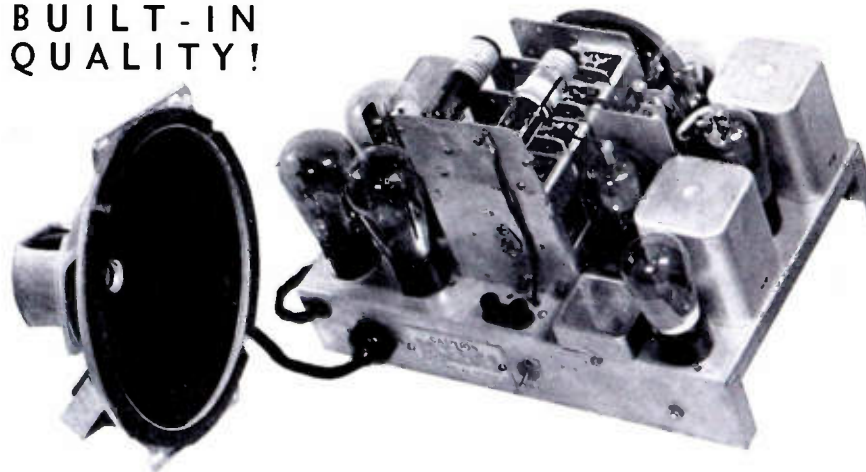
Eight tuned circuits—the coils in all eight circuits are bank-wound with Litzendraht wire—the most efficient type of coil yet developed.

Tuned Selector Stage—Tone Control—Local Distance Switch—Push-pull Amplification.

Everything that Radio has to offer in the most highly perfected form, combined with compactness.

LICENSED UNDER R.C.A., HAZELTINE, AND LA TOUR PATENTS

**BUILT-IN
QUALITY!**



Chassis and Speaker only . . .

\$59⁵⁰ LIST PRICE

Why SET-TESTED

Give you
Quicker sales
More profits
Greater satisfaction

THERE is one thing every set-owner wants to know about the tubes he buys: "Do they give perfect results in my particular set?"

There is one way to answer that question to his complete satisfaction: *Tell him that Sylvania Tubes have been tried out in a set exactly like the one he owns.*

That is what SET-TESTED means—to you and to your customers. That is why sales are quick, profits bigger, and complaints fewer. You know, and the people who buy

from you know, that Sylvania Tubes have been actually tested in every one of the fine radios listed at the right—that they have passed strict tests for tone, distance, volume and selectivity.

Write at once for the Sylvania Certified Test Chart. Dealers everywhere are using it side by side with their stock of Sylvania Tubes. Note for yourself how quickly tube sales increase—how much less time you need to spend with each one of your customers.

SYLVANIA PRODUCTS CO., EMPORIUM, PA.

SYLVANIA RADIO TUBES

SYLVANIA INCANDESCENT LAMPS

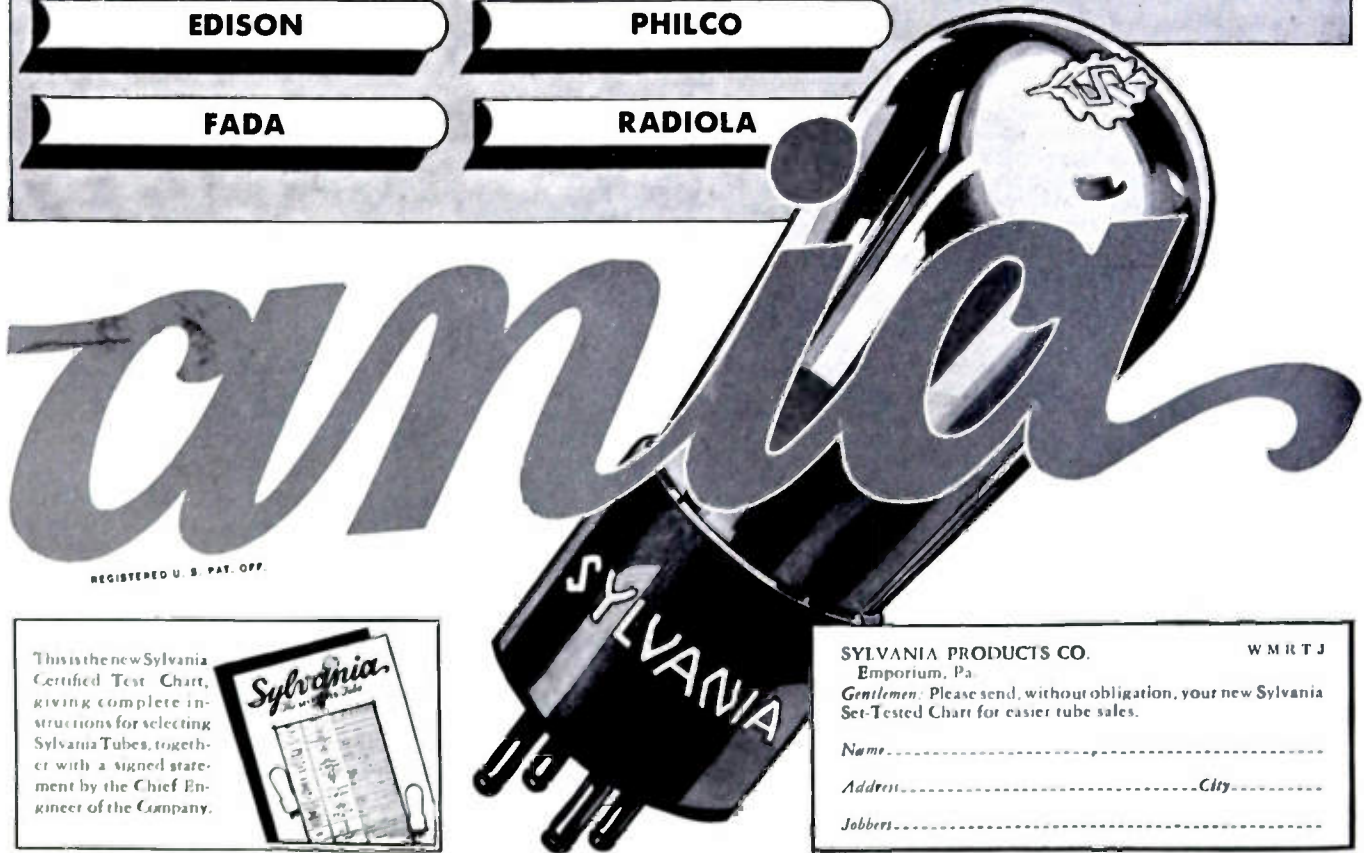
Sylv



•
 Licensed under RCA Patents
 •

TUBES

AUDIOLA	GENERAL ELECTRIC	SILVER MARSHALL
APEX	GENERAL MOTORS	SIMPLEX
ATWATER KENT	GRAYBAR	SONORA
BOSCH	GREBE	SPARTON
BRUNSWICK	GULBRANSEN	STEINITE
CLARION	HOWARD	STERLING
COLONIAL	KENNEDY	STEWART WARNER
CONTINENTAL	LYRIC	STROMBERG CARLSON
CROSLEY	MAJESTIC	VICTOR
EDISON	PHILCO	WESTINGHOUSE
FADA	RADIOLA	ZENITH



REGISTERED U. S. PAT. OFF.

This is the new Sylvania Certified Test Chart, giving complete instructions for selecting Sylvania Tubes, together with a signed statement by the Chief Engineer of the Company.

SYLVANIA PRODUCTS CO. W M R T J
 Emporium, Pa.
 Gentlemen: Please send, without obligation, your new Sylvania Set-Tested Chart for easier tube sales.

Name.....
 Address.....City.....
 Jobbers.....

Grigsby-Grunow Merges

Directors of Grigsby-Grunow Company, manufacturers of Majestic radios, have approved an offer for the additional purchase of the refrigerator business of the Majestic Household Utilities Corporation, on the basis of an exchange of stock, share for share.

The purchase is conditional upon approval of stockholders and subscription and sale of \$5,000,000 worth of six per cent first mortgage gold bonds on fixed assets of the combined companies, having a net value of \$15,899,429. The proposed merger will result in combined net current assets of about \$9,000,000.

Bonds carrying the stock conversion rights will be first offered to the stockholders of the Grigsby-Grunow Company. Meanwhile, they are being offered to creditors of Majestic Utilities and distributors and dealers of the refrigerator company, subject to the prior right of stockholders to subscribe. B. J. Grigsby, president of both companies, stated that Grigsby-Grunow has only agreed to the merger in the event of the financing plan being completed.

Manufacturers' Failures Less

There were less failures of radio manufacturers in 1930 than in the previous year, it has been found by the Radio Manufacturers' Association. In 1929 there were 25 failures, involving more than \$12,000,000, while in the past year there were 22 failures reported, involving \$4,300,000.

In 1930 only one credit extension was granted, involving \$400,000, and in 1929

Los Angeles Manufacturers Adopt Performance Standards

THE Radio Manufacturers' Association of Los Angeles has established a committee on standardization, to submit performance standards for Los Angeles-made superheterodynes, intended to eliminate many mispractices. The report follows:

"That, in the manufacture of superheterodyne receivers, either in midget or console sizes, no manufacturer in this organization deviate from minimum performance standards as set forth herein:

"SENSITIVITY. In these receivers, the field strength required to produce a standard signal of 50 milliwatts in the output circuit of the final tube shall not exceed 2 microvolts per meter at any broadcast frequency.

"SELECTIVITY. The minimum interference ratio at any broadcast frequency shall be 250 to one at 10 kilocycles off resonance.

"IMAGE FREQUENCY. The receiver, operating in a field with an intensity of 100,000 microvolts per meter, and using a standard antenna of four meters, effective height, shall not produce more than one audible peak over the entire broadcast band, with the exception of a radiated harmonic of the transmitted signal, should this be present. Such harmonics can occur only between 1500 and 1100 kilocycles, being the second harmonics of broadcast carriers between 550 to 750 kilocycles.

"RADIATION. At the present time, this committee is unable to set forth exact standards for radiation from the os-

DOINGS IN THE INDUSTRY

RCA Injunction Sustained

After three years in the courts, the case of several independent tube manufacturers against Radio Corporation of America, Westinghouse Electric & Manufacturing Company, and the American Telephone & Telegraph Company, charging a "patent pooling" monopoly in the sale of tubes, has been closed.

The Federal Circuit Court of Appeals, sitting in Philadelphia, affirmed a previous decree of the District Court of Delaware that these companies had attained a monopoly, in violation of the Clayton anti-trust act. The original injunction ordered against RCA was sustained by the court of appeal to which that company carried the case. It was again sustained in the Appellate Court.

The DeForest Radio Company, one of the plaintiffs, claimed it had been frozen out of the tube market by the patent pool intended by the Radio Corporation to give it a monopoly in the sale of tubes to its licensee receiver manufacturers and dealers. The Radio Corporation countered that in effect no monopoly had been created, as shown by the increased sales of the plaintiffs. In treating this question, Judge Buffington in his decision said, "There is nothing in them (the facts brought out in the final hearing) which would lead us to the conclusion that the objectionable contract has not resulted in a monopoly."

illator circuit of superheterodyne receivers. This phase of the performance of superheterodynes constitutes a serious menace to the industry in general, and our observation of the performance of existing receivers of this type have caused us to make extensive investigation and research into this matter before attempting to establish standards. It has been noted, for instance, that with a tuned radio frequency receiver, operating on the same AC line with a superheterodyne of a popular make, and receiving a signal from a distance of approximately 1000 miles, this signal having a field intensity of approximately 10 microvolts per meter at the point of reception, rotation of the oscillator dial of the superheterodyne to a point where the oscillator frequency was equal to the received signal, reception with the t.r.f. set, was completely destroyed.

"The interference committee of this association is daily receiving interference complaints which are being traced to heterodyning by nearby superheterodyne receivers. We earnestly recommend that manufacturers contemplating the marketing of receivers of this type, investigate the radiation energy from the oscillators before finally approving any models for production. This committee will continue its investigation along this line, and submit a more detailed report when sufficient information has been gathered."

R. G. Leitner is chairman of this committee of standardization.

Utah is being advertised in this way, and the dealers also appreciate these broadcasts during business hours which have helped them demonstrate in their stores.



AL MEYERS
President of Leo J. Meyberg Co., Inc.

Meyberg Company Buys Victor Distributing Rights

Distribution activities of the Leo J. Meyberg Company, Inc., 1022 South Wall St., Los Angeles, now include all merchandise formerly distributed by the California Distributing Company, in addition to Radiola products.

Since March 16, when the change became effective, the Meyberg company has taken over all of the activities of the Southern California Victor Distributing Company, and now handles Victor, Radiola, RCA Victor, Radiotrons, and other radio supplies and merchandise.

"We are confident that this action will result in a greatly strengthened organization, capable of rendering a larger and more efficient service to Radiola and Victor dealers," stated H. E. Sherman, vice-president of Leo J. Meyberg Company. "The two lines will continue to be merchandised separately and in accordance with the sales, service, and advertising policies affecting each line, as heretofore."

Otto L. May, president of the California Victor Distributing Company, has been appointed district sales manager in California, and is cooperating with the new distributors in merchandising both lines. Herbert R. Zenker has been made sales manager for the Meyberg company.

Leo J. Meyberg, Inc., was formerly the Haller Cunningham Electric Company with offices in San Francisco. In 1917 this company was purchased by Leo J. Meyberg, who managed the business until his death four years ago. Two of the first radio stations in America were operated by the company between 1922 and 1926—KYJ, Los Angeles, and KDM, San Francisco.

The Los Angeles branch of the company was started in 1921 in a loft building on Los Angeles Street. From there it was moved to South Flower, and thence to the present location on Wall. Branch warehouses of the company are located in San Diego, Fresno, Sacramento, Stockton, and Oakland.

Rogers & Goetz Burglarized

Rogers & Goetz Burglarized

Thieves broke into the building of Rogers & Goetz, Eeophone distributors, at 7626 Santa Monica Blvd., Hollywood March 11, and stole 33 sets, mostly the new models.

Sometime in the early morning hours, the burglars smashed in the front door, despite the fact that the front is well lighted from a nearby street light. Apparently they had tried to gain entrance in the rear, but finding the heavy fire-proof doors impossible to force, went around to the front.

Mel Rogers, partner of the firm, stated that he would pay \$50 for information leading to the arrest and conviction of the thieves.

Following are descriptions and serial numbers of the stolen sets:

Model S-3 (5)—Five tubes, Dynamic

Speaker, Single dial control, the tubes are 3 224, 1 245, 1 280.

5066—Rola Speaker, 57944—Jensen Speaker, 59286—Jensen Speaker, 53479—Rola Speaker, 60202—Jensen Speaker.

Model S-5 (9)—Superhetrodyne, Eight tubes as follows: 4 224, 1 280, 1 227, and 2 245. Jensen Dynamic Speaker, illuminated dial, tone control; phonograph pick-up and distance switch on the back of chassis. Serials:

1855-105478, 1857-106138, 1858-105803, 1859-106077, 1835-106008, 1822-105953, 1815-105428, 1816-105841, 1810-106078.

Dwarf (19)—Five tubes, Electro Dynamic Speaker, tone control, illuminated dial, 12½ inches high, 10 inches wide. Tubes are 3 224, 1 245, and 1 280. Serials:

1117, 1124, 1125, 1132, 1158, 1162, 1067, 1177, 1183, 1193, 1206, 1209, 1348, 1350, 1066, 1264, 1271, 1282, 1286.



One of Bovee's demonstration displays in Store No. 14, Los Angeles.

Bovee Active In Promoting Tube Shops

In less than 60 days, R. B. Bovee, owner of Bovee Tube Shops, exclusive tube chain stores, has placed Acremeters in 14 of his 20 proposed strategic locations in Los Angeles.

In several of these locations Bovee plays to attract the attention of radio buyers. In addition to the window displays, an Acremeter display arrangement has been placed in each location. In this display, the instrument is demonstrated by a competent girl operator.

Bovee's publicity plans include radio broadcasts from five stations in the West. These broadcasts advertise the Acremeter, together with the Bovee chain of exclusive tube stores.

Radio Corporation of America and KenRad Corporation are cooperating with Bovee in these activities, furnishing much of his display material, cards, posters and tube cartons.

One of the features of the Bovee plan is his technician and service man, who follows up all tube sales, checks and inspects, checks tube stocks, and delivers tubes daily. Every morning he inspects every Acremeter placed and takes care of servicing.

Bovee's advertising schedule also includes a direct mail postcard campaign.

Watkin Co. Re-elects Officials

At its annual stockholders and directors meeting, the Will A. Watkin Company, Dallas, Texas, reelected its same officials: Will A. Watkin, president; A. Ragland, vice-president; Robert N. Watkin, secretary-treasurer, and the following directors: Will A. Watkin, M. H. Wolfe, Rhodes Baker, A. Ragland, and Robert N. Watkin.

Next year the company will celebrate its fiftieth anniversary in Dallas.

Westinghouse Reorganizes

Complete reorganization of the merchandising department of the Westinghouse Electric and Manufacturing Company, has been made, according to C. F. Allen, commercial vice-president of the company. This department, under the new arrangement, will be responsible for all products sold for the home, such as refrigerators, radios, ranges, heating appliances, fans, vacuum cleaners and water heaters. Farm lighting and water systems will be added later, Allen said.

Operations are now divided into two sections; one under M. C. Morrow, sales manager, and the other under F. R. Kohnstamm, director of merchandise. In the division under Morrow, C. D. Taylor has been appointed refrigeration sales manager, and C. H. Collins, radio sales manager. Headquarters for the Merchandising Department are centered in Mansfield, Ohio.

Capehart Grants Canada License to DeForest

An exclusive license to manufacture the new Capehart Record Changer in Canada has been granted the DeForest Radio Corporation Ltd., at Toronto.

Negotiations were recently closed in Fort Wayne, Ind., by H. E. Capehart, representing the Capehart Corporation, and J. E. Hahn, W. M. Angus and A. L. Ainsworth, of the DeForest company.

The Canadian radio firm will manufacture the Capehart Record Changer for the big market which exists in Canada for automatic phonograph-radio combinations.

Fitzgerald Quits Business

James Taber Fitzgerald, pioneer Los Angeles business man, and for nearly forty years head of the Fitzgerald Music Company, has retired from business. With his retirement, the firm has started closing out its entire stock.

From a small one-room shop selling violins and other instruments, the company established by Fitzgerald in 1892 developed into one of the largest music houses in Los Angeles.

This development makes no difference in the Glendale branch of the Fitzgerald Music Company. It will continue in business as it has in the past, under the management of Leo Deatrick.

Radio to Prevent Air Collision

A prediction that it will be only a short time until radio will be employed to keep airplanes on their course, has been made by E. Lloyd Sutton, Pacific Coast Manager for E. T. Cunningham, in San Francisco.

It is also Sutton's prophecy that radio will soon be used on planes to warn them of the near presence or approximate position of other ships. He has based his predictions upon the recent successful experiment made by aviation officials of the Department of Commerce in their efforts to solve the problem of preventing collisions between aircraft in flight.

Buys Repair Business

Frank Livingstone, former manager of the Senator Radio Shop, Chico, Calif., has purchased the radio repair business of Kenneth Willman, and has moved to his new location at 542 Broadway. Willman remains associated with Livingstone in charge of the repair and service department.

Fire Damages L. A. Store

Fire of undetermined origin swept through the C. R. Parker radio store, 2533 South Hill St., Los Angeles, recently, causing damage estimated at \$3000.

Old Pianos Destroyed

Rapid progress in the campaign to exterminate old and worthless pianos according to the "Starr Enthusiast," monthly bulletin of the Pacific Division of the Starr Piano Company.

According to the Starr plan, during the months of January, February and March, all trade-ins, later destroyed by dealers, are taken in on Starr-made pianos sold during these months, subject to a credit allowance on current accounts or future purchases. For instance, a 20-dollar credit is the trade-in on a certain style of Starr. A 10-dollar credit if traded in another style, and a five-dollar credit on another. Claims of dealers must be made and filed before May, 1931.

The extermination of these old pianos has been accredited a great deal to President Jeanette of the Starr factory. It was his idea that with old, useless pianos out of the way, there would be much more chance for prospects in new merchandise.

RECORD REVIEWS

• FOR MARCH •

By DON McDOWELL

FIRST honors in popular records, in my estimation, go to Guy Lombardo this month. Guy and his Royal Canadians, in making "By the River Saint Marie," have achieved something more than a "good dance number" in this Columbia production.

It is a smooth, flowing, love song, delicate in its artistry of execution and almost classical in its instrumental arrangement. There is a soothing element in the fox trot that the usual run of records fall short of achieving. Carmen Lombard sings the vocal refrain beautifully, accompanied by ringing bells and chime effects by the orchestra. "Running Between the Raindrops" is on the other side, a sweet fox trot, with vocal trio and guitar.

Waltzes Gaining Favor

Waltzes appear to be regaining some of their lost favor. The popularity of long skirts is bringing this about, it is thought by many recording authorities. The "Cavaliers," waltz specialists, recording for Columbia, have picked two beauties this time, in "When Your Hair Has Turned to Silver (I Will Love You Just the Same)," and "Wabash Moon."

The first of these is a good old-fashioned waltz, like mother used to make whoopee to. The words and melody are simple and beautiful, and the quartet that sings the vocal chorus make the most of them. On the reverse is "Wabash Moon," a dreamy modern waltz, fast gaining popularity.

Red Nichols Goes "Spiritual"

And now we must give a hand to Red Nichols and his Five Pennies. He seems to have gone in for negro "spirituals" in a large way, as indicated by his two latest Brunswick recordings, "Bub-a-Boo" and "Corrine Corrina." The first is one of those "get hot and wash yo' sins away" numbers, starting off with a negro dialogue introduction, then smashing into a lowdown fox trot. "Corrine Corrina" is a typical dark-town blues, and Red and the boys really go to town on it. The high trumpet note held through the ending is worth the seventy-five cents.

Lucas admirers will be tickled with Nick's recording of this popular fox trot "Walkin' My Baby Back Home" (Brunswick). The instrumental arrangement is varied, giving nearly all of the hoys in the band a break. Lucas, of course, is the high spot of the record, with his song choruses. The number calls for lots of dance rhythm, and the Troubadours step right out and furnish it. "Falling in Love" is on the other side, giving Lucas an opportunity to wax more romantic.

Rudy Vallee Scores Again

Girls between the ages of 16 and 60 will especially like Rudy Vallee in his

new Victor recording of "The Wind in the Willows." It is a smooth, sweet, fox trot, with a violin trio taking some very pretty choruses, backed by chimes and bass. Vallee contributes his usual easy-going tenor in the vocal refrain.

Among Rudy's other late hits are "When You Fall in Love, Fall in Love With Me," "Would You Like to Take a Walk?," and "99 Out of a Hundred Wanna Be Loved." In the second, he exhorts his sweetie to go walking, talks about the weather, and optimistically warbles that "Something Good Will Come of That!," all to a good, swinging dance melody. A piano refrain adds to the variety. "99 Out of a Hundred" is an amusing piece—a rollicking one-step set to a rolling march tempo.

In "Sam and Delilah," Duke Ellington gives a lively and amusing parody on these biblical characters. Chick Bullock sings the number in true lowdown night club fashion. The words are exceptionally interesting, the melody is good, and the rhythm is a foot tickling stomp. A Victor record.

Ruth Etting's New Number

Ruth Etting reveals again why she is called "Columbia's Sweetheart," in her new recording of "You're the One I Care For." She sings the first half of the number in sentimental ballad style, and switches suddenly into dance rhythm in the last part. Her piano accompanist adds materially to the success of the record. On the other side of the records is "Love is Like That," which Etting also does splendidly.

Mickie Alpert has blossomed out with a nice arrangement of "Sing Song Girl" (Columbia). He uses a Chinese instrumental introduction and ending, and sprinkles Chinese musical effects liberally throughout the number. A male trio harmonizes in the vocal parts. The words and music are both catchy. Alpert has succeeded in lending an Oriental atmosphere to a good American fox trot. "I Surrender Dear" is the tune on the reverse side.

Old Cowboy Favorite

For them as likes that 'ar music, the Beverly Hill Billies offer the good old cowboy standby, "The Strawberry Roan" (Brunswick). Serenading themselves with accordion, guitar, and fiddle, they draw out the 47-odd verses about the famous strawberry steed "that's never been rode." On the other side is the "Everglades," by the Hill Billies—another good lament.

Brunswick presents an unusual whistling record this month—"Spring Song," by Mendelssohn, whistled by Margaret "Mickey" McKee. The canary effects in this unusual interpretation of this old classical favorite, are beautiful. She is accompanied by the Brunswick Concert Orchestra. "The Call of The Angelus," on the other side, also affords her ample opportunity to execute some original and intricate whistling effects. Bell effects are furnished by the orchestra.

March Hits

Brunswick

- 514 "The Strawberry Roan" *Beverly Hill Billies*. This is a good old cowboy number, put over in great shape by these popular broadcast artists. Vocal refrains are accompanied by the accordion, guitar, and violin.
- "Everglades" *Hill Billies*
- 6029 "Sweet and Hot." *Young "Red" Nichols*. As the name indicates, it is a mixture of both sweet and hot instrumental arrangements. It has a novelty tenor song chorus. One of the hits from the musical show "You Said It."
- "You Said It." *Nichols*.
- 6018 "Truly." *Ozzie Nelson*. Here is a smooth, sweet dance tune, in which a good melody and words combine with a lazy, deep bass rhythm to make it a popular fox-trot.
- "When You Fall in Love, Fall in Love With Me." *Nelson*.
- 6048 "Walkin' My Baby Back Home." *Nick Lucas and his Crooning Troubadours*. The instrumental arrangement of this number is varied, giving most of the instruments a break. As usual, Nick is the high spot of the record, with his song choruses. Plenty of rhythm.
- "Falling in Love Again." *Lucas*
- 6058 "Bub-a-Boo." *Red Nichols and His Five Pennies*. Starts off with a negro dialogue introduction. One of those "get hot and wash your sins away" numbers.
- "Corrine Corrina." Typical dark-town blues number. *The Pennies* really go to town on this tune. Listen for the high trumpet note at the end.
- 6037 "Heavenly Night." *Emil Coleman*. A lively waltz, with a very pretty melody. Nice rhythm background and violin obligato to tenor vocal refrain.
- "With All My Heart." *Jacques Renard*.
- 6028 "Would You Like to Take a Walk?" *Chester Gaylord*. The "Whispering Serenade" gives his interpretation of this popular novelty number, with orchestral accompaniment.
- "Cheerful Little Earful." *Gaylord*.
- 6025 "The Wind in the Willows." *Ben Bernie*. An elaborate instrumental arrangement, with a wind sound effect in the introduction and ending. Excellent baritone vocal refrain.
- "Everything But Love." Another good fox-trot.
- 6054 "Spring Song" (Mendelssohn). *Margaret "Mickey" McKee*. Here is an unusual whistling record of an old classical favorite. Accompaniment by the Brunswick Concert Orchestra. Beautiful canary effects.
- "The Call of the Angelus." Whistling with bell effects by orchestra.

(Continued on Page 46)

SELLING IS EASIER WHEN you're backed by this GREAT RADIO LINE!

These beautiful Columbia machines offer your customers more for their dollars than you can give them in any other modern instruments. That's why this radio is *selling!*

All models include Columbia's nationally advertised 8-tube screen grid Telefocal receiver—the famous radio *with no dead spots on the dial.* And each Com-

ination also includes Columbia's new Electric Reproducing Phonograph—acoustically and electrically the *perfect* record player.

Remember—this Columbia line has a price range that helps you sell the greatest, most profitable class of purchasers in the country. And it gives you machines packing the beauty and performance which will cinch a healthy 1931 sales-increase for you!

Model 939 — The New Columbia Telefocal Radio - Phonograph Combination. List price, \$235.00.



Model C20 — The New Columbia Telefocal Radio, Low-boy Model. List price, \$145.00.



Model 991 — The New Columbin Telefocal Radio and Automatic Record-Changing Phonograph Combination. List price, \$325.00.



Model C21 — The New Columbia Telefocal Radio, High-boy Model. List price, \$185.00.



ALL LIST PRICES ARE LESS TUBES

Columbia Radios



TM Trade Mark Reg. U.S. Pat. Off.
M. M. Lee Reg. Nos. 18433 y 18434 de 9 de
Abril de 1910 y 18435 de 17 de Agosto 1910. Marca
Sustentada Registrada Bajo Nos. 1076, 2168 y 2672

The Columbia Phonograph Company, Inc., New York.
In Canada: Columbia Phonograph Company, Ltd., Toronto

WASHINGTON AND SEATTLE

By LEO GREEN

ONE enterprising dealer of this city has taken his cue from the efforts of a manufacturer to create a new interest on the part of the buying public, in getting behind the Westinghouse Company's new Columaire receiver.

As an evidence that the manufacturer has at least shown a sustained interest in public thought, Hugh Campbell of Fraser-Paterson Company decided to hold a salon showing with all frills and atmosphere of the Columaire, to demonstrate that though the radio may not be basically nor mechanically new, it is at least a presentation in an entirely new and different manner, which is after all what is creating a new interest in the Westinghouse receiver.

Selecting the oriental rug department with its luxurious setting on the third floor of the building, Campbell set the stage in dramatic fashion and arranged a unique program with artists from local broadcasting stations to dovetail with the demonstration of the receiver. Ushers and members of the radio department were attired in tuxedos, beautifully engraved invitations were sent out to a selected list and the appointed hour found the auditorium packed with interested listeners.

Success was written all over the salon irrespective of the immediate sale realized. Success in the light that a new interest had been created among buyers who ordinarily could not have been attracted to the store by showing a conventional cabinet housing the identical chassis.

The one indelible lesson taken from the idea was the terse comment of Campbell himself. "How can a manufacturer expect his product to go over if the dealer himself is not sold on the products?"

That answers the question, brothers, with respect to the Columaire. Westinghouse or any other manufacturer can turn out new ideas until Doomsday and unless the dealer becomes sold on the possibilities of creating new business as a result thereof, there is little prospect of the manufacturer being rewarded for his effort.

Refrigerators

There seems to be a stronger tendency for radio dealers to diversify their business this year. Reason—naturally the creation of more volume to lessen overhead; likewise the fear of encountering another summer such as 1930 with bed rock radio sales, so the logical solution seems to be refrigerators.

General Motors has already established Frigidaire among most of the GM radio dealers. A considerable number of other dealers handling radio merchandise through jobbing houses having a refrigerator line as well, have taken on said refrigerator.

This is in sharp contrast to the arguments advanced a year ago by both refrigerator jobbers and radio jobbers as to the business acumen of this plan, but

like all things these ideas must have their test, and if it's to the best interest of all concerned, why not?

The argument is advanced by straight radio merchants that furniture houses and department stores have both classes of merchandise and no doubt exchange prospect lists even though operated as separated departments in separate parts of the store.

On the other hand, service becomes at once a problem for the small merchant. Herein, perhaps, lies the brains of the manufacturer and the jobber of refrigerators.

Some years have passed since the first electric refrigerators were marketed, and much has been learned in the interim. The leading makers of refrigerators today claim their products to be practically fool-proof, with service now perfected to a minimum, and furthermore, the average jobbing house has created a service department to take care of such defects that might occur.

Summer Radio Sales

From the viewpoint of the radio man who after all created the dealer, what is its effect likely to be on the summer sale of radios? Not so long ago we thought we had overcome the bugaboo of a summer slump in radio. It is apparent that there is a letting down in sales during the summer months and will or will not the dealer's enthusiasm to put over his refrigerator sales cause him to overlook the radio department and in the end find the radio sales even less than they were for the corresponding period of the year previous?

This one fact is without contradiction: the radio merchant has a perfect right to try and bolster his volume and protect his store investment. He should be entitled to the consideration that his business judgment is not going to allow one hand to lie idle while the other is working, and if he has the happy faculty of keeping both working harmoniously there can be little doubt as to the outcome.

Figures Show Sales Field

An editorial entitled "Radio Growth," which appeared in a recent issue of the Seattle Post-Intelligencer comes under the heading of "good news." The editorial states that the radio industry "is planning a great selling drive," and that according to figures, but 60,000 families of the 10,000,000 in the United States are radio owners, barely 35 per cent of the total population—leaving 65 per cent still waiting to see what Radio is going to produce next. It's this 65 per cent that is worrying a lot of us.

In a recent issue of this same publication in the form of a news story came the announcement released by RCA that Television was not in the far distant future. To the radio merchant this no doubt is classed as "bad news." True enough, there is a deterring effect on the

sale of radio when news of radical changes in the development of radio such as television is to bring it released. But it's news and newspapers cannot withhold its publication. Moral, let's get to the bottom of this selling drive announcement and get it started, and let the future development of radio come as a natural course the same as it has done in the automobile industry and other similar industries.

Consoles Versus Midgets

An interesting sidelight on the comparative selling ratio of standard consoles versus midget was revealed a few days ago by one of Seattle's large dealers, who gave his total figures covering a two-weeks' period. The ratio had been typical of sales for the previous six weeks, he stated. For every \$1,000 worth of console merchandise of standard make, he was disposing of less than \$40 worth of the smaller types. All of which points out that after all permanent radio sales volume seems to rest with the higher priced sets. This doesn't argue either that the midget will not sell, for this dealer declares that the new type midgets are destined for a nice volume, but it does indicate that cabinet design of the conventional console is by no means go-

Radio Employment Increases

Employment is increasing in the radio industry preparatory to a seasonal resumption of activity, according to a statement received by Colonel Arthur Woods, chairman of the President's Emergency Committee for Employment, from Bond Geddes, executive vice-president of the Radio Manufacturers' Association, New York City.

"Radio manufacturing is seasonal to a large extent," stated Geddes. "Our peak production usually begins in June and extends at top load well into August or September. We believe this seasonal expansion will occur this year to an extent governed by special conditions relating to the demand for products. In anticipation, receiving set manufacturers already have begun to place orders, thus stimulating production among parts, speaker, and accessory manufacturers. The increase in labor already has been considerable with more to come as the season advances.

"This association represents over 200 companies making up about 95 per cent of the output of the entire radio industry. Employment during last summer's peak for the entire industry was about 35,000 persons, including both wage earners and salaried personnel. We are urging all our member companies to consider every means to spread the work among as many persons as may be economically practicable. Wage rates are being maintained."

Radio Exports Show Gain

Representing a value of approximately a billion and a half dollars, more than 24,000,000 radio sets were in use throughout the world in November, 1929, according to figures brought out in an analysis of the electrical department of the United States Department of Commerce.

It is estimated that 120,000,000 people are equipped to listen to broadcast programs. In most countries except the United States and Canada the cost of broadcasting is paid by license fees levied on set owners.

Complete eight tube Superheterodyne. Contains everything and does everything that money can buy in fine Superheterodyne performance. 17 inches high—13 inches wide—7 inches deep—weighs only 22 pounds. Tubes 4—224, 1—227, 2—245, 1—280, complete \$69.50 nothing else to buy.



\$69.50
Nothing Else
to Buy

The telephone you use today is not a midget phone. The telephone you used to use was a monstrosity. The same is true of your washing machine, your electric iron, your automobile, your typewriter—practically everything you use. They have all been refined in quality, increased in efficiency, and most materially reduced in PRICE and SIZE. The same thing that has happened to everything else has now happened to radio. And ECHOPHONE is the ORIGINATOR and LEADER in this modern move of compact

radio. And now offers the new ECHOPHONE SUPERHETERODYNE, no larger or heavier than the original, created by modern engineers with modern vision, and developed by the greatest financial interests of America. ECHOPHONE has long since passed through all of its experimental stages, has already put into the homes of America over 500,000 of these modern radios and, in short, has already taken all of the steps that most of the radio world is about to set out upon.

Echophone

ECHOES OF THE WORLD

ROGERS & GOETZ, Ltd.

21 Laskie Street
SAN FRANCISCO
Market 3124

7626 Santa Monica Blvd.
HOLLYWOOD
Granite 1194

'ere's 'ow it's done in merrie old England!

A LONDON dealer was sentenced to prison for "selling gramophone records below the authorized retail price fixed by plaintiffs in breach of an order made by the Court."

A PIANO dealer was summoned under the Bankruptcy Amendment Act for not keeping proper books in connection with his business. When pressed at his public examination as to why he did not keep a cash book, defendant stated that "he could not really say why they did not; they banked the money and that was all." The court contended that, as the public had to be protected against people who traded in this reckless manner, he should go to prison for a lengthy period, but it was decided to only fine him 25 pounds of three months imprisonment.

IT is the custom among gramophone dealers to hold recitals for their customers, at which the popular records are played and new instruments introduced. These recitals take the form of more or less social events. Programs, special decorations and home talent entertainment are furnished. The proceeds go toward various causes—welfare societies, church benefits, and last, but by no means least—to the Music Trades' Benevolent Society!

In this connection it is interesting to note that factories and large musical organizations have collecting boxes, wherein may be placed contributions which go to the old age and infirmity fund for members of the trade.

Pavilions and halls are often hired by dealers, who stage gramophone concerts and public recitals. These concerts extend to schools, churches, institutes and other public places.

ONE Leicester firm organized a band contest a few years ago as an advertising effort, which grew into an event in which bands from most of the midland cities participate every year. The firm gives a silver cup to the winning contestant.

COMPETITION in some of these British towns is by no means dull; one music house advertised the following offer: "A player piano for 3 pounds deposit, with full allowance on the purchaser's existing instrument; a box stool to hold 24 rolls, free; two guineas' worth of music rolls of the customers own choice, free; free demonstration in the home after delivery; twelve months tuning, free; ten years' full guarantee."

RADIO manufacturers in Great Britain maintain a real live-wire association, in which they take an immense pride and interest. At a recent association banquet, the Rt. Hon. Sir William Bull, president, delivered a speech in which he said, "That this industry is capturing the public is quite obvious. There are now three and a quarter million license holders. The Radio Manufacturers' Association represents a total capacity of nearly 18,000,000 pounds. Every penny of that is British; all of the members are British, and their manufactures bear the Made in Britain mark with pride."

That Husky Baby Brother



—Courtesy Los Angeles Times

KIMBALL PIANO

FRANCHISE

EMBRACES — The most salable line in the industry? The only

financing plan under which the dealer secures his full margin of profit.

*Co-operative Sales Helps
offered by our two
West Coast Representatives:*

T. V. Anderson
519 Cooper Bldg.
Los Angeles,
and
250 Chronicle Bldg.
San Francisco
Rep. Southwest

F. W. Grosser
521 Knott St., Portland
Rep. for Oregon, Wash.,
Idaho and Northwest

W. W. KIMBALL COMPANY

Established 1857

306 S. Wabash Ave., Kimball Bldg.

Chicago



*Kimball
Chippendale
Grand*

"Balanced Sales, within reason, mean Profitable Operation in every season"

NORGE

Electric Refrigeration with the Exclusive Rollator. Different and better from every standpoint. \$189.50 to \$325.00.

CAPEHART

Automatic Record-Changing Instrument. Home and Commercial Types. Unit record changers for every purpose. An "Ace" money-maker for the dealer.

On Display

SILVER-MARSHALL

On Display

The "FIRST" licensed Super-Heterodyne Manufacturer. A leader in the low price super field—\$69.50 to \$124.50, 8 and 9-tube models. Silver has a large following among the fans.

On Display

ACREMETER

Tube Analyzer and Tube Sales Plan—the first practical method of getting BIG tube volume. Not just a "Meter." Only a few territories left.

HAMMOND

Electric Clocks—A leader in price and sales volume. The dealer's best steady, year-round seller.



On Display

On Display

KEN-RAD

Tubes and Incandescent Lamps. The real quality and profit line. Ken-Rad Controls Acremeter—that shows they are aggressive. A new set-up for the dealer on Lamps. Investigate!

SARGENT

Short Wave Converter—The outstanding unit in a rapidly growing field. Get in first with the largest Super-Ranger.

Cunningham

Radio Tubes—Since 1915 and until the end of time Cunningham will stand as leader—head and shoulders above the crowd. We are proud to have sold this line consistently for eleven years.

CLARION

The Greatest Radio Value at any price. Now outselling the Midget with a BIG Radio at Mid-get prices—\$69.50 and \$79.50. Get in on this!

EVEREADY

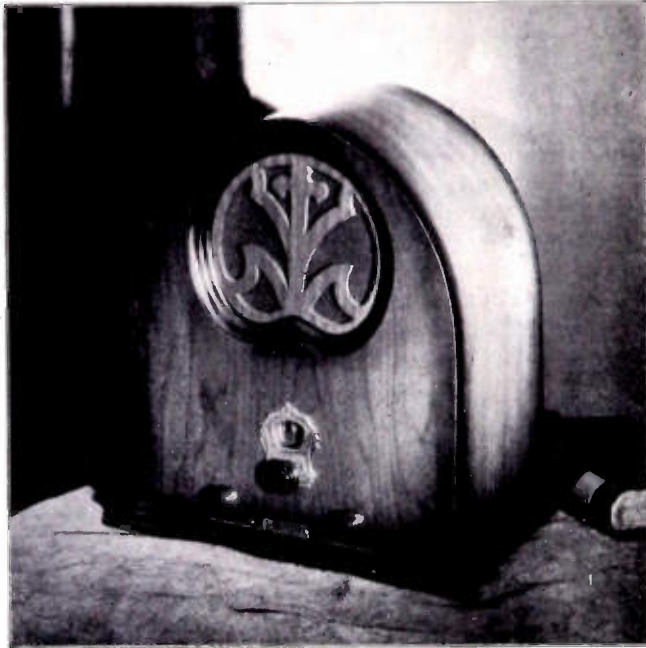
Lighting Specialties Tubes—Known and used the world over. Always a good item and steady seller.

See For Yourself . . . On Display Now

1135 WALL STREET

WEStmore 3338

« « « « **WESTERNER**
SCORES
AGAIN



●
 And this time
 with the new
Powerful Jun-
ior model
 listing at

\$49⁵⁰

Complete

The new Westerner Mighty Junior—small, compact but powerful! . . . the chassis of battleship construction fully shielded, is designed with six tubes. 3-24's, 1-45, 1-80. Distance and tone has been perfected in this new popular sized radio. A distance log made from this new creation by the Westerner would be a compliment to an ordinary low-priced superheterodyne.

Plain and simple in design, the cabinet of dual toned walnut fits attractively in any home, office, or place of business. It is a radio you will have to hear to appreciate our claims. Be not misled at its size as this new Westerner contains a full size dynamic speaker.

Wire or write immediately requesting your sample. It is to your advantage.

Westerner Radio Manufacturing Co.

4265 South Broadway

Los Angeles, Calif.

— WIRE FOR YOURS NOW —



The 10 Features listed below make MAYFLOWER Electric Refrigerators the Hot-test selling line on the market this year.

New Profits

We Offer You In . . .

MAYFLOWER

Electric Refrigerators

A Complete Line That Gives Every Advantage You Can Want for Today's Market

If you have seriously considered adding refrigeration to your business, you have become conversant with the selling points that should make a refrigerator attractive to the public.

You will recognize these selling features as important. Mayflower Refrigerators have them all:

1. Colonial Period, beautiful in design, giving an aristocratic impression. Specially designed Colonial type hardware, satin chromium finish.
2. One-piece, gleaming white porcelain lined interior, no cracks or seams.
3. Porcelain cooling unit; sanitary in appearance, only found in the most expensive boxes. Freezes ice cubes in 90 minutes. Large ice trays.
4. Temperature control for faster freezing—positive in action.
5. Ribbon type wire shelves—small bottles will not easily tip over.
6. "Remova-shelf"—a patented feature found only in Mayflower Refrigerators—makes more room for full size bottles.
7. An amazingly quiet compressor—costing less to operate.
8. No troublesome installation—just plug into the light socket.
9. Fully guaranteed and backed by manufacturer's ten years' experience in electric refrigeration.
10. Lower priced than any refrigerator incorporating these features.

A margin of profit that will make Mayflower Refrigerators an asset to you.

KIERULFF & RAVENSCROFT, Inc.

LOS ANGELES
137-139 West 17th St.

SAN FRANCISCO
121-131 Ninth St.

● MARCH RECORD HITS ●

(Continued from Page 38)

Columbia

- 2400-D—"99 Out of a Hundred Wanna Be Loved." *Ben Selvin*. Rollicking one-step, in march tempo, which provides variety by switching into fox-trot time intermittently. Clever words, soprano vocal refrain, accompanied by instrumental novelty effects, such as banjo and xylophone bits.
- 2404-D—"Walkin' My Baby Back Home." *Johnny Walker*. A swinging fox-trot, with rhythm that goes right to the feet. Hot piano with bass chorus. Vocal refrain.
- 2398-D—"You're the One I Care For." *Ruth Etting*. The first half of this number is sung in sentimental ballad style, but swings into dance tempo in the last part. Etting sings to an excellent piano accompaniment.
- 2403-D—"Sing Song Girl." *Mickie Alpert*. Opens with Chinese instrumental introduction. Vocal choruses are harmonized by a male trio. Both the words and melody are catchy. The arrangement is interspersed with Chinese musical effects, giving an Oriental atmosphere to an American dance tune.
- 2401-D—"By the River Saint Marie." *Guy Lombardo*. This is an unusual dance number; smooth, flowing, and almost classical in its artistic execution and ar-

- range. Ringing bells and chime effects accompany Carmen Lombard in a pleasing baritone refrain. This is a beautiful love-song and an excellent fox trot.
- 2397-D—"The King's Horses." *California Ramblers*. A novelty number, with instrumental "horse" effects and amusing vocal parts.
- 2399 D—"When Your Hair Has Turned to Silver (I Will Love You Just the Same)." *The Cavaliers*. Specializing on waltzes, this orchestra picked a beauty this time. It is a real old fashioned waltz, with simple, beautiful melody and words. Sung in vocal chorus by quartet.

Victor

- 22700—"One More Time." *Gus Arnheim*. Hot dance tune, with plenty of instrumental scorches and rhythm. Bing Crosby sings the vocal refrain, in regulation night club style.
- 22615—"The Wind in the Willows." *Rudy Vallee*. A very smooth fox trot. Violin trio takes a pretty chorus, backed by chimes

- and bass rhythm. Vallee contributes his usual easy going tenor in the vocal refrain.
- 22611—"Would You Like to Take a Walk?" *Rudy Vallee*. This is a clever number, from the musical comedy "Sweet and Low." The words are amusing, and set to a good dance melody. Piano refrain adds to the variety.
- 22701—"Wrap Your Troubles in Your Dreams." *Bing Crosby*. Here is a happy-go-lucky ballad, sung to sweet instrumental arrangements. Violins predominate throughout the number.
- 22612—"Say Hello to the Folks Back Home." *Best Losen*. A good "back home" tune, that gets under the skin without being sloppy with sentiment. Nice melody. A fox trot.
- 22605—"Hurt." *Leo Reisman*. Smooth dance tune, with baritone song. The arrangement is sweet, and full of harmony and rhythm.
- 23036—"Sam and Delilah." *Duke Ellington*. Parody on these biblical characters. The words are interesting. Lowdown song chorus by Chick Bullock, with an abundance of red hot rhythm. From the musical comedy "Girl Crazy."

A Series of Successful Collection Letters

(Continued from Page 15)

As a Final Notice before filing suit or reclaiming goods this letter has pulled big returns. We do not make any reference to "pulling" the merchandise, for in many cases this is not desirable. What you want is the money and let the customer figure out what action will be taken. He might willingly give up the furniture but would "balk" at being sued for the balance. A notice of suit is much more effective than a notice to repossess.

Dear Sir:

In three days you will receive notice of legal proceedings which will be instituted by our legal department.

These proceedings will be based upon a formal legal contract, entered in good faith on your part—a contract which we have fulfilled to the letter.

We sincerely regret that you have compelled us to re-

Majestic Sales, Inc., recently opened its doors in the Eldridge-Buick Bldg., 905 East Forty-fifth St., Seattle, Wash. A complete line of Majestic radios and refrigerators is handled. Kenneth E. Northfield, former installation engineer of Seattle is president of the new firm, and Lee B. Nichols is secretary and treasurer. The rooms of the establish-

ment are of Spanish design throughout, and include a main floor display room, and a well-appointed balcony and offices.

Garold Watts, formerly employed in the radio department of Vyne Brothers Electric Company, Prescott, Ariz., has resigned to start a radio shop of his

fer this matter to our attorneys, and believe that if you realized what it may mean to you—payment of the entire balance, plus court costs and interest, as well as the annoyance, undesirable publicity and injury to your credit reputation—that you would not permit the case to go into court, but would make immediate arrangements for payment.

IT IS UP TO YOU. We have been unusually considerate and even now we are reluctant to take such severe a measure, but from your continued neglect of the account we are forced to assume that you are indifferent and will not pay the balance willingly.

Before permitting the account to go out of our hands, we are willing to wait until (date) for payment. Failure on your part to adjust the claim before that date will automatically close our records and thereafter you will be compelled to deal direct with our legal department.

This is positively your LAST NOTICE from our office.

Yours sincerely,

Credit Manager.

own at 320 East Sheldon St. Watts is specializing in repair parts, and does not handle sets.

Radio Tube Service Store, 212 South Brand, Glendale, Calif., is ready for business, according to J. Spencer Purdy, manager.

Ready!

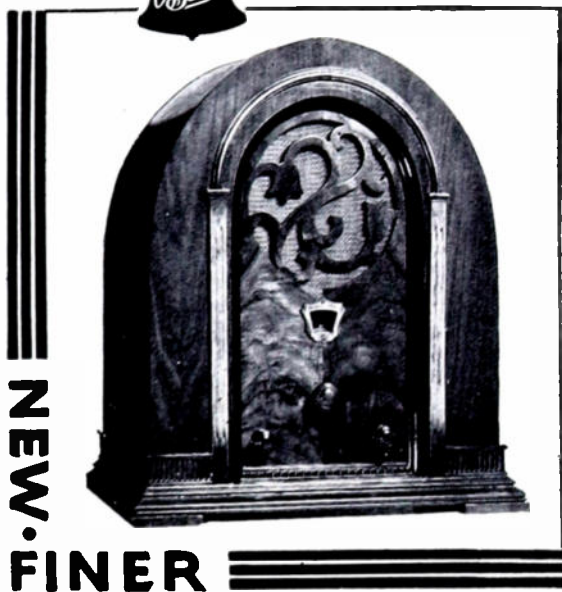
SENSATIONAL NEW MODEL 68

8 TUBE



JACKSON-BELL

Midget RADIO



NEW-FINER

\$69.50

complete with 8 tubes

NEW MODEL 50

5 tubes (3 screen grid), dynamic speaker, tone control, attractive walnut cabinet - - 8"x11 1/2"x15"

\$49.50

complete with 5 tubes

NEW MODEL 62

6 tubes (4 screen grid) Magnavox dynamic speaker, perfected tone control, exquisite walnut cabinet 8"x11 1/2"x15"

\$59.50

complete with 6 tubes

JACKSON-BELL COMPANY . . . LOS ANGELES, CAL., U. S. A. MANUFACTURERS OF ALL-ELECTRIC RADIOS . . . SINCE 1926

The THIRD in the 1931 line of JACKSON-BELL Midgets. The ONLY exclusively Midget Line in America. Big extra profit. No conflict with your present lines. Profit proven by the experience of thousands of Dealers and Distributors everywhere. Dependable merchandise, produced by an old established Manufacturer, pioneer and recognized leader in the Midget field. Generous co-operation. Effective advertising. Sure-fire sales plan. Write TO-DAY for proposition.



Model 68 Features

- 8 tube "wallop"
- 4 screen grid tubes
- local and distance switch
- illuminated vernier dial
- Magnavox dynamic speaker.
- push pull amplification
- improved tone control
- walnut cabinet 19" x 11" x 16 1/2"





Eugene Farny

Farny Visits West

Eugene Farny, President of the All-American Corporation, manufacturers of the Lyric radio, has been touring the West in company with Curtiss Abbott, western manager for Lyric. Farny is very optimistic for the outlook of the coming year, stating that here is a great interest in the Pentode tube and that he stands every chance of repeating the success of the screen grid tubes. Distressed merchandise, Farny believes, is pretty well absorbed and as a consequence manufacturers, jobbers and dealers are making their plans for the sale of the new models of 1931. He reports a remarkable interest in the new automatic Lyric in which a clock system is incorporated in the radio tuning different stations in and out the entire day at the operator's previous setting. Farny indicated an interest in refrigeration and television but had no announcements to make.

Curtiss Abbott announced the appointment of the Coast Radio Company, Seattle, as exclusive Lyric distributors. Coast Radio is one of the largest retail outlets in Seattle. They have organized a complete wholesale division.

Walter Holland, the vice-president and chief engineer of the Philadelphia Storage Battery Company, has been touring the West, ostensibly on a vacation.

New Dwarf Miniature

The Dwarf Radio Mfg. Company of Los Angeles, is introducing a new Miniature midget, only 11 inches high and weighing 16 pounds, that is particularly distinguished for its volume and tone characteristics. Its volume is sufficient to fill an average room, and full volume can be used without distortion. Although the model is not designed for distance, owners report playing KOA Denver on many occasions.

The set uses 5 tubes with three screen grids, TRF circuit, illuminated dial, dynamic speaker, phonograph jack. Height 12½ inches. Width 11 inches. Depth seven inches. List price \$49.50.

Visionola Jobbers Appointed

C. H. Dickey, Jr., western manager for Visionola, talking movies for the home, announces the appointment of W. E. and W. H. Jackson in San Francisco and Fey & Krause in Los Angeles as Visionola jobbers.

Visionola is a complete unit comprising a radio, a phonograph and a motion picture projector. Either may be operated separately. Used as a talking movie machine the 16mm. film synchronizes with the phonograph record. An exclusive feature of the Visionola is the motion picture screen which raises up from the top of the cabinet, the picture being reflected, mirror mounted on the front of the cabinet, obviating any necessity of having a screen across the room from the projection.

The entire apparatus is housed in a very beautiful cabinet similar to a combination cabinet. A total of four hundred talking motion pictures with reels with records are available including such features as "Showboat," "All Quiet on the Western Front," comedies, travel, and educational. Programs may range in length from one-reel from fifteen minutes to two hours. Reels and records are carried in stock by the jobbers and may be rented at a very reasonable fee. The machine lists at \$595.00. Visionola Manufacturing Company, at 60 East Forty-second Street, New York, is headed by C. H. Dickey, Carmel capitalist and prominent western financial head.

Other officers are prominent in financial circles.

Jackson-Bell's New Super

After being many months in the laboratory, Jackson-Bell has introduced their new super-heterodyne to the trade. The new model is an excellently engineered piece of merchandise, with sturdiness and neatness outstanding in its construction.

The new super uses eight tubes with three 24's, two '45s, one '80, and two '27's. A full Magnavox dynamic speaker is employed. Electrolytic condensers are used, with a four gang variable condenser. Housed in the most beautiful cabinet of any Jackson Bell, in matched walnut.

Typical of superheterodynes the set is extremely selective, easily giving a ten kilocycle separation. It is particularly sensitive on distance and is equipped with a local-distance switch.

A tone control, originated by Jackson-Bell is used to vary the high or low frequencies of sound obtainable and to reduce static. Complete with tubes the super lists at \$69.50. The factory is in full production and sample orders are being shipped to outlets now.

Atwater Kent's Pentode Midget

Although not confirmed at the time of going to press from sources that are believed accurate it is learned that Atwater Kent will manufacture a midget super-heterodyne using six tubes with a Pentode tube, listing at \$72.50 complete. It is understood that the chassis will be housed in a very beautiful cabinet with the usual Atwater Kent dials and controls.

Lou Willis Western Manager for Majestic

Vernon Collamore, sales manager of the Grigsby Grunow Company, startled the western trade recently through his announcement of the appointment of Lou Willis as western manager for Majestic radios and refrigerators. Lou Willis is one of the very best known factory men in the western territory, having been traveling the West for the past six years.

At the time of going to press he is on a trip visiting the various Majestic jobbers. Willis states that the Majestic factory contemplates no change whatsoever in their jobber or dealer set-up but will rather intensify their present organization. He is very enthusiastic over the new Majestic merchandise and the aggressive sales and merchandising plans radios and refrigerators. Lou Willis is launched by Vernon Collamore. Willis has appointed Ernie Severson to assist him in the Northwest.



Lou Willis

New Super By Gilfillan

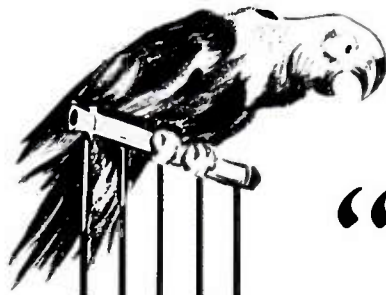
R. J. McNeely, sales-manager of Gilfillan Brothers, Inc., is announcing a new eight tube superheterodyne. McNeely states,

"We are so enthusiastic about this new super-heterodyne that we will lay bets that it will outperform any radio ever built. It was designed by Frank Jones, after many months in the laboratory, and Jones is an old hand at super-heterodynes."

The Gilfillan super uses eight tubes, three 24's, two 27's, two 45's and an 80. It has all the equipment of a modern radio, local-distance switch, tone control, illuminated vernier dial, 10 kilocycle selectivity and a "bear for distance." The chassis, using a Rola dynamic speaker is housed in a carved, dull-finish open faced Walnut lowboy and lists at the popular price of \$127.00.

Marshank Gets Movie

Dave Marshank has just returned from a trip to New York and states that the Sprague Talking Movies for the home will shortly be ready for delivery in the West. Marshank has been appointed western manager. Machine will be in a very popular price class.



“again
and
again”

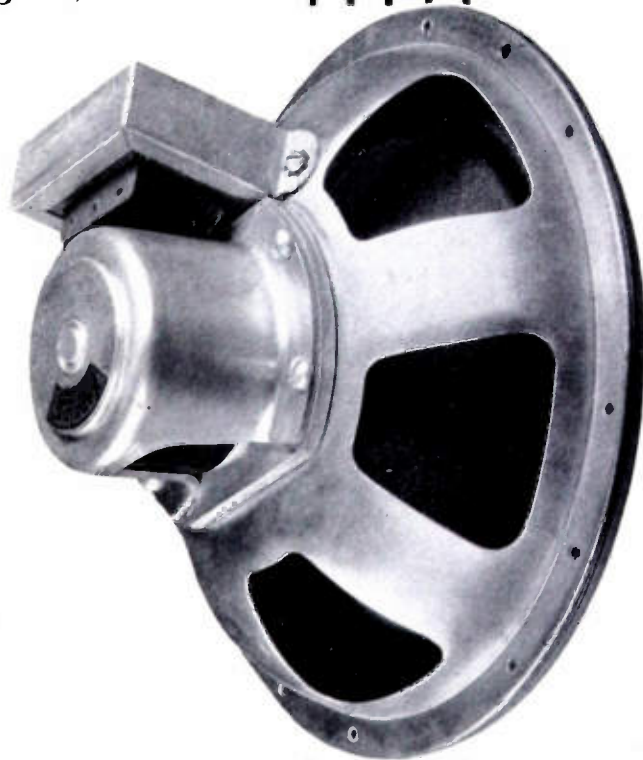
Manufactured
by



LANSING
MANUFACTURING Co.

6920 McKinley Ave.
Los Angeles, Cal.

Radio designers and manufacturers have promised their dealers superb tone in their merchandise . . . tone that will be unsurpassed . . . depth . . . volume and realistic! Again and again these dealers have received these promises in the modern radio. Curiosity led their eye to the back of the radio to find nothing but the new modern type of speaker LANSING!



The engineering department of the Lansing Manufacturing Company work hand-in-hand with manufacturers in designing the particular type speaker that works perfectly with your particular type chassis. This is only one of our services . . . kindly call upon us.

MR. DEALER

If at the present time your line of merchandise does not contain the new famous Lansing, instruct your factories to let you hear the next shipment through one. Today it is tone that is being sold . . . positive tone! You will appreciate the Lansing.





Story & Clark "Petite"

Console "Petite"

A new feature in set designing, known as "Unified Control," is incorporated in the "Console Petite" by Story & Clark, 173 N. Michigan Ave., Chicago. The device combines three separate operations in one. It acts as a station finder, volume control and on and off switch. In addition to this, the Console Petite has full vision tuning dial, with sliding selector, 12 foot connecting cord, flat top cabinet to be used as table or smoking stand. Chassis built of cadmium plated steel, employs seven tubes—three 224, two 245, one 227, and one 280. Has four-gang condenser, tone control, local-distance switch, complete shielding, triple screen grid and push-pull amplification.

The cabinet is 25½ inches high, 16 inches wide, and 10 inches deep. Weight, approximately 35 pounds. List price, \$89.50, complete with tubes.

New-Type Radiotron

A new screen grid tube, designed primarily for use in radio-frequency and intermediate frequency amplifier stages, has been developed by the RCA Radiotron Company, Inc., Harrison, N. J. The new tube, designated as RCA 235, is designed to eliminate cross-modulation and modulation distortion. It is made for AC operation, and employs a cathode of the quick heater type. The mutual conductance at 40 volts on the grid is nominally 10 microhms, and at 1.5 volts, 1100 microhms, giving a ratio of 110 for a single stage.

Wellston Replacement Parts

A complete line of replacement parts, in addition to the Wellston Gold Test Aerial and Gold Test Tone Control, have been announced to the trade by F. J. Grenzer, president of the Wellston Radio Corporation, St. Louis, Mo.

Bushnell and Rayner, 212 Ninth St., Oakland, Calif., exclusive Western Sales Agents for the Wellston Radio Corporation, have arranged to carry a complete stock of Wellston parts, including such items as replacement transformers, condensers, and resistances. Either Bushnell and Rayner, or the Wellston Radio Corporation will furnish Catalog No. 11 to service men, which contains special prices on replacement parts.

Universal Photo-Conductive Cell

A new type of selenium photo-conductive cell has been developed by the Universal Photo-Cell Laboratory, Venice, Calif. It is a highly sensitive, new type cell, with a great variety of uses to which it may be put, such as distinguishing colors, turning lights on and off automatically, etc.

An important commercial use to which it will soon be put, according to Earl E. Scott, factory representative, is in an instrument that can be set to automatically turn store lights on in the evening and off in the morning.

One of the forms in which it is made is a mechanism that will open garage doors when the headlights of the automobile shine upon it. It is foolproof, and only the owner, who knows the secret, can make it operate. List price of photo-conductive cell for relay work, \$15.00.

Crosley "Wigit"

The "Wigit," a new product of the Crosley Radio Corporation, Cincinnati, Ohio, is only 12½ inches high, 11½ inches wide and 9½ inches deep. The cabinet is made of Repwood "B," a material that duplicates wood carvings naturally.

The new midget uses five tubes—three 24 screen grid, one 45 output, and one 80 rectifier. A new electro-power speaker has been developed for the set. The chassis employs a Mershon condenser, single tuning control, volume control and a three-gang tuning condenser. List price, \$39.50, complete with tubes.

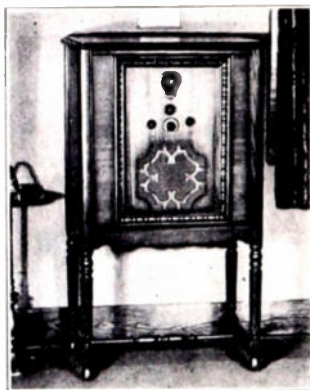
"Littlefuses"

Littlefuse Laboratories, 1772 Wilson Ave., Chicago, manufacture low range fuses for the protection of galvanometers, meters, and other delicate instruments, known as "Littlefuses." They are used in tube-testing equipment to protect the meters in case a tube is shorted. They range in price from 10 cents to 20 cents.

Arcturus Type 551

Known as the type 551 variable mu, a new tube has been designed by the Arcturus Radio Tube Company, Newark, N. J. This type operates on the variable-mu principle wherein cross talk and modulation distortion, caused by high-powered local stations, is practically eliminated.

It is built to handle a signal 25 times greater than present-day screen grid tubes. By a special construction of the grid, it compensates for the difference between strong and weak signals, thereby taking the place of two screen grid tubes.



Stewart-Warner Model 14.

Two Stewart Models

Stewart-Warner Corporation, 1824 Diversey Parkway, Chicago, offers two new console models. Model 12 is 37 inches high, 23 inches wide, and 14½ inches deep. The cabinet top is five ply walnut, with Oriental walnut in a lighter tone for the central control panel. The legs are genuine quarter-sawn American red gumwood. List price (Western), complete with super electro-dynamic speaker and eight standard tubes, \$108.75.

Model 14 is 41 inches high, 23 inches wide, and 14½ inches deep. A rectangular moulding frames the inner panel upon which the control knobs are located. Western list price, \$108.75.

Fastron Recordophone

The Fastron Recordophone, manufactured by F. A. Schiller, Inc., Irvington, N. J., consists of a complete phonograph motor and turntable together with a recording head, recording arm, microphone, pick-up, etc. Can be adapted for use with all AC receivers using one or two 245 tubes in the last audio stage. Phonograph pick-up or set is unnecessary. The device records anything coming over the radio or through the microphone on aluminum discs, special needles being used for recording and reproducing, and may be played over as often as desired. Price: Instrument complete, with cabinet and small table, \$99.50. Can be purchased without table for \$94.50, and the recording instrument may be had alone with microphone for \$59.50.

New Mer From the



Crosley Super-Administrator

Crosley Superhets

Three models of the new Senior Super heterodyne (Phodynatron) are being manufactured by the Crosley Radio Corporation, Cincinnati, Ohio. The chassis used in these models employs four 224, screen grid, one 227, two 245 power output in push-pull, one 280 rectifier. It is used with a full floating moving coil dynamic speaker. All three models are equipped with static and tone controls, local distance switch and combination volume and on/off switch.

The Super Administrator cabinet is finished in mahogany on the top and sides with pillars of solid mahogany. The front panel is of Repwood "B," reproducing an original wood carving. Dimensions, 36½ inches high, 23½ inches wide, and 13¼ inches deep. List price, \$109.50, with tubes.

The Super Rondeau is 37¼ inches high, 25¼ inches wide, and 15½ inches deep. Top and sides are of five ply walnut veneer. The center panel is of Repwood "B," representing an original wood carving. Both this model and the Administrator are equipped with phonograph pick-up terminals. List price, \$119.50, with tubes.

The Super Sando is a radio-phonograph combination. Motor is noiseless and self-starting. Corners of the cabinet are rounded, and are made of a new material, "Carve-Air." Dimensions, 42 inches high, 29½ inches wide and 10¾ inches deep. List price, \$189.50, with tubes.

Crosley "Johnny Smoker"

Completely enclosed on all sides, the Crosley "Johnny Smoker" is a combination radio and smoking stand, that can be set anywhere in the room. The cabinet provides the necessary places for cigarettes, tobacco jar or reading matter. The front panel is made of genuine Repwood, representing an original wood carving. It is 22 inches high, 12¾ inches wide and 10¾ inches deep. It is equipped with the Wigit chassis, using three screen grid 224, one 245, and a 280. Has volume control. Made by Crosley Radio Corporation, Cincinnati, Ohio. List price, \$47.50, with tubes.

New "Allen" Set

The "Allen" radio, manufactured by the Arcadia Radio Supply Company, Arcadia, Calif., is a six tube set listing at \$37. Has triple screen grid, large Lansing dynamic speaker, tone control, electrolyte condenser, is 19 inches high, and 14 inches wide.

Merchandise Factory

Lee DeForest Midget

The "Royale" is the name of the new midget manufactured by the Lee DeForest Manufacturing Company, Ltd., 1224 Wall St., Los Angeles. The chassis is screen grid, and has tone control and an illuminated dial. The cabinet has beaded edgings around the curved top. List price, \$69.50.

The company also makes a new portable set, using the same chassis and having the same features as the mantle model. The cabinet is square, with handles for carrying.

Cinderella Washer

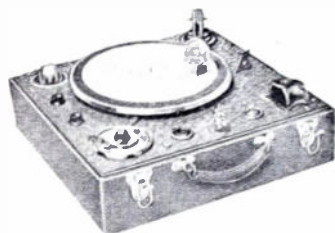
Small, compact, and attractive, the Cinderella "bubble action" vacuum washing machine, manufactured by Black & Decker Manufacturing Company, Towson, Md., washes and dry cleans clothes. It washes thoroughly without mechanical agitation, and has no movable parts. A glass demonstrator, window and interior displays are available. List price, \$37.50.

Condenser Cartridges

Condenser cartridges for replacement purposes are being marketed by the Dubilier Condenser Corporation, 4377 Bronx Blvd., New York. They are large, flat, non-conductive cartridges, designed for filter block repairs, available in capacities of 1/2 to 2 mfd., or in DC working voltages of 200 to 1000. A smaller type of cartridge is also made, for by-pass repairs, in capacities of 1/4 to 1 mfd., and in DC working voltages of 200 to 400.

Multi Frequency Oscillator

The 330 Multi Frequency Test Oscillator is a new development of the Radio Products Company, Dayton, Ohio. It is calibrated for transmitting self-modulated signals of 130, 175 with vernier, and 180 kilocycles for intermediate adjustment on superheterodyne receivers. Two settings are available—one transmitting 750, 1000, 1200, and 1500 kilocycles, and the other 600, 800, 1000, 1200 and 1400. The instrument is shielded and equipped with volume control. It is self-contained and battery-operated. Uses a '30 tube, four flash light cells, and one 22 1/2 volt battery. Case is of oak, with hinged lid. Dealer's price, \$26.50.



Presto Record Maker.

Presto Record Maker

Cutting and growing its own records, the Presto Record Maker is a compact, portable instrument that can be attached to any radio set. It uses a special recording head, instead of the phonograph pickup and uses a smooth disc six, eight, ten or 12 inches in diameter. Records can also be made direct from broadcasts. The Record Maker comes complete with motor, turn-table, volume control, microphone, selector switch and radio-phonograph switch, and is housed in a compact portable leatherette case. List price, \$85.00.

A record attachment kit for use on radio-phonograph combinations is also obtainable, consisting of a recording head, feed mechanism, microphone, and selective switch. List price, \$39.50. List prices on double side record blanks are: Six-inch blanks, 20 cents each; 7 1/2-inch blanks, 30 cents; 10-inch blanks, 60 cents; and 12-inch blanks, \$1.00. Manufactured by the Presto Corporation, 117 North Seventh St., Philadelphia.

Westinghouse Remote Control

The new Westinghouse remote control turns the set on and off, selects any of six stations, and adjusts the volume control, through a series of ten marked push-buttons mounted in a small metal box, attached to the receiver by a flat ribbon cable. The motor employed in the system is of the capacitor type and is noiseless, and turns the condensers to the desired station. It is possible to get stations other than the six by manipulation of two of the buttons, a high and a low wave-length. The equipment is obtainable with the new Westinghouse Models WR 6 and WR 7.

Superhet Condensers

Condenser units for use with superheterodyne circuits are offered by the Dejur-Amsco Corporation, 95 Morton St., New York. The condenser units are mounted on an insulating base of Isolantite. They are made in three types: duplex semi-variable, duplex variable, and single variable.

Radiart "Amplitrope"

Furnishing power for the amplification of music and speech over a large area, the "Amplitrope," manufactured by the Radiart Corporation, 13229 Shaw Ave., Cleveland, Ohio, is a device consisting of a built-in electric turn-table and pick-up, power amplifier, matching transformers, external transformer, and switches.

The output will operate both magnetic and dynamic speakers and may be used with any radio set. The "Amplitrope" is made in three models.



Tiffany Tone Super.

Tiffany Tone Superhet

In the new "Tiffany Tone" Superheterodyne, manufactured by Herbert H. Horn Manufacturing Company, 1629 South Hill Street, Los Angeles, there are eight tuned circuits, each of which includes a coil wound with Litzendraht wire. Chassis is extremely compact, and employs three 224, two 227, two 245, and one 280. Includes dual volume control, tone control and illuminated dial, calibrated in Kilocycles. List price, \$78.50, complete with tubes.

The Horn Company is also manufacturing a new product, the "DX Ground-Aerial." Consists of a brass tube, filled with chemicals, equipped with a sharpened point for driving into the ground. After it is buried, water is poured into the open upper end, and the resulting chemical action produces a positive, low-resistance ground in the soil around it. List price, \$1.50.



Jackson-Bell 8-tube set.

Eight-Tube Midget

The Jackson-Bell Company, Los Angeles, 1682 W. Washington, announces an 8-tube midget radio, production of which has already begun.

The new Jackson-Bell 8-tube set is a concert grand size and is listed as Model 68. Among its features are, a local-distance switch, a tone control and vernier dial, three devices which have been mostly confined to the larger type of receivers. There are four screen-grid tubes and two 245 tubes in push-pull amplification. The chassis is shielded throughout and is of solid construction. Incorporated in the new Model 68 is a Magnavox dynamic speaker of the latest design. The cabinet is somewhat larger than other Jackson-Bell models, although still in the true midget class. The dimensions are 19 1/4 inches high, 16 1/2 inches wide and 11 inches from front to back. List price, \$69.50, with tubes.

Silver-Marshall Superhets

Silver-Marshall Compact and Cadet superheterodyne models have been introduced. The Compact is a mantle set, listing at \$79.50 with tubes, and the Cadet is a small console, at \$89.50 with tubes. Both use the same chassis, which includes eight tubes, continual variable tone control, local-distance switch, of ten-kilocycle selectivity. A pair of extension speaker jacks are included, making it possible to operate a speaker in a distant room.

Compact Fada Model

Fada model 43 is a small-size receiver, compact and semi-portable. It is a seven-tube set, using three 224 screen-grid, one 227 heater, two 245 power, and one 280 rectifier. Chassis is shielded, includes pre-selected tuning, double contact volume control, chassis vibration control, full tone dynamic speaker. Cabinet is combination walnut, 18 inches high, and 15 1/2 inches wide. Shipping weight, 38 pounds. List price, \$84.50 complete.

DeForest Tube Kit

With space for a complete set of fresh, tested and matched DeForest Audions, a new tube kit is now being used by the DeForest Radio Company, Passaic, N. J. The kit is designed in orange and black, and is 12 1/2 inches long, 7 1/2 inches wide, and 8 inches high.

The purpose of the kit is to provide compact, organized grouping of tube sets for the various makes of receivers. The branch offices arrange the tubes that go with each type of set, and pack them in the kit for convenience. The tubes in each kit are certified 1931 production.



DeForest Tube kit.

VISIONOLA

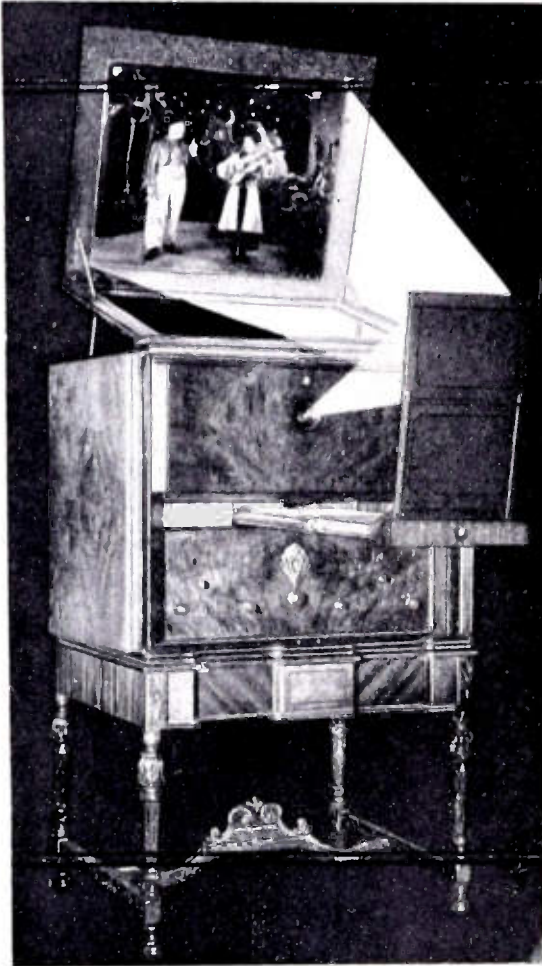
HOME TALKIES

Radio-Phonograph Motion Picture Projector

The Instrument That Will Make Your Store Headquarters for Home Entertainment—With Quick Profits—Quick Turnover and Unlimited Advertising for Your Store.

Designed in recognition of a demand for complete home entertainment and an appeal for a moderately priced instrument having all the principal characteristics of the theatre.

Visionola is self-merchandising. Its very appearance attracts attention and creates a desire for ownership—its performance as perfect as you ever heard from a \$2.00 seat—flcker free pictures on a self contained screen, synchronized to absolute perfection, true tones, almost human. Its own talking advertisement brings its own repeat business. Visionola fills the present demand for Home Talking Pictures. The first and only perfect and complete foolproof Home Talkie instrument makes its bid for dominance in a tremendous market.



*Hear Visionola—See Visionola—*for fifteen minutes of actual demonstration will tell you more of the sales possibilities of Visionola than oceans of printer's ink and tons of paper. Visionola Home Talkies will attract crowds to your store—get the Visionola Seven Point Sales Story now. The Visionola dealer will be headquarters for Home Entertainment in your city.

*Dealers Now Being Appointed
Immediate Delivery*



SEVEN SALIENT SALES FEATURES

Talking Pictures
Silent Pictures
Radio
Phonograph
Film Rentals
Instrument Rental
Advertising Medium

*Unlimited Film Rental
Library Available*

VISIONOLA MFG. CORPORATION

60 East 42nd, New York

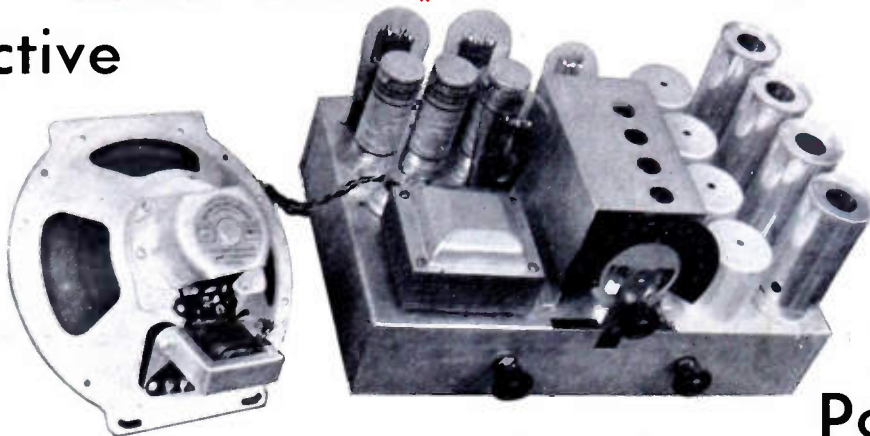
Southern California Distributor
FEY & KRAUSE, Inc.
1616 South Figueroa
LOS ANGELES

Northern California Distributor
W. E. & W. H. JACKSON
255 9th Street
SAN FRANCISCO

FOR YOUR
PRIVATE 8 BRAND!
 THIS **8** TUBE
CHASSIS

The Finest Value Ever Offered to the Radio Industry

Distinctive



Powerful!

*Net Price
Less Tubes*

\$21

*With
Dynamic
Speaker*

Guaranteed 90 Days as to Workmanship and Materials

MODEL 80
 Tone Control.
 Eight tubes.
 Four screen grid.
 Two 245 push pull audio.
 Four tuned circuits of high gain radio frequency amplification.
 Heavy gauge steel chassis.
 Cadmium plated.
 Fully shielded four gang variable condenser.
 Vernier illuminated dial in kilocycles.
KENATONE CIRCUIT—the most sensational circuit in radio.
MAGNAVOX dynamic speaker.
 Oversize power transformer.
 Oversize electrolytic self healing filter condensers.
DISTANCE—One of the most powerful circuits in radio. Distance limited only to location. Has out-performed sets costing many times its price.
 Size 10½ by 15.
 Weight 26 lbs. packed for shipment.

“EXPECT GREAT THINGS”

After many years, since the infancy of radio, the engineers associated with **KENWOOD RADIO CORPORATION** have perfected the smoothest operating and performing circuit in the history of radio.

KENATONE

A new circuit perfected in the laboratories of **KENWOOD RADIO CORPORATION**. The perfection of balance between **SELECTIVITY, SENSITIVITY, and TONE**—

SELECTIVITY that STARTLES!
SENSITIVITY that AMAZES!
TONE that is DYNAMIC!

You have heard the high and low notes, you have heard the overtones and undertones, **BUT YOU HAVE NOT HEARD KENATONE.**

The third dimension in **TONE**.
The desired degree in **SELECTIVITY**.
The ultimate in **SENSITIVITY**.

“EXPECT GREAT THINGS”

KENWOOD RADIO CORPORATION

2042 Venice Blvd.

Los Angeles, Calif.

Wire, Write or Phone—Republic 9030

Music and Radio Headquarters at SAN FRANCISCO'S

(New Half Million Dollar Hostelry)



HOTEL ROOSEVELT

JONES at EDDY

Every Room with Bath and Shower

Single - - - - -	\$2.00 & \$2.50
Double - - - - -	\$3.00 & \$3.50

SUITES AND SPECIAL ACCOMMODATIONS
FOR FAMILIES

Convenient to Theatres and Shops
Radio Connections in Rooms
Spacious Lobby and Mezzanine

Garage Under Same Roof

Indorsed by the

NATIONAL AUTOMOBILE ASSOCIATION

Write for Illustrated Folder

Management of RENE A. VAYSSIE

Classified Advertising

Rates five cents a word.

Position Wanted advertisements inserted free.

WANTS PACIFIC COAST CONNECTION

Well-known factory representative and retail merchandising manager desires Pacific Coast connection. Have excellent record as representative of Eastern manufacturers for four years, and have had five years retail experience on the Pacific Coast, as manager of radio merchandising for large chain store. Am well acquainted with important radio firms on the Coast. At present connected with national manufacturer. Age, early forties. Available on short notice.

EXECUTIVE POSITION WANTED

A real he-man having a comprehensive grasp of problems of advertising, selling, and collecting, from manufacturer, distributor, and dealer standpoint, seeks a larger opportunity for executive talent and ability of high order. Have covered entire Pacific Coast as Sales Manager for large radio manufacturer for past year and a half. A strict disciplinarian as regards personal behavior. Address, c/o this Journal, Box A.



Radio Scarfs— —\$12⁰⁰ Doz.
Grand Piano Shawls— —\$475 up

HARRY F. SLATER

1013 South Los Angeles Street
Los Angeles, Calif.

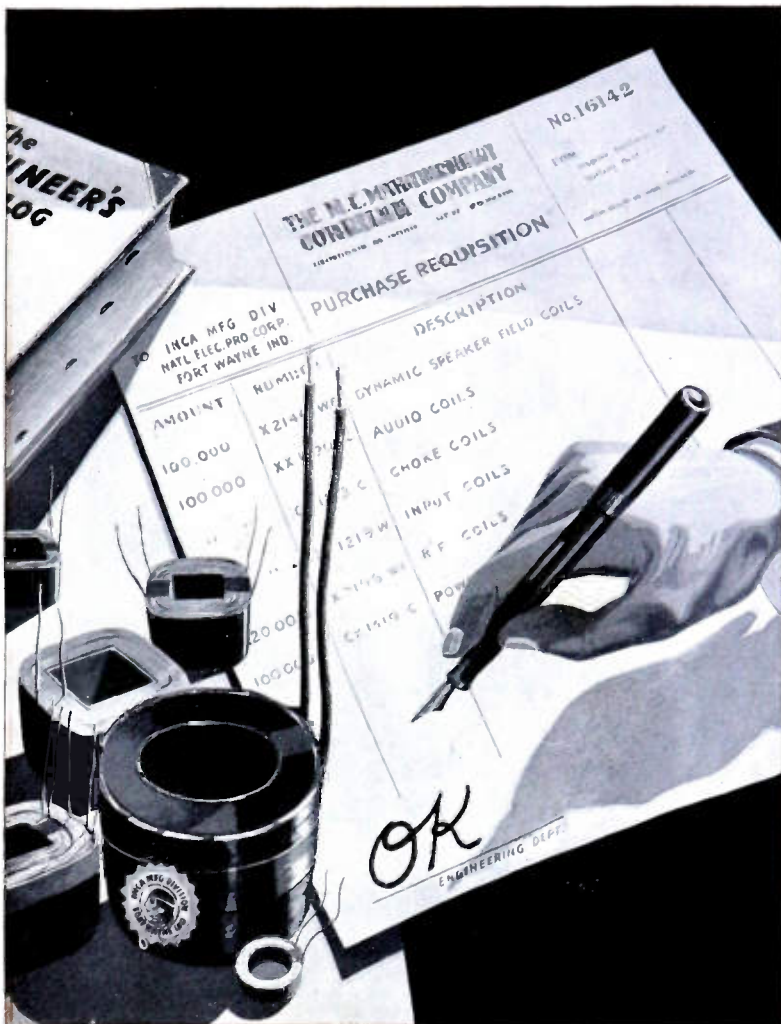
THE O. K. THAT CAME INSTANTLY

When the production department of a leading radio manufacturer recently made up a large requisition for coils, the engineering department unhesitatingly specified Inca coils.

The reason was perfectly simple . . . the engineers knew from experience that the electrical and physical characteristics of Inca coils can be relied upon.

Present day Inca quality takes its root in the same spirit of copper craft which brought undying fame to the prehistoric Inca of old Peru.

Today, Inca stands for continuous improvement . . . for absolute dependability. What better foundation on which to base the O.K. of modern Radio Engineering?



The Peruvian Quipu is perhaps the oldest form of recording known to archaeologists and historians. The position of each knot, the color of each strand, had its particular significance to the Incas. The Quipu was used largely as a system of bookkeeping in recording the amount of grain, or cloth, or the numbers of animals owned by an individual or a tribe.

INCA MANUFACTURING DIVISION



Symbol of the best in copper wire products.

Central Office and Factory:
Fort Wayne, Indiana.

Eastern Office: 233 Broadway,
New York, N. Y.

of NATIONAL ELECTRIC
PRODUCTS CORPORATION
1547 Venice Blvd., Los Angeles

The New Gilfillan Super-Heterodyne Will Help You Build Business At a Profit



MODEL 110 LOW BOY
8-Tube Super-Heterodyne



ENCASED in a strikingly artistic cabinet, the sensational new Gilfillan 8-tube Super-Heterodyne Radio puts the dealer in a position to attract new business and to do so at a real profit.

As might be expected of a Gilfillan product, it is outstanding in its performance. It is extremely selective — unusually sensitive. The set has wonderful tone. It is easy to tune, unusually smooth and quiet in operation. All these points are important and attractive to the layman.

And here's a further rich source of business—You can sell the new Model 110 Chassis (without cabinet) at an attractive figure. Thus you open up an entirely new market of buyers who have invested considerable money in fine cabinets, which they don't care to throw away. They can now bring their radio sets up to date—can enjoy the latest and best in radio entertainment at the lowest possible cost.

Write or wire us today for our proposition on this sensational new model. Then you can see for yourself what it offers you as a business-builder and profit-maker.

Gilfillan Bros. Inc.,

1815 Venice Blvd., Los Angeles

San Francisco Portland Seattle
1315 Howard St. A. S. Cobb 1100 Elliott Ave. W.