

The CROSLEY BROADCASTER



WSAI



WLW

VOL VIII.

JANUARY 1, 1929

NO. 1.

CROSLEY BACK OF YOUR 1929 EFFORT

A Crosley Year Is a Prosperous Year

Volume of Sales Strengthened
by Crosley Advertising

Advertising Program of 1929 Will
Maintain Demand for Crosley
Products

A PROGRAM of consistent and sustained advertising builds up behind Crosley dealers a great wave of steady demand for Crosley radio sets.

Throughout 1929 this program will be maintained. The help given Crosley dealers in keeping up a progressive volume of sales takes a variety of forms. As before, there will be national and trade paper advertising of the kind which has already caused so much favorable comment. Newspaper advertising in the form of stereotype mats is constantly in preparation. When you wish to advertise in your local papers, mats for that purpose are available to you.

What are called "dealer helps" are advertised in the BROADCASTER from time to time. These dealer helps are very carefully selected. Only those which we believe will really help sales, are presented to Crosley dealers. Among such dealer helps are suitable electric signs, lamps for window and counter display purposes, counter cards and other display material. Also, souvenirs like balloons, memorandum books, pencils, and the like. You can get a set of handsome moving picture slides to use in your local theatre, and you'll find this a very effective way to advertise yourself as the "authorized Crosley dealer."

Practically every month some striking piece of advertising goes out to all Crosley dealers. As a rule, this is a large broadside which can be pasted in your window. Reproductions of magazine advertisements are sent as they appear; these also can go into the window and make a direct tie-up between your store and the magazine in which the ad appears.

If you put yourself in the place of a radio prospect—even one who does not yet realize that he is a radio prospect—you will see at once that a steady pressure of Crosley influence is exerted upon him.



"We shall work untiringly to build for your greater prosperity in 1929"

Use WLW to Demonstrate Sets
Clinch Sales of Crosley Sets by Dialing
Crosley Station

When you demonstrate Crosley receivers to your radio prospects, tune in on Crosley station WLW. It's a 100% tie-up and an unbeatable selling argument.

Dial WLW any time of day and count on good reception. This holds true in all parts of the country. Hundreds of letters from dealers and owners, prove they have brought in this powerful station using Crosley receivers.

Hundreds of miles from Cincinnati you can pick up WLW in daytime hours. Programs from this great Crosley station are reliable and quality and of universal appeal.

Give your prospects a decisive argument by demonstrating Crosley sets on the Crosley broadcasting station!

Millions of Potential Buyers
Educated to All-Electric Sets

Crosley Sales Manager Sees Tremendous
Volume of Mid-Winter
and Spring Business

FROM all indications, the present demand for Crosley radio receivers will continue. All plans at our factory are set in that direction. Production of the Showbox and Gembox will be carried right along, full speed.

You will recall that the demand for A-C receivers carried on with big volume all through the Spring months. This year the same will be true. We are replacing obsolete battery-operated sets wherever electric current is available, plus those new buyers who never before have possessed a radio set.

Our whole advertising, merchandising and production plans have been built upon the fundamental that there are many millions of radio sets now in use, to be replaced at the earliest possible moment. Former owners of battery-operated radio sets are shopping carefully among all makes of radio receivers offered, and are continuing to find, by comparison, that the Crosley Showbox and Gembox are products of a high manufacturing standard of efficiency, at a low price. Performance is greater than their expectations, in comparison to past experience with battery-operated models two and three years old.

The other indications are that this vast market of potential radio buyers, is rapidly becoming educated to the advantages of the all-electric set.

We are anticipating carrying on our record breaking progress of this year throughout every month of 1929. If business slows down, it can only be due to inactivity and lethargy and a failure to appreciate the vast volume of sales which are waiting for you.

The Showbox and the Gembox stand alone in their price field. The Crosley Dynacone is, and has been, the biggest selling loud-speaker in the world! Everything is set for you to go right ahead with the most tremendous mid-winter and Spring business you have ever known.

All Set for Your 1929 Crosley Business!

With a Good Crosley Display and the Use of Crosley Selling Helps You Can Make Your Efforts Twice as Effective!

When the Folks Go to the Movies---
Tell 'em You're the Crosley
Dealer of their Neighborhood



Movie Slides Tell the Crosley Story
\$1.50 for Set of 5 Crosley Slides, Imprinted

The price of \$1.50 for each set of 5 new Crosley Moving Picture Slides includes a 3-line imprint carrying your name and address.

Order From Your Distributor.

CROSLY BOOK MATCHES

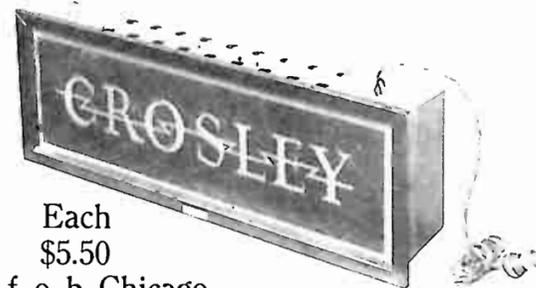


\$3.75
Per One
Thousand
=
No. 28-16

Book Matches of the finest grade, carrying your own name and address on one side, and the Crosley slogan on the reverse, are invariably acceptable to your prospects. Priced very reasonably for wide distribution, at \$3.75 for one thousand, or at \$3.50 per thousand on order of two thousand or over, from your distributor.

YOU'RE There WITH CROSLY SELLING HELPS

Our Illuminated Shadow Box
Is Proving a Knock-Out
It Has That Eye-Directing Neon Red



Each
\$5.50
f. o. b. Chicago

Our ventilated Shadow Box throwing the name "Crosley" out in a deep glowing red, against a black background, is an indispensable asset to your Crosley sales.

Order From Your Distributor.

MODERNISTIC LAMPS



Table Lamp
No. 28-25

Counter Size
and
Floor Size
=
Color
Light
Motion

Up-to-the-minute decoration for your Crosley display. The Table Lamp is \$2.50. The Floor Lamp is \$3.50. Prices include all fixtures but the bulb. Rotating Shade with futuristic pattern of flashing color. From your distributor.



Radio Shown to be Indispensable in Music Trades

Music Merchants of Country Regard Radio as a Merchandising Asset

A recent survey of the music trades disclose some facts which have a direct bearing upon the radio field.

The trade journal "The Music Trades," the important organ in its class, sent out a confidential questionnaire to 4000 piano and music dealers. They received 31% returns. From comments, "The Music Trades" was able to compile some interesting statistics.

The survey revealed the fact that 82% of the piano and music merchants of this country are handling radio receiving sets. Of this number, 92% are also selling speakers.

Some of the music dealers reported handling as many as eight and ten makes of receivers. The average number of different makes handled, however, seems to be three. Of course a large number are exclusive dealers for a single line of radio receivers. The latter feel that they do a better merchandising job by confining their efforts to one or two lines.

One of the questions put to the music trade was, "What type of radio set has been your best seller?" By this question was meant whether the console type, table model or phonograph installation sells better. 47% reported best sales on the table model type of receiver. 43% gave the console type as their best seller; only 10% stated that the phonograph installation was their best seller.

Radio Increases Sale Of Other Lines

To the question, "Has the sale of Radio produced customers for other lines?" it was brought out that 49% of the music merchants agreed that radio had increased sales in other lines.

Many of the music dealers in the country maintain radio departments in their stores. Not all, however; with a few, it is merely an item. Some music merchants regard a radio receiver as a musical instrument. Consequently it was important to find out what relation the sale of radio sets bears to other merchandise lines in the music field.

Probably the findings of music merchants, that the sale of radio receivers tends to increase sales of other merchandise, would bear out in other fields. Radio sales increase sales generally.

Radio Is A Merchandising Asset

86% of the music merchants reported that radio is a profitable line to carry. They regard it as a merchandising asset.

Some music dealers declared that their radio departments had produced customers for other lines. A large number consider that radio is the leader in the retail music field. All music merchants, the report states, should carry radio. It is almost necessary to carry radio sets with pianos. Radio acts as a salesman for records, sheet music, and phonographs. It is indispensable to the music business.

What Crosley Sales Are Doing

"Election Returns" by States Show Sharp Crosley Advance in 1928

Our Sales Department has let us in on a few of its secrets. All you who are interested in the movement of Crosley Radio sets already know that it is steadily upward.

Some actual comparisons of 1928 business with last year's business will serve to show the great and increasing demand for Crosley sets throughout the country.

In the months of September and October, 1928, Crosley sales in the State of Ohio equalled the total of 1927 Ohio sales! In Tennessee, sales for August, September and October of this year were equal to the total sales in that state last year. The same is true of Virginia as is true of Tennessee.

Alabama sales for 1927 totaled forty-eight thousand dollars. Crosley sales for the single month of Oc-

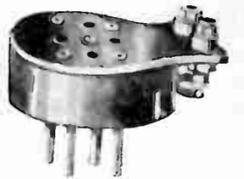
tober 1928 ran higher than the 1927 figure.

California dealers sold one-third more in August, September and October of this year, than all of last year. In July, August and October, Massachusetts doubled its record of last year.

10% more than all of last year was the Georgia record for September and October, 1928. In Florida, during September, October and November, more sets were sold than all of 1927. Louisiana did 25% more Crosley business in September and October of this year than it did all last year.

These are partial returns but they show the trend. The national business has been greatly in advance of 1927. All indications point to a corresponding advance during 1929.

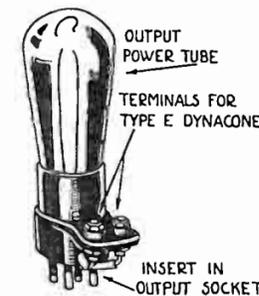
Dynacone ADAPTER



New device by which the Type E DYNACONE Power Speaker may be adapted to other-than-Crosley electric Receivers.

\$1.00 List

Order from Your Distributor



Virtually any A-C radio receiving set, utilizing a 171-A output tube, may be adapted for use with the Crosley DYNACONE, with our new Dynacone Adapter.

The Dynacone Socket Adapter is used with radio sets having output transformers or output choke systems.

Type E. DYNACONE should be used only with radio sets equipped with 171-A output tubes having 135 volts or more on the plate. Or, on radio sets having an output tube with a plate current of 20ma.

Is Your Counter Doing Its Duty?

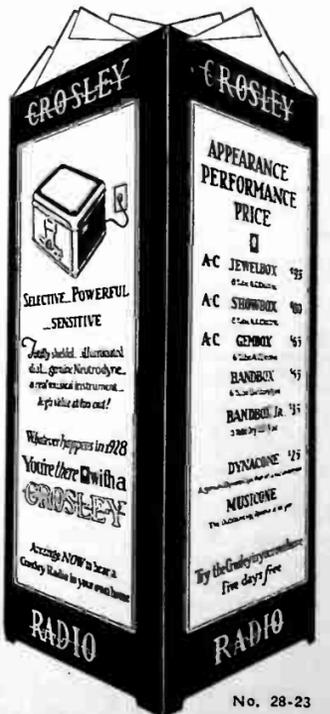
With the
RAINBOW
DISPLAY
Your Counter
Is Selling for
You All the Time

\$3.00 each
f. o. b. Cincinnati

The dancing colors of the Crosley Rainbow Display irresistibly draw the eye to your counter and lay the ground-work for your personal sales effort. This Rainbow Display tells the Crosley story and keeps the attention with its shifting play of color.

Price of \$3.00 includes all fixtures except bulb.

Order from Your Distributor



No. 28-23



Published by the CROSLY RADIO CORPORATION Manufacturers of Radio Apparatus Colerain and Sassafras Streets, Cincinnati, Ohio

Telephone Kirby 3200

Editor: A. E. Deaderick



Crosley manufacturers radio sets for radio amateur, experimental, and broadcast reception use, under patents of the Radio Corporation of America and Associated Companies, The Hazeltine Corporation, and the Latour Corporation.

All prices quoted in the Broadcaster are Eastern prices. Western prices are slightly higher.

Editorials

This is your paper. Help make it interesting by sending in contributions. All material sent in will be most welcome. Comments of every description will be appreciated. What do you say? Let's all pull together.

Radio Music Not a Street Nuisance, Judge Decides

Chubb & Steinberg, Cincinnati Dealers, Go Into Court On Issue.

Two Crosley dealers have brought to a court decision, a feature of retail selling which is important to all radio stores, and that is the matter of having a loud speaker outside the store.

A group of Cincinnati radio dealers, among them our good friends, Eli Steinberg and Howard Chubb, allowed themselves to be brought into court in order to get a decision. They were brought before Judge Luebbers in Cincinnati.

Judge Luebbers dismissed the case against them on the ground that the ordinance under which they were prosecuted, was invalid.

The judge held that the playing of radio music so that it could be heard on the street was not a nuisance. He stated that if the ordinance was held valid, it eventually might mean that radio dealers would be compelled to construct sound-proof buildings so that they might demonstrate their instruments to prospects and not have passers-by hear the sounds out on the street.

The nature of the nuisance would have to be defined, it was said, before a legal ruling could be made against radio music as such.

The Country Needs Super-Power Radio

By F. CLIFFORD ESTEY, (Assistant to the President, The Crosley Radio Corporation)

The chaos that was radio during the days following the break-down of federal supervision in 1926 will be back in greater force than ever if the Federal Radio Commission heeds the criticism and suggestion of certain misinformed congressmen and supplants efficient high powered stations with hundreds of weak local plants.

If, in order to get a few more stations on the air, the higher powered broadcasters are required to cut down their power, the rural districts of the nation will be deprived of adequate radio service and the interference situation will be more deplorable than ever. Instead of more people having good radio service available, less will be served and these will find other conditions very poor.

No doubt it is true, with radio playing such a big part in the lives of nearly every American citizen, that it is the earnest desire of every Senator and Congressman to give the American public the best possible radio legislation; but many of these distinguished gentlemen base their activities on evidence obtained from one isolated example, rather than from one giving a cross section of the entire situation. I base my views on the subject of high power on experience gained through active engagement in the radio industry since 1906, having seen it grow from a school boy plaything to one of the most important things in American life.

In respect to super-power, it is well that every one of our lawmakers consider this one fact:—Radio stations are run primarily for one reason, and only one, namely, to build good will for their owners. Therefore, no station owner is going to do anything that will have a tendency to destroy, rather than build, good will. Station WLW, which is operated by The Crosley Radio Corporation and broadcasts with 50,000 watts power, cost its owners nearly one-half million dollars, and operating and program personnel to maintain such a station cost a very large sum of money annually.

Stations such as this would not be built by business interests unless they were sure such stations could serve the public rather than offend them, and, since the cost of equipment and operation of a station can only be charged to advertising, surely no owner would publish advertising in newspapers and magazines that would offend the readers.

Radio's growth from a few stations out of control, to its present status where hundreds of stations are regulated by law, has been very rapid. The present regulations have been in force less than one month—much too short a time to be in perfect operation.

All that now remains to be done is for our legislators to supply their

interpretation as to the application of present laws to the commission they created to enforce the law, since the majority of the commission interpret the Davis amendment one way and the minority another.

To those who understand: Present regulations fully cover the situation providing the radio commission is permitted to exercise some slight flexibility in reallocation and is empowered to establish certain standards of service. Such flexibility in allocation as will overcome that peculiar transmission condition over which man has no control is needed. For example, for many years amateur stations in Washington could not transmit radio messages to Baltimore only 40 miles away, but would have to route these messages through some northern station, say in Boston, to be relayed back to Baltimore. The Baltimore answer likewise was sent to the northern city for relay to Washington. Although the Washington station could not reach nearby Baltimore it could reach Boston several hundred miles north, while Boston could reach Washington or Baltimore, hundreds of miles south, but could not reach Worcester, only 40 miles southeast. The commission should be empowered to flexibly apply allocation to take care of such conditions since if the same conditions hold true in broadcasting, Baltimore, only 40 miles away, should not be made dependent on Washington stations. A similar condition holds true in Southern Indiana, Southern Ohio, and Eastern Kentucky, a section of the country surrounded by cities with good stations such as are found in Pittsburgh, Detroit, Chicago, Indianapolis and Louisville; yet this great area must depend on Cincinnati stations for consistent reception.

Station WLW in Cincinnati, the world's most modern broadcasting station, is owned by a radio manufacturer who obviously must broadcast only to build good will for his company and increase the sale of his product. This particular station modulates 100 per cent of its output, thereby eliminating the whistle and squeal so common and objectionable to the entire listening public. Furthermore, it operates by crystal control, making it impossible for it to deviate from its prescribed wave length and interfere on other channels. One must not overlook the fact that when other super-stations such as WJZ, KDKA, WEA, and WGY opened, a storm of pro-

test arose because of their apparent broadness, but soon died down. A station of this type cannot be broad; it may only appear broadly tuned on obsolete receiving sets or those improperly designed and in many cases is due to an antenna connected to the receiving set that is far too long.

The regulations of the Federal Radio Commission place stations or channels 10 kilocycles apart, which is ample separation if all stations stay exactly on their own wave. Present objectionable whistles and squeals are due to the fact that many stations do not and many cannot stay on their prescribed wave length because of inadequate equipment;—a station with crystal control cannot get off its channel.

Another very important step which would help clear up the air would be for all stations to be required to use 100 per cent modulation. I understand that the majority of stations only modulate from 20 per cent to 30 per cent of their output, meaning that a station with sufficient power to reach out 1,000 miles actually delivers music, speech and entertainment for a distance of from 200 to 300 miles; but in that area covered by the balance the effect of their carrier wave is to deliver a howl or whistle that is very objectionable to the listeners and causes interference with other regional stations, within the 1,000 mile radius of that station but also within the radius of a similar station an equal distance in an opposite direction.

In reference to super-power there are but 40 clear national channels for national stations. A station occupying one of these very limited number of national channels should have sufficient power to fully utilize this channel.

A 5 kilowatt station will not do so. Such a station may have a night time range of from 500 to 1,000 miles. Should listeners on the Pacific Coast be deprived of hearing a station on this channel just because a station on the East Coast has this channel, or vice versa? The answer is obvious—that stations on national channels should be able to serve nationally and the Federal Radio Commission empowered to prescribe that they use the type of equipment enabling them to stay on their own waves and modulate their full output, and unless they are so equipped and supply service to meet a certain standard, the Commission should have the power to suspend or revoke their license.

Testimonials Strong Selling Aids

Genuine Letters from Crosley Owners Carry Big Selling Punch

Almost every issue of the BROADCASTER carries a few testimonial letters from buyers of Crosley sets, or from dealers who tell us some experience they've had in selling Crosley sets.

Good testimonial letters are great selling arguments. Every testimonial letter printed in the BROADCASTER is genuine!

We do not always print letters in full. Sometimes only an excerpt from a letter would interest our family of dealers. All quotations from letters, and all letters printed in their entirety, are absolutely authentic.

You have in these letters a real aid in selling. Your prospects ask you many questions about distance, selectivity, volume, and the like. Sometimes the most convincing answer you can make to a question is to read a letter which touches on the point brought up.

For example, suppose you are selling Crosley radios in a small town in West Virginia. You have a customer who is anxious to get a set which will bring in distant stations. You might read this from Nat Wetzel, situated, as he puts it, "away down on the Mexican border, north of Brownsville," in which he says: "Permit me to say to you by letter that I have a pretty good radio, a 'birthday present.' I get Maine to California and Canada to Cuba." Mr. Wetzel's set is a Showbox.

A Gembox owner, living in Wandersgift, Pa., has just written us, as follows: "I thought I would drop you a line to let you know how I like your Crosley Gembox. One Sunday morning I tuned in and listened to a station up in Alaska." Here is a letter written by a New Orleans Showbox owner: "During the past week, November 19th to 25th, I decided to find out how many stations could be clearly tun-

ed. To my surprise, I found that I had registered one hundred and two stations."

Suppose the question of interference comes up during a selling talk. Here is a letter covering that point. It is from George Orphan, proprietor of The Liberty Ice Cream Parlor at Ottawa, Illinois. "About two months ago we purchased a Crosley Showbox and we beg to say that it is one of the most wonderful performing sets on the market. In spite of the fact that there are two electrically operated ice cream cabinets, a carbonator and two electric malted milk machines, we are not troubled with interference."

Melvin Kennedy writes us from Chicago: "I wish to tell you how well pleased we are with the Crosley Gembox, which we bought from the Standard Radio Co., of Chicago. The reception is great and I doubt if anyone would want it any better. Our set is perfect in its clearness and selectiveness. In a period of about two weeks we tuned in on thirty-eight stations; they range from coast to coast, southern United States, and Canada."

Use Your Testimonial Letters These letters come to us voluntarily. We print only a fraction of those received. There wouldn't be space to print all the letters which come to us, and many of them say much the same thing.

The point about these letters is that they are the word of actual users of Crosley radio sets. They come from individuals who have bought sets, used them, and like them so well that they want to tell us about it.

When you come up against a tough point or you find that your customer is hard to convince, dig into a copy of the BROADCASTER and read him what others have to say about their Crosley sets!



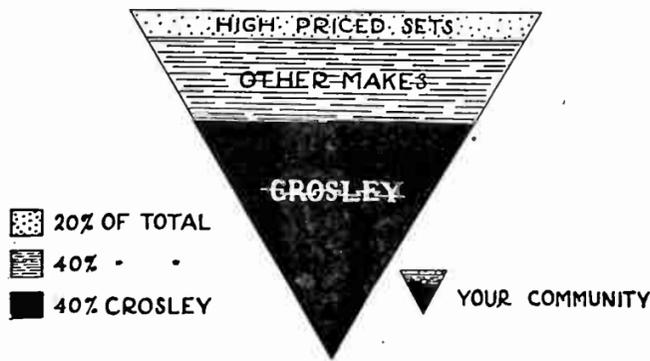
TALKS TO the TRADE

There is one important thing apparent to all who have been associated with this great industry during the past few years. This radio business has shown a decided change and is no longer seasonal. January, February, and March seem to be just as profitable as September and October. Even the intervening summer months show a substantial business, enabling distributors to retain their full organization and meet their summer overhead.

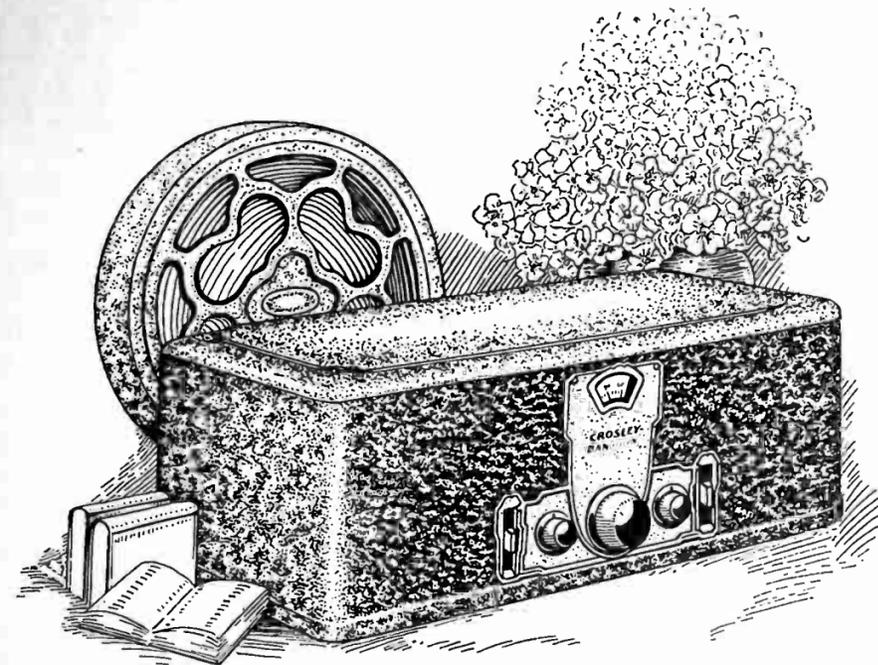
The reason for this is obviously due to a certainty in the public's mind that radio has passed through the development stage and the present day A. C. receivers will remain standard for a long time to come. The public now buys with confidence realizing that the product of the national manufacturers of high reputation will be not only free from servicing difficulties but one that gives true rendition of the programs being broadcast. Such programs today are of the highest possible musical standard produced in the centers where the world's greatest artists can be found.

To me it appears that 1929 will show a much greater business for those who have become well established in 1928. I see no radical changes but continued success for those who have always tried to render the best possible service to the greatest number of people. The A. C. set, combined with the power type of speaker, has made possible the quality of radio reception now recognized as a standard and heretofore unknown. The millions of battery operated sets sold previous to this year have not yet been replaced, and it will take the combined efforts of the reputable manufacturers to replace these sets and take care of the demand for new sets in 1929.

Powell Crosley Jr.



80% OF ALL RADIO SETS SOLD, SELL FROM \$50 TO \$200. OF SETS SOLD IN THIS CLASS, 50% ARE CROSLY SETS. FIGURE THIS OUT FOR YOUR OWN TOWN.



Crosley BANDBOX

6-Tube
Storage Battery

Genuine
Neutrodyne

\$55.
Without Tubes

For Unwired Homes the Bandox Is the Desired Set

POWER LINES miss a lot of places. Where there are lonely farms and small villages, there is the place that radio pleasure comes only via the battery-type set. In some of our liveliest cities, there are streets without number to which electric current has never penetrated. All in all, homes without wiring run into the millions. It would surprise you to learn how many families are getting house light from the old-fashioned gas jet. There are scores of places still using kerosene lamps. It may be a long time since you saw a kerosene lamp outside a museum but they still exist, shedding a comfortable yellow light over the only available type of radio set for that class of homes. The Crosley BANDBOX is, or should be, basking in that yellow light, in those thousands of homes.

Use WLW for Demonstrating the Bandox

Buyers of the Crosley BANDBOX get a modern radio receiver, of the storage battery type, completely shielded, with acuminators, illuminated dial and other radio refinements. It is wired for use with power output tube and may be converted, with a suitable power supply unit, for use with current from power lines. Handsomely cased in gold highlighted metal cabinet.

**Crosley Type-D MUSICONE recommended as
the best speaker for use with the BANDBOX.**

A Findlay-Crosley Combination Sells Itself!

Complete All-Electric Radio Set

\$122.50

Without Tubes

The
Crosley
SHOWBOX

and
Dynacone
Power Speaker



Complete with a beautiful Findlay Metal Table

YOU get maximum radio value in this Crosley-Findlay combination of an 8-tube, all-electric SHOWBOX complete with a FINDLAY gold-finished metal table in Renaissance design, and Dynacone Power Speaker. Suitable for any home. 5-day free trial in your own home. With this set you get the stations you want to hear, with perfect volume control and rich tonal beauty.

(DEALER'S NAME HERE)

Unequaled radio value offered in this combination: A Crosley SHOWBOX with a FINDLAY METAL TABLE complete with Dynacone. 4 styles. Advertise this combination in your local papers and outstrip all competition: \$122.50, without tubes.

The ad shown above is 7 inches on 3 columns. Mats furnished on application.

ROBERT FINDLAY MANUFACTURING CO.

Incorporated
Brooklyn, New York

Highlights in the Making of the Famous Crosley All-Electric Showbox

A quick trip through Crosley Plant No. 1, in which the 8-tube A-C set, the SHOWBOX, is manufactured. Some of the processes are not pictured below because of the impossibility of photographing certain operations, but you'll get a good idea of the whole story here.



1.—Die casting as it is practised in Plant No. 1. The rotor and stator blades are assembled into magazines and loaded into the die cast machine. Then the hot metal is forced into the die to make rotor and stator assemblies, or, in combination, a condenser.



2.—Tapping. After the rotor and stator assemblies have been trimmed on a punch press, the holes are tapped, 2 holes at a time. This means they are threaded so that screws can be put in.



3.—The title of this picture is "Assembling the Condenser Gang." But it has no reference to the underworld. It means that the stator assemblies are put into "bathtubs," the rotor assemblies are mounted on the rotor shaft, then the pinion bracket is mounted, next the pinion and the dial.



4.—Test of the Assembler Gang: One of the numerous tests in the making of each Showbox radio set. The man at the left is testing for tuning capacity of the condensers and for possible short circuits. The instrument used is a capacity aligning machine.



5.—After the condenser gang has passed its final test it travels on a chain conveyor to the receiver department and is mounted on the receiver chassis. The soldering work illustrated is painstaking, exacting work and is handled by girls. Each girl has 6 or 7 wires to solder on each set.



6.—A Continuity Test of the completed receiver chassis assembly shown above. These men are testing for open circuits in the assembly. Pictures of all these tests would fill a book, so we show only a few here and there.



7.—The receiver travels on the chain conveyor to the Power Converter Department. The girl of the picture is soldering connections on the filter strips. The small meter hanging from the rack, is for testing open circuits on filter strips, before the set goes into the testing booth.



8.—Power Converter Test. In this sound-proof testing room, the young lady tests the power converter chassis. She also tests the power transformer, tests to see if unit is in working condition, inserts tubes to see if each tube will get the proper voltage, and finally, she tests for mechanical hum in the transformer.



9.—At right: The Converter and the Receiver are Hooked Together. The wedding of these two important sections of a Showbox takes place after the converter test is completed. The combination is tested again before the set is put into its cabinet.

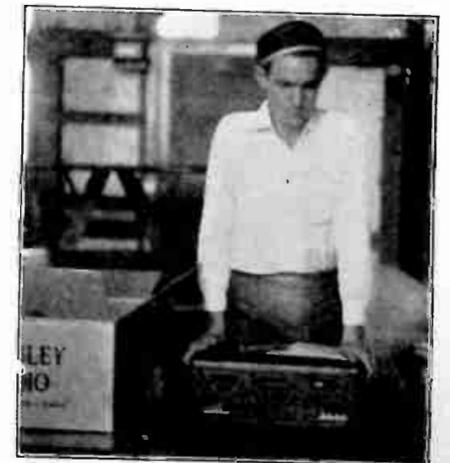


10.—The set is shown above, ready to be assembled in the cabinet. Preparation and finishing of Showbox cabinets is another story. The metal cases, with their gold highlighted ripple finish, are stacked beside the moving belt shown in the picture, and as the sets travel by on this belt, they are taken off, mounted into cabinets, and sent on their way.



11.—More tests! The Showbox has traveled into another series of sound-proof booths and is thoroughly tested. If the handling has disturbed any of the parts or connections, it is discovered here. The set is balanced, tested to make certain it will cover the wave length or broadcast band, and checked for volume control.

12.—The Packing Line finds the Showbox almost ready to leave the plant, right. The finished sets travel down a belt and go through the various processes of shipping, which include tagging, putting instructions into each set, etc. Here the man is about to place a Showbox in a strong shipping carton.





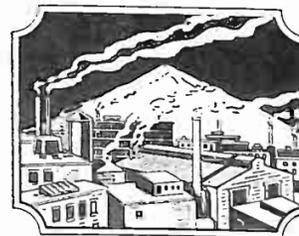
The retail merchants who sell a fine radio line in themselves indicate the character and standing of the product. Amrad points with pride to the hundreds of retail leaders all over the United States who feature the Symphonic Series in their stores, among them Jordan Marsh in Boston; Davega, Wanamaker and Walthal in New York, Kimball and Marshall Field in Chicago; Stieff and Wanamaker in Philadelphia; Brandeis in Omaha, and many others.

No Other Radio Set
At ANY Price
Includes All of these Features:
Four-Way Tone Control
World's Finest Dynamic Speaker
The Mershon Condenser
Hand Carved Consoles
250 Output Tube

And Amrad has the "Finest Tone in Radio"!
THE AMRAD CORPORATION
Medford Hillside, Mass.

POWEL CROSLY, JR.,
Chairman of the Board

JAMES E. HAHN
President



CROSLY DISTRIBUTORS



60-Day Claim on Newspaper Ads

Send Advertising Claims to Your Distributor Promptly to Get Allowance

Important notice to Crosley dealers: All claims for cooperative advertising credit must be in our hands within sixty days following the date of insertion of ad, in order to receive credit.

On advertising claims received after that period has elapsed, no credit will be allowed.

This 60-day stipulation is necessary and advisable, in order that the season's accounts may be settled promptly and satisfactorily. This ruling will be enforced strictly from now on. We suggest that you take every precaution to forward your claims, to your Distributor, as soon as possible.

If you have an accumulation of advertising claims, please do not hold them any longer. Send them at once to your Distributor to be forwarded to us for credit, and from now on, we urge you not to allow your claims to accumulate.

Bialkowsky Devotes a Day to Fine Diplomacy

Consumes Hours Explaining to Harper-Meggee Dealers Why Orders are Shorted

When the word went around among the Crosley dealers in Seattle, that a load of Showboxes and Gemboxes had arrived at their distributor's shipping platform, Harper-Meggee's they stormed the place in a body.

Fortunately Mr. Bialkowsky, general Crosley salesman, happened to be on hand. He hastily transferred himself to the shipping department. He remained there the rest of the day. As one Crosley dealer after another came in, asking for his quota of Crosley sets, Bialowsky explained to them that each order would have to be shorted in order to take care of all.

The news of this carload arrival had spread miles beyond Seattle.

A Housewife's Day at the Office

A Woman's Day at Home Corresponds to a Man's Day at Work

Isn't a housewife's day in her own home, the same thing as a man's day at his shop or office? Then is the time she transacts her end of the business. She turns out her routine, she does her ordering over the telephone, and she sees the people who come to her door for an interview, just as a man sees those who come to his office.

When a woman answers a ring at the front door and finds a salesman there soliciting her business, she is doing the same thing as the business man who swings around at his desk in response to the greeting of another business man.

Running a house and a family is a job in itself. It involves wise buying and good management and keeping in touch with things. A salesman for a Crosley dealer, who presents himself at the door of a residence, is there on a business proposition.

The sales manager for a large corporation with thousands of salesmen, and with offices in practically every city of fifty thousand and over, recently decided to make an investigation.

Salesmen had been telling him, in each city he visited, why they could not see prospects at certain times of the day. The prospects were women. The sales manager compiled a list of these reasons for not seeing prospects. He found that he had been given excellent excuses to cover every hour of the day. It read something like this:

8 A. M.—Cannot see prospects because many housewives have not finished breakfast. Others are not yet up.

9 A. M.—Prospects are doing breakfast dishes.

10 A. M.—Prospects are doing the housework and do not wish to be bothered.

11 A. M.—The prospects are washing or ironing, or attending to the baby.

12 M.—Prospects are getting lunch for the children.

1 P. M.—Prospects are getting children off to school and cleaning up the lunch dishes.

2 P. M.—Prospects are getting dressed to go shopping or out for the afternoon.

3 P. M.—Prospects are out shopping or at a bridge party, or lying down.

4 P. M.—The prospects have not yet returned from bridge party or shopping tour or are still lying down and do not wish to be bothered.

5 P. M.—Prospects can not be seen; they are dressing or preparing dinner.

From the foregoing, it is obvious that it is useless to make any effort to see prospects at all. Thousands of sales managers are bumping up daily against the bugbear or salesmen's objections. It is a natural thing for salesmen to find excuses for not selling a prospect, rather than to sit down to figure up means to overcome resistance.

Very often, as many Crosley dealers employing salesmen have already discovered, sales resistance lies at least partly within the salesmen themselves.

Sales authorities agree that every objection has its logical answer. This answer may not present itself at once, and may require study. But the fact of an objection makes it necessary to find the right answer.

Crosley dealers' salesmen, in selling Crosley sets to the home, find themselves engaged in a "man to woman" deal. This is different from a "man to man" proposition. It is handled differently throughout. If such salesmen will study the stock objections listed above and work out ways to combat them, he will increase his selling average because he has overcome obstacles, not been overcome by them.

Radio Corporation of Kansas Entertains Sedgwick County Dealers

An altogether delightful get-together of Crosley dealers in Sedgwick County, Kansas, was held by our Distributors in Wichita, the Radio Corporation of Kansas. The meeting was held at the Hotel Lassen, Wichita, Friday, December 7th, 1928. It was followed by a dinner and a program of speeches.

After the dinner (which, from a look at the menu, must have been darned good) an address on the subject, "What Radio Has Meant to Kansas," was made by Max Levand.

James Buck followed this up with a short talk on "How We Put Over Our Quota."

All the talks were short, to the point, and directly interesting to the Crosley dealers present. C. H. Marling discussed "The Future of Radio." "Why Furniture Houses Make the Best Radio Dealers" was argued by Lyle Dixon. The record doesn't show how many of his hearers agreed with him. W. B. Baldwin, district manager of the Crosley Radio Corporation, gave a talk on "Crosley of the Future." This was followed by "Why We Sell Crosley," by M. W. Congdon.

Jess Vowel stated "Why Furniture Dealers Have To Sell Radio." A technical talk followed. It was "How We Eliminate Static," by John Seesholts. At the close, W. E. Titus, president of the Radio Corporation of Kansas, gave "The Outlook for 1929-30 with Crosley."

Meetings such as this, evidently carefully planned in advance to give to the Crosley dealers who attended, a lot of sound information, at the same time making the whole affair informal and pleasant, are of tremendous value in welding together an organization.

"We are going to be there with Crosley you bet."

K. Booth, Hulse Service,
San Jose, Calif.

"I believe that with the present line up of Crosley radio that sales will greatly exceed all former records with less effort. The tone is wonderful."

G. W. Guiley, Jr.,
Oakland, Calif.

Use WLW to Demonstrate Crosley Sets!

CROSLY DEALER'S RADIO COURSE

10 Simplified Lessons Especially Prepared for Crosley Dealers

LESSON IV

Mutual Inductance.

We saw in the last lesson that if a current of electricity is sent through a coil of wire, any variations in the current will be opposed by the magnetic field about the wire.

Now suppose that instead of one coil we place two coils side by side, connecting one of them to a changing source of current. The changes of current in the first coil will be opposed by counter electromotive forces set up by the magnetic field. The field will also set up electromotive forces in the second coil, and if this coil is connected to a meter a current will be indicated by the meter whenever the current in the first coil is changed (Fig. 1). This inductive effect between two coils is called "mutual inductance."

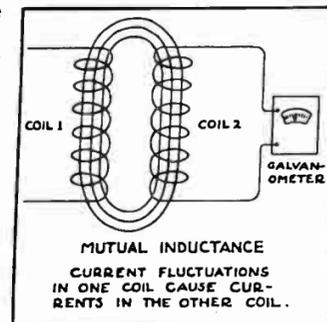


Fig. 1—Mutual Inductance

Alternating and Direct Current.

So far we have been talking about currents which flow continuously in one direction; or which vary, or fluctuate, while always flowing in the same direction. Such currents are called "direct currents", abbreviated "d. c." or "D. C.". Thus, "110 volts, D. C.", means a continuous uni-directional current, having an e. m. f. of 110 volts.

Quite often direct currents instead of being continuous occur in more or less regular spurts or pulses. Such currents are called "pulsating direct currents".

In radio we deal not only with continuous and pulsating direct currents but with currents which are periodically changing in direction. Such a current will start from zero, build up to a maximum value, reduce to zero, build up to maximum in the opposite direction, and reduce to zero again, repeating this cycle of operations many times each second (Fig. 2). A current periodically reversing or alternating its direction of flow is called an "alternating current", abbreviated "a. c." or "A. C."

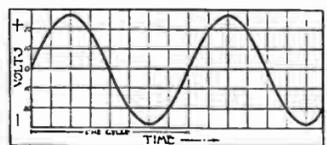


Fig. 2 Graph of an Alternating Circuit

The number of complete cycles of reversal that takes place each second is called the "frequency". Thus house lighting current is usually 110 volts, 60 cycles, A. C.; that is, it has an e. m. f. of 110 volts, is alternating in directions of flow, and makes 60 complete cycles of reversal (120 reversals) each second. Some house-lighting systems are of 25 cycles frequency, and a few range between 25 and 60 cycles. Currents in radio circuits often have frequencies as high as 1,000,000 cycles per second.

Radio and Audio Frequencies.

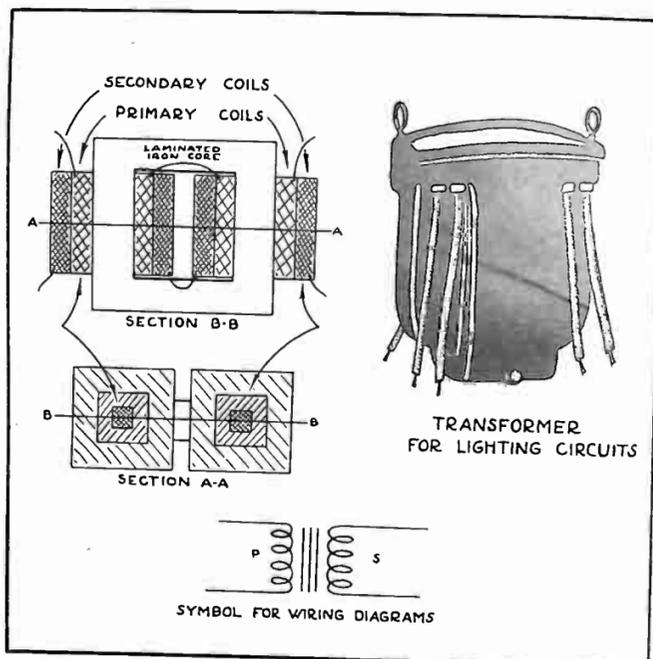
The study of radio systems includes both the study of electrical circuits and of sound output systems, such as loudspeakers. Now sound is due to waves produced in the air by vibrating bodies, such as vibrating bells or piano strings. When sound is produced by a loudspeaker it is created by alternating currents, or pulsating D. C., flowing through an electromagnet in the speaker, causing the diaphragm of the speaker to vibrate in unison with the current changes and to send out sound waves. The pitch or tone emitted by the speaker depends upon the rapidity of vibration, that is, upon the frequency of the vibrations. The faster the vibrations, or the greater the frequency, the higher will be the pitch. A frequency of 20 to 100 cycles corresponds to the lowest tones that the ear can hear, while frequencies of from 15,000 to 20,000 cycles correspond to the highest audible tones. Frequencies within this range are called "audio frequencies" and alternating currents having frequencies within this range are called "audio-frequency currents".

In parts of radio circuits, on the other hand, alternating currents having frequencies of 400,000 to 1,000,000 cycles or more are used. Such high-frequency alternating currents are little employed outside of radio work. Hence they are known as "radio-frequency currents".

Transformers.

Suppose we arrange two coils of wire side by side and connect one to a 110 volt, 60 cycle, A. C. lighting circuit and the other to a lamp bulb. To heighten the inductive effect we may put a core of iron in the two coils, as previously described (see Lesson III, "Electromagnets"). What will happen?

The alternating current in the first coil will set up a changing magnetic field about the two coils. This changing magnetic field will set up alternating electromotive forces in the second coil, forcing a current around through the coil and lamp bulb and lighting the lamp bulb. Thus an alternating current sent through one coil results in an alternating current being set up in the other coil. Such a device is known as a "transformer" (Fig. 3).



The input coil—that is, the coil into which we are feeding alternating current—is known as the "primary". The output coil, from which we are drawing current to light the lamp bulb, is known as the "secondary".

It is not necessary to feed alternating current into the primary in order to get current from the secondary. As we have seen, a changing or pulsating direct current in the primary will set up a current in the secondary coil.

Because of the fact that the inductive effect is always in such a direction as to oppose changes, an increase in current in the primary will cause a current to flow in the reverse direction in the secondary, while a decrease in current in the primary will cause a secondary current in the same direction. Thus fluctuating or pulsating D. C. in the primary results in an output of A. C. from the secondary.

This is exactly what happens in the transformers linking the stages of radio sets. Pulsating direct current is fed into the primaries of these transformers, while their secondaries have an alternating current output.

Radio-Frequency and Audio-Frequency Transformers.

A modern, multiple-tube radio set may be divided into two sections—the circuits preceding the detector tube, handling alternating currents of radio frequencies; and those following the detector, handling alternating currents of audio-frequencies. Thus, preceding the detector there are a number of radio-frequency tubes or stages; and following the detector, a number of audio-frequency tubes or stages.

In Crosley sets these tubes, or stages, are linked together by transformers (there are other methods of linking them, as will be described

later). The transformers linking stages that carry radio-frequency currents are known as "radio-frequency transformers". Those which link the audio stages are known as "audio-frequency transformers" (Fig. 4).

If you will examine a set you will see that the audio-frequency transformers have iron cores in them, while the radio-frequency transformers do not. Now we have learned that an iron core in a coil of wire ordinarily results in great increase of the magnetic or inductive effect. Why is iron not used in radio-frequency transformers?

The answer is that iron will not respond readily to extremely rapid changes in a magnetic field. In a 60 cycle transformer the iron core will reverse its magnetism 120 times per second. But in a radio-frequency transformer, operating let us say at 700,000 cycles frequency per second, an ordinary iron core is not able to follow such rapid changes in the field, and the chief effect of the iron is to waste energy through heating the core. For this reason, iron is not ordinarily used in radio-frequency transformers.

Why Transformers are Used.

There are two important advantages of transformers that explain their use not only in radio circuits but in lighting systems, etc. They are:

(1) A continuous current fed into the primary of the transformer has no effect in the secondary. It is only current fluctuations in the primary that cause currents in the secondary. For example a radio tube has coming out of it a high-voltage, continuous "B" current which fluctuates slightly in intensity while signals are being received. For reasons that will be explained later, it is desired to feed these fluctuations into the next tube, but not to apply the high "B" voltage to that tube. By sending the high-voltage, fluctuating "B" current into the primary of a transformer, it is possible to get out of the secondary only current alternations corresponding to the fluctuations in the primary, with no effect due to the high-voltage, continuous "B" current flowing in the primary.

(2) By using a larger number of turns in the secondary coil than in the primary it is possible to get from the secondary a current of higher voltage than that fed into the primary. Conversely, by using less turns in the secondary than in the primary, an output voltage less than the primary voltage may be obtained. Why this is possible will be explained later. It should be noted, however, that although the voltage may be raised or lowered by using a transformer, the energy delivered by the secondary is never greater than that which is fed into the primary. Actually the output energy is always less than the input energy, for transformers are never 100% efficient, some current being used up in heating the coils, core, etc.

The voltage delivered by the secondary of a transformer may be calculated roughly by multiplying the voltage across the primary by the ratio of the secondary turns to the primary turns. Thus a transformer having 500 secondary turns and 100 primary turns would step up the voltage to approximately five times the primary voltage.

QUESTIONS

Answer the following questions carefully. If you have any questions regarding them or regarding portions of the lesson text, write to the Editor, "Crosley Radio Broadcaster."

1. Is it possible for a transformer to deliver continuous direct current or pulsating direct current from its secondary?
2. What range of frequencies is considered essential for proper reproduction of music and voices?
3. Draw a curve such as that shown in Figure 2, representing an alternating current. Now draw a similar curve showing the direction and magnitude of a transformer secondary current corresponding to the above primary current.
4. Why are "bell ringing" transformers used in some houses?
5. A transformer supplied with a primary voltage of 105 has 50 turns on the secondary as on the primary. What is the approximate voltage output of the secondary?

YMCA Hotel, Chicago, Installs a Showbox

We note in the YMCA Hotel News, published by the YMCA Hotel in Chicago, an item to the effect that a Crosley Showbox has been purchased for the West Room of the hotel: "For the first time, the Hotel has found a radio that will give satisfaction, overcoming all the interference of the Elevated, electric generators, etc. A new Crosley eight-tube for direct current has solved the problem and now brings you dinner hour music, Sunday Evening Club and special feature broadcasts."

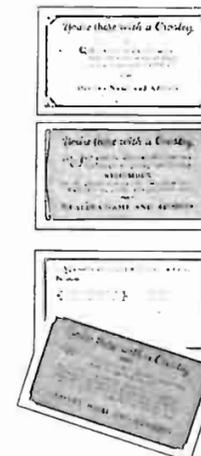
Use WLW to Demonstrate Crosley Sets!



Fig. 4—Audio Transformer as Used in Older Crosley Sets.

Let the Mails Assist You

THE CROSLY SELLING PLAN Shows You Where Prospects Are Puts You in Touch with Them Overcomes Resistance

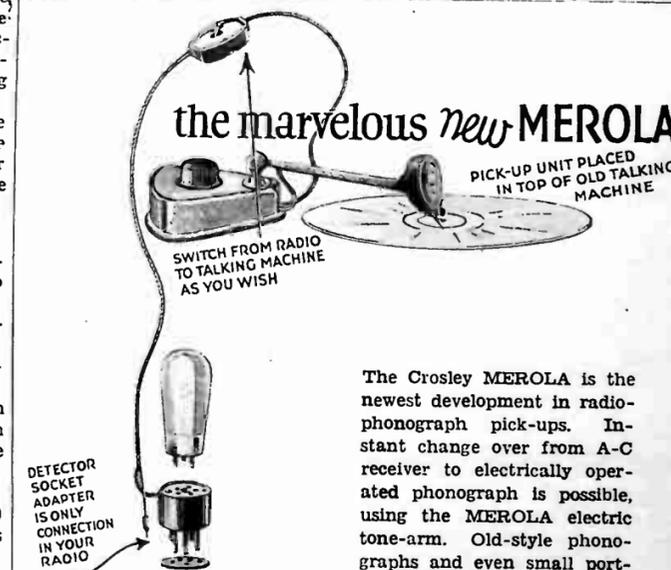


BY letting the post office do part of your job for you, your sales work goes right on and you can give your personal attention to direct sales effort.

Our Retail Sales Plan

The Crosley Retail Sales Plan consists of an attractive, carefully worked out direct-mail campaign, prepared by experts in this kind of selling. Each handsome piece carries your own name and address and directs the business to your store.

Get sample pieces of the Crosley Retail Sales Plan from your Distributor and start covering your territory with this strong mail campaign.



the marvelous new MEROLA

PICK-UP UNIT PLACED IN TOP OF OLD TALKING MACHINE

SWITCH FROM RADIO TO TALKING MACHINE AS YOU WISH

DETECTOR SOCKET ADAPTER IS ONLY CONNECTION IN YOUR RADIO

The Crosley MEROLA is the newest development in radio-phonograph pick-ups. Instant change over from A-C receiver to electrically operated phonograph is possible, using the MEROLA electric tone-arm. Old-style phonographs and even small portables can be transformed into modern electric reproducers, with tremendous improvement in tone, volume and quality. Crosley A-C sets are equipped with MEROLA posts and the permanent installation on a Crosley set is the work of a few minutes. The MEROLA is neat, compact, and handsomely finished.

\$15.00

Order from Your Distributor

'Taint Heat, It's the Humidity

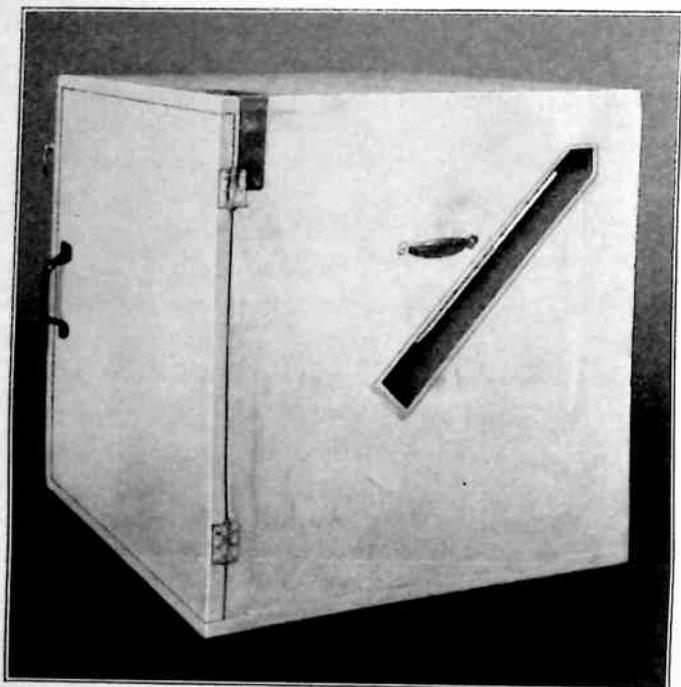
Africa and Alaska Test Crosley Sets Right in Our Laboratory

When the hot, heavy winds of central Africa deposit their load of moisture on every metal part they can penetrate, a quick coating of rust begins to show.

That won't do for a Crosley radio receiver. You'll find the extensive use of cadmium plating prevents rust from ever getting a foothold.

The parts of a Crosley set are carefully tested out. The material itself is all subjected to tests.

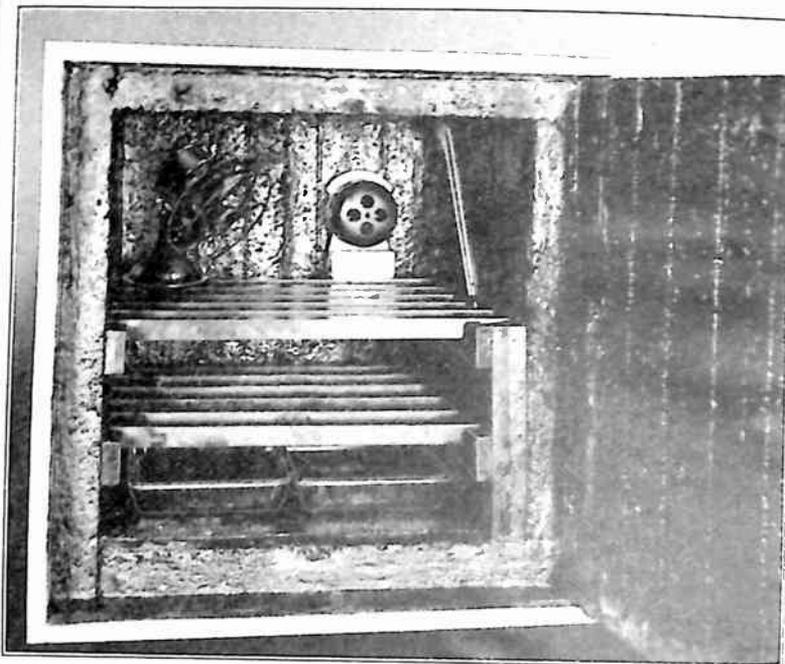
As part of the testing process, a special Humidity Chamber has been built in the laboratories of the Crosley Radio Corporation, where weather conditions can be created and controlled.



The weather conditions which obtain in various parts of the country can be duplicated, to determine how the parts of the machine, or a radio set entire, will act under those conditions. Especially, the Humidity Chamber is used to determine how moisture acts on any of the components used in the manufacture of Crosley radio sets.

The cabinet is a large case of wood lined with a heavy layer of cork, on all six sides of the interior. This inner lining is coated with pitch to prevent evaporation through the cork and wood sides.

Inside the Humidity Chamber are racks on which the parts are placed while the tests are going on. The interior is large enough to accommodate the largest Crosley set made.



Resting on the floor of the chamber are vats of sulphuric acid solution. It is well known that sulphuric acid is a powerful absorbent of moisture. There is also an electric fan controlled by a thermostat. A temperature of 103 deg. F. can be attained inside this chamber, and a humidity of 90%. The amount of saturated aqueous vapor that can exist in any given space depends entirely upon the temperature. It is possible to attain almost 100% saturation inside the Humidity Chamber. Upon occasion, a full 100% may be reached, and then there would be a small cloudburst within a restricted space.

The material or parts to be tested are placed on the racks, the chamber is tightly closed, and the fan set in motion. Within a short period the temperature is raised to the degree desired and there maintained long enough to demonstrate that the parts will withstand the weather conditions thus set up.

Of the materials which enter into the manufacture of Crosley sets, only that which responds favorably to all tests, is actually used.

A Crosley Pup and His Pal!

Young New Zealander Makes His Radio Choice Early in Life



This picture came to us from New Zealand. It was sent to us by a Crosley enthusiast and set owner, W. L. Fletcher. Mr. Fletcher lives in Auckland, the leading city of New Zealand.

It seems that Crosley receivers are getting in on the ground floor, in those far-away Pacific islands.

"On to Cincinnati" Is Cry

Insistent Demand for Crosley Sets Likened to Union Advance

Perkinson writes us from Richmond, Virginia, once the capital of the war-torn Confederacy: "About 65 years ago, the cry was, 'On to Richmond.'" We presume the way the Distributors are coming to Cincinnati pleading for sets, you think the cry is, "On to Cincinnati."

Mr. H. R. Perkinson is Sales Manager of the Tower-Binford Electric & Manufacturing Company, Crosley distributor at Richmond, Virginia. We note with regret his statement that he does not intend to come to Cincinnati at this time. It would have been a pleasure to see him.

His long letter gives us an excellent idea, however, of the insistent demand for Crosley receivers in the Old Dominion territory.

TUNE IN!

We broadcast daily at 11:00 a. m. and 1:30 p. m.
 Financial News
 Market Reports
 Government Bond
 Quotations
 Call Money Rates
 Foreign Exchange
 Grain and Live Stock
 Quotations

the FIFTH THIRD UNION COMPANY
 14 West Fourth Street
 Cincinnati, Ohio

"Just wanted to tell you that the couple of days I have had your set convinces me of its ability. I get good results in daytime, even at this time of the year." Leo F. Scott, St. Louis, Mo.

TAYLOR ELECTRIC CO.
 MADISON, WIS.
 Exclusively Radio
 Wholesale Only
 CROSLY DISTRIBUTOR

100% Crosley Distributors
 "THIS IS A CROSLY YEAR"
 "THERE'S A REASON"
 Distributors in Chicago Territory
 — TRY OUR SERVICE —
 HUDSON-ROSS, Inc.
 116 S. WELLS CHICAGO

SCHUSTER ELECTRIC
 COMPANY
 WHOLESALE
 CROSLY DISTRIBUTOR

2169 Spring Grove Avenue
 412 Elm Street, Cincinnati, Ohio
 West 144—PHONES—Main 820

Demonstrate Crosley Sets Any
 Time of Day on WLW.