

THE CROSLEY BROADCASTER

PUBLISHED BY THE CROSLEY RADIO CORPORATION

VOL. VII

MARCH 1, 1928

NO. V.

Crosley Sets New Pace In Radio Leadership

Model 704 Captures Public

Sales For This Season Unprecedented

Crosley radio history for 1928 is being made at a powerful rate. The most unprecedented Crosley sales storm in history at this season of the year is now sweeping the country with a force and momentum that is unbeatable.

Crosley is setting a new pace with the Model 704, which is causing a terrific spurt in dealer sales. Indications point that the 704 will surpass, in achievement and popularity, the records set by the 601 Bandbox, the outstanding radio success of 1927.

Meets Universal Public Favor.

The reaction to the new 704 single unit receiver has been tremendous and instantaneous. Not only has this wonderful new electric set met the approval of the trade, but it meets with universal public favor. The buying public has received it with opened arms—they have been waiting for the Crosley Model 704. Dealers can not get the 704 fast enough. There is only one thing that will determine the extent of sales of this new set and that is the ability of the factory to produce them.

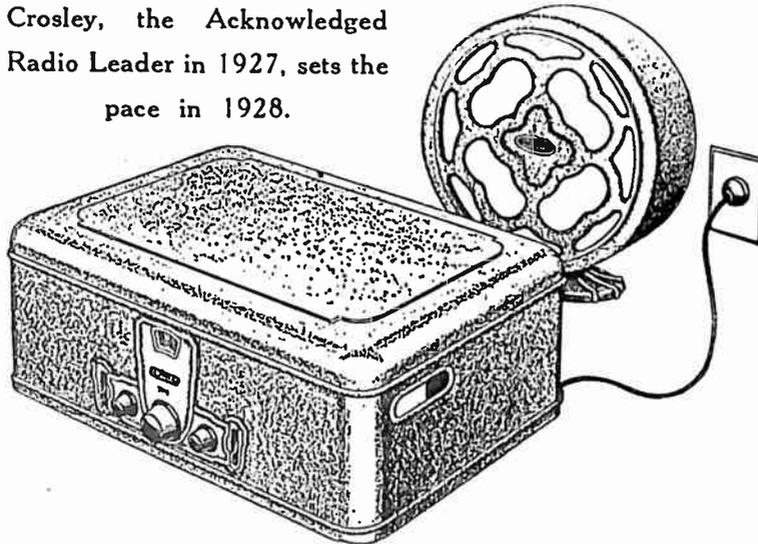
Telegram Tells Story.

The explanation of all this unprecedented demand for the new 704 is simple. It can be all summed up by one of the many telegrams which have been received. This telegram, received some weeks ago, from a live wire Crosley distributor reads: "Just received shipment of new seven naught four Stop The unique coloring effect of the case we believe to be without question the outstanding achievement of the year Stop The performance of the set simply knocks our well known competition cold Stop Our sales will only be regulated by the number that the factory can ship."

Leadership.

There you have it—leadership,

Crosley, the Acknowledged Radio Leader in 1927, sets the pace in 1928.



New 704 Model—The Greatest Value In Radio

performance and appearance. The 704 has them all with performance the outstanding and dominating factor.

There is no set that can compare

with the 704. It is the greatest radio value of 1928. With it Crosley has again hit the nail on the head. Crosley the acknowledged radio leader in 1927, sets the pace in 1928.

Talk About Cooperation---Read This

WLW Announcer, Miles Away, Unknowingly Aids Dealer at Right Moment

"In case you don't know it, this is Crosley Radio," said the announcer at the WLW station miles away from Williamson, West Virginia, little realizing that in making that statement he had aided a Crosley dealer in instantly selling a Bandbox.

Here is the way it happened. Not long ago H. V. Hefner, of the Hefner & Taylor Company, authorized dealers at Williamson, West Virginia, was making an installation of a Crosley Bandbox to demonstrate this set to one of his prospects. He had taken the set out to the home, unpacked it and made all the proper connections. He turned on the switch without having touched the volume control or the station selector. Furthermore this set had never been tried out before.

Upon turning on the switch the announcer at WLW filled the room, saying: "In case you don't know it, this is Crosley Radio." That was enough; the man to whom the demonstration was being made did not hear the announcer finish his statement. He immediately turned to Mr. Hefner and bought the set.

The announcers at WLW station do not promise to always give this fine co-operation. This incident, however, proves the importance of demonstrating the Crosley Bandbox in the homes of your prospects. Night calls are profitable. Take out the 704 to the home of your prospect, make the installation and let them play with the set. Dealers report that eight out of ten demonstrations to logical prospects result in sales.

Type 'D' Musicone Has New Finish

Golden Brown Finish Makes New Musicone Even More Beautiful---Now Retail At \$16.00

The Type "D" Musicone can now be obtained in a golden brown crystalline finish which harmonizes perfectly with the new 704 single unit Bandbox. This replaces the brown crystalline finish in which the Type "D" Musicone will not be furnished in the future. The retail price of the Type "D" Musicone will now be \$16.00 instead of \$15.00.

With its new golden brown crystalline finish, the Type "D" Musicone has increased eye value which will greatly enhance its sales possibilities. The new duo tone combination blends to an even greater extent with the orange cone.

More Popular.

It is anticipated by all who have seen the new Type "D" Musicone in its latest dress that this speaker will now prove even more popular. This is saying a lot for the Type "D" Musicone, since its announcement a few months ago has taken the country by storm.

The eye value of the Type "D" Musicone, however, is only one of its features. As a faithful reproducer of tone qualities with a complete range from low bass notes to high pitch, this speaker is without equal at anywhere near its price range. The remarkable reproductive qualities are to be traced partly to the high sensitivity of the actuating unit, a famous Crosley Musicone feature, and also to the construction of the new speaker. The cone housed in the metal drum shape case produces a baffle board effect, making possible the faithful reproduction of the widest range of tone.

Greatest Loudspeaker Value.

As its new price of \$16.00, the Type "D" Musicone finished in the

(Continued on Page 4)

This Ad Appearing in Trade and Fan Publications

COMPARE IT!



Check it with any set you choose!
—then hook it up and learn first hand its superior tonal and reception qualities!

SPECIFICATIONS	ACBANDBOX 704	?	?
1. Genuine Neutrodyne circuit.	Yes		
2. All elements totally shielded.	Yes		
3. Full 180 volts on plate of output tube.	Yes		
4. Supplemental tuning devices for hair line alignment of condensers to secure sharpest possible tuning (Acuminators).	Yes		
5. Single station selector.	Yes		
6. Illuminated dial.	Yes		
7. Volume control that will reduce heavy local reception to a whisper without detuning and without distortion.	Yes		
8. Power plant with a condenser of 30 mf capacity.	Yes		
9. Self-healing condenser.	Yes		
10. Modern, neat, compact, richly finished cabinet.	Yes		
11. Adaptability to any type of console cabinet by being available in single or double units.	Yes		
12. Quantity production price of less than \$100.	Yes		

**SINGLE UNIT
AC
BANDBOX**

or in two units
for console installation
at \$90



The NEW dry cell 401
Bandbox Junior

A new dry cell receiver with all the Crosley Bandbox features—selectivity, sensitivity, volume and appearance. Ideal for homes having no alternating lighting current or where storage battery service is not available or desired. Especially desired because of its economical installation cost and operation. Batteries last months! Use Crosley Musicone for perfect reproduction! **\$35.**

Battery type Bandbox operating with storage batteries or power supply \$55.

CROSLY RADIO

"You're there with a Crosley"

Crosley is licensed only for Radio Amateur, Experimental and Broadcast Reception. Montana, Wyoming, Colorado, New Mexico and West prices slightly higher. Write Dept. 000 for descriptive literature.
THE CROSLY RADIO CORPORATION
CINCINNATI, OHIO
POWEL CROSLY, Jr., Pres.

Making Trial Demonstration Much More Profitable

Sales Promotion Manager, L. A. Kellogg, Uncovers Hot Idea—Put It To Work

The trial demonstration plan of selling is constantly increasing in favor with dealers everywhere. It is a sure fire method for selling the Crosley Bandbox, because once a person has played with the Bandbox in their own home, if they are at all on the market for a radio, they will buy the Bandbox.

Just the other day, L. A. Kellogg, Crosley Sales Promotion Manager, ran across a plan which makes the method of trial demonstration selling even more profitable. This plan was being used by Gordon Moran, Authorized Crosley Dealer at Omro, Wisconsin. Kellogg immediately saw the merit of this idea, so wants to pass it on to Crosley Dealers everywhere.

Leave Card for Logging.

The plan is simple but effective. Just as soon as you have made the installation of a Bandbox, which you want to leave on trial demonstration, take a card from your pocket especially made for the purpose, and log on the card about four stations. While you are doing this you can show the person how the set works and how easy it is to tune.

The card is long enough so it has room for about fifteen stations to be logged on it. Leave this card with the prospect, telling him he can keep a record of the stations that they logged on it.

Valuable Key to Sale.

When you return the next day or the day after to close the sale you ask for the card. This is the important part of the idea, for the card is a valuable key, giving you information which will save you time and money.

Mr. Moran has discovered that if the prospect has filled out the card, logging about fifteen stations, that it is a nine to one shot that the set is sold. If possible he closes the sale that day. If this is not possible he leaves the set on demonstration and calls again in the future.

Saves Time and Energy.

If Mr. Moran finds that the prospect has not listed any additional stations on the card, he realizes that his chance of closing the sale are slim. He, however, makes an effort to close the sale, and if not successful, takes the set along with him. He does not leave a set with a person who has not taken the interest to fill the card with the stations logged. Experience has shown that to do this is just a waste of time and effort.

That is the value of the idea—it tells you, right off the bat,

whether it is worth while to continue working on the prospect or whether you should take the set along with you and not leave it on trial demonstration any longer.

Try out this idea, test your results and then write a letter to L. A. Kellogg, The Crosley Radio Corporation, Cincinnati, Ohio, and let him know your results. He will be glad to hear from you.

Honolulu, Hawaii On Bandbox

Believe It Or Not—Read This Letter

Editor, The Broadcaster,
Crosley Radio Corporation,
Cincinnati, Ohio.

Dear Sir:

When we wrote our little letter

to the Service Department including the excerpt which appeared in the Broadcaster, we did not even think it would appear in the Broadcaster or we would have left the little expression out about telling "the cock-eyed world" You're There With A Crosley. I grant you the statement was undignified.

But, at any rate, we honestly believe in the product we sell—exclusively Crosley—and have not had the occasion to exaggerate because it was not necessary. However, one particular Model 601 Bandbox owner has either gone too hard lying or he has a wonder machine. This particular owner claims and swears black and blue that he got a station, either KFU, KGU, or KJU in Honolulu, Hawaii. I know positively that he can get the coast stations because I stayed up one night and tuned them in for him with ease, but to get that "drop of mud or coral out in the Pacific" with a Bandbox, possible I say, but—well, I almost believe he was lying. He claims he got them on their right frequency too, according to his log book and that the relay argument I put up was out.

Thanking you again for the boost you gave us and assuring you that this furnishes us with more pep and

inspiration to do even better work, we are,

Very truly yours,
THE RADIO SHOP,
O. R. OATES, Prop.
Petersburg, W. Va.

Bandbox Goes Through Fire

Worked Perfectly When Hooked Up—Second Incident of Kind Reported

When something unusual happens once, it is just an accident, but when the same thing happens twice it can be safely used as conclusive evidence.

A number of months ago we reported a 601 Bandbox which had gone through a fire and when hooked up still operated. Here is another interesting experience of like nature.

Our dealer, Walter Plant, in Muskegon, Mich., sold a 601 Bandbox to an aged couple living on the second floor of a building. The house was burned to the ground, and presumably the Bandbox was included in the wreckage, however, the Bandbox was found in the cellar all charred. The set was taken by our dealer to his store and hooked up. It worked beautifully. The original tubes were used in the test, but all other accessories were damaged.

Our distributor in Grand Rapids, the Sherwood Hall Company, now have this set in their possession. The test to which this 601 Bandbox was subjected is certainly conclusive evidence to show the advantage of the shielding which is a feature of the Bandbox. A set that will withstand fire, and even a fall from the second floor to the basement without injury will certainly stand the normal operating conditions to which it is subjected.

Crosley Appoints General Sales Manager

H. Curtiss Abbott, Nationally Known In Radio Field, To Direct Crosley Sales

H. Curtiss Abbott, of Chicago, nationally known in the fields of radio and music, has accepted the position of general sales manager of The Crosley Radio Corporation.

Mr. Abbott, a Yale graduate, has had many years of experience in the radio business and has made an enviable record in the selling end of the industry. For a number of years he was assistant to the owners of the Lyon and Healy Company, Inc., one of the foremost music concerns of the country and as sales manager of the Kellogg Switchboard and Supply Company, Chicago, for the past two years became widely known in the radio distribution field.

Mr. Abbott firmly believes that the surface has hardly been scratched in the radio field. He believes the demand for Crosley products this year will be greater than ever and is laying plans for the most successful business in its history.

While there probably will be an ever present demand for battery operated sets, the public is being thoroughly sold on the advantages of the one unit sets which are operated from light sockets, Mr. Abbott said, "and the future is very bright for this product. It has



H. CURTISS ABBOTT,
General Sales Manager.

Wire, Phone
or Write Your
Distributor

ORDER MODEL
704 AT ONCE

The Crosley 704 is the greatest Value in Radio. You must see and hear it to fully realize its sales possibilities. Get your sample at once. Wire, Phone or Write your Distributor for it. Act Today.



Published By
The Crosley Radio Corporation,
Manufacturers of Radio Apparatus
Colum and Sassafras Streets,
Cincinnati, Ohio
Telephone Kirby 3200
Editor: Charles E. Fay

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.



Crosley manufactures 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.

Editorials

Presidential Campaign To Boom Radio Sales

The primary campaign for nominations and the Presidential campaign of this year promise to arouse more interest than almost any other campaign that has ever taken place.

Vital issues of policy are in the balance. The situation is such that every candidate must be a diplomat of the first water in order to avoid running amuck of strong feeling on one subject or another. The electorate is on its toes and is watching every move of every aspirant to the presidential chair.

There will be thousands of speeches during the next few months. There will be thousands of meetings at which important issues will be debated pro and con. In all of this the general public is taking an active interested part. In the case of the more important issues, it is even taking a heated part—on one side or the other.

This high-running interest in presidential politics is creating a fine sales situation for every Crosley dealer. In no other way is it possible to keep informed of events in the political world as well as by radio. In no other way may the speeches of big men on the prominent issues of the day be brought right into the home. In no other way is it possible to follow the campaign in every important detail from the first few speeches to the final election returns.

This feature of radio will appeal to thousands of persons. Now is the time to begin using it as a talking point. Already public interest is at fever height. Already things are beginning to move fast in the political world.

Instruct Customers Apartment Building Icyball Equipped On 401

Customers Should Be Instructed In Use of 401 Rheostat, Proper Understanding Will Promote Satisfaction

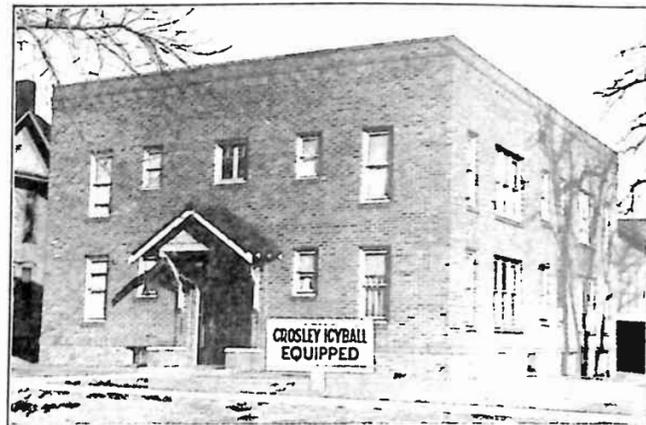
When installing Bandbox Junior, Model 401, Crosley dealers should be sure to instruct the set owner how to adjust the filament rheostat in such a way as to get best results combined with maximum life from tubes and batteries.

The instructions for this model state that the rheostat should be turned on until a slight hissing sound is heard—from 1/2 to 3/4 turn for fresh batteries. More definite instructions than this cannot be given, because batteries vary considerably in the voltage that they deliver.

The dealer, however, can check the exact rheostat setting for best results when installing the set. To do this he may use either a voltmeter which will give an accurate 3 volt reading or a milliammeter that will read 300 milliamperes accurately.

If a milliammeter is used, it is connected directly in series with the "A" battery circuit. The volume control (on the left) should be turned on full. The filament rheostat is then advanced until a reading of 300 m. a. on the instrument is obtained. The setting is noted, and the set owner is instructed to turn his rheostat to this setting when using the set, carefully advancing the setting slightly as the batteries grow older and he finds it necessary to turn on the rheostat further for satisfactory reception.

If a voltmeter is used, this should be connected from the ground to the yellow battery cord. The volume control (at the left) should be turned on full, and the filament



Janitor Is Iceman For Ahrens Apartment Building, Des Moines, Iowa---Here's Economical Refrigeration

Who said that the Crosley Icyball would only appeal to the farmer? The above illustration of the Ahrens Apartment Building at 739 Seventeenth Street, Des Moines, Iowa, is strong proof that the Crosley Icyball will also sell in the metropolitan centers.

The Ahrens Apartments consist of eight cozy little apartments. Each apartment has been equipped with a Crosley Icyball Refrigerator. Thus the tenants enjoy all the advantages of automatic mechanical refrigeration without any bother or worry to themselves. The janitor makes the rounds once a day, heats each Icyball and replaces it in position.

Mr. D. C. Clark, the owner of the Ahrens Apartments, is more

than satisfied with the installation. He is supplying the most modern refrigeration for his tenants. The initial cost and the cost of operation is a negligible item when the price of electrical refrigeration is considered.

The Iowa Radio Corporation, Crosley Distributor at Des Moines, Iowa, who sent in the photograph and information of this Ahrens Apartment Building, claim that this is the first Crosley equipped apartment. That may be true now but it won't remain true very long, for it is certain that the Icyball by offering modern economical refrigeration will have a strong appeal to metropolitan centers.

rheostat turned on slowly until the meter registers 3 volts. This setting should be recorded, and the set owner instructed as above.

By giving instructions to customers with regard to this point, Crosley dealers will insure satisfaction among those who purchase 401's

from them, and will avoid complaints with regard to short life of batteries or tubes.

Wire, Phone or Write Your Distributor for Sample of MODEL 704

Type 'D' Musicone Has New Finish

(Continued from Page 1)
new beautiful tone, golden brown crystalline effect, is certain to be the most popular selling speaker on the market. The Type "D" is considered superior to receivers at \$20.00 and even \$30.00. Many can not understand how Crosley is able to make the price so reasonable. Now, more than ever before, it is possible to sell the Type "D" Musicone every time a 704 and 401 Bandbox or other members of the Crosley line are sold. It is a real companion piece to the other members of the Crosley Line.

Can You Add Any?

Here Are Teaser Sentences On The Icyball

The Icyball Refrigerator is a product which adapts itself effectively to snappy curiosity arousing slogans. Here are a few that have been developed. Can you add to the list? Try your hand at writing a few. Address your letters to the Editor, The Crosley Radio Corporation, Cincinnati, Ohio:

- Cook your ice instead of buying it. Daily ice cheaper than mailing a letter.
- Your cook stove will be your iceman.
- Perfect Refrigeration at 2c a day.
- This summer's ice will be nearly free.
- 1928 miracle. Heat turned into cold.
- 1928 ice 2c a day.
- A match a day keeps the iceman away.
- Chilling by fire.

Crosley Representative Receives Gold Watch In Sales Contest



Powel Crosley, Jr., Awards Watch To P. W. Bialkowsky For Stimulating Most Dealer Advertising

Some time during last Fall, a contest was put on among Crosley Representatives. Powel Crosley, Jr., promised a gold watch to the field man who would encourage the most dealer advertising. The contest ended Christmas Day and when all the results were checked our Representative in the middle west, P. W. Bialkowsky, was found the winner.

The above picture shows Bill, as he is familiarly called by all, being presented with the gold watch which has been awarded to him by Mr. Crosley. Bill is standing. The presentation was made in Mr. Sidel's private office in the Nebraska Building, Lincoln, Nebraska. Those shown in the picture are: J. B. Hollenbeck, J. Hickman, Harry Sidel, R. P. Crawley, P. W. Bialkowsky, H. W. Chadwick, C. L. Carper, J. W. Sherry, Charles Stuart, and H. E. Sidel.

Valuable Aid For Window Display

Duco Finished Cabinets Very Popular---Make Attractive Window Display

Have you stopped to consider how valuable the new Duco finished Bandboxes would be to you for use in window displays?

There are no radio sets of any kind so striking in appearance and so calculated to arrest attention as the beautiful new blue and red Duco Bandbox models, with Musicones to match. In a window display they add a touch of color which cannot be obtained with sets finished in the ordinary way. The result is a warmer, far more attractive window.

For a window of moderate size, it will be found advisable to use a central display of a set or sets finished in the ordinary way. On either side of this may be displayed the Duco models—the red ones on one side and the blue ones on the other. Wherever Ducoed sets are shown, appropriately finished Musicones should be displayed with them.

In the store, too, the Duco finished sets should be given a

prominent place. For dressing up show cases and attracting attention to other items, they are ideal. A set such as the 601, for instance, finished in blue or red, may be used as a counter display.

The new colors now available give the dealer unlimited range for working up display schemes and fitting in his displays with his other decorations. Make full use of these opportunities and let the Ducoed sets help to add life to your whole store.

The metal cabinet only for the 601 and 602 Bandbox is furnished in the two Duco finishes, Chinese red and robins egg blue. These specially finished cabinets retail at \$5 each. The complete Type D Musicone is furnished. This retails at \$18. Order samples from your distributor.

Wire, Phone or Write Your Distributor

ORDER MODEL 704 AT ONCE



POWEL CROSLY JR.

TALKS TO the TRADE

Actual shipments during the past two weeks are nearly double our shipments for the entire month of February last year.

Long distance telephone calls and telegrams are pouring in asking for increased shipments on the new rich, golden finish Model 704. If you have seen this beautiful golden finish you are just as enthusiastic about its eye value as the many jobbers who are telephoning, wiring and writing us, saying that their sales depend only upon our ability to deliver the goods.

After several months of work, we succeeded last week in developing this most wonderful new finish for the 704 model, giving to it a touch of golden richness and great beauty. It will fit in with the decorations of the most richly furnished home. Nothing compares with the 704 from the standpoint of eye value. It must be seen to be appreciated.

In our experience in radio, we have tested many kinds of receiving sets. I have had hundreds of different sets in my home but never have I had my hands on such a receiver as the 704. Its sensitivity is startling. The "punch" with which each station crashes into the loud speaker indicates a "kick" I have never before experienced.

It is selective. The tone quality is great, the result of care in design and manufacture of our audio frequency transformers. Full 180 volts on the plate of the 171 output tube accounts also for the great, undistorted volume of the 704. Some AC sets cheapen production costs by putting from 110 to 140 volts on the output tube. Just like designing a 100 horse power motor car engine and putting a 20 horse power carburetor on it.

The sensitivity and selectivity come from the use of genuine, completely balanced and shielded Hazeltine neutrodyne stages of radio frequency amplification. A comparative test made by putting the 704 on the table with any other kind of set with the means for switching the antenna from one to the other will prove to you that we do build better performance and infinitely better value into our sets.

The trade tells us the Model 704 will be the fastest selling set on the American market this year and we feel quite sure this is so. We have spent every effort to constantly improve our product and are taking every possible step to make the Crosley franchise more valuable to every Crosley dealer.

The Crosley line is destined to be the leading radio line in 1928. This is another Crosley year. We have the product, the organization and determination to make it so. The increased value of the Crosley dealer franchise assures complete dealer co-operation.

Powel Crosley, Jr.



To the left is part of the WLW staff after 48 of the 62 hours. To the right is shown Helen Nugent and Rose Milanise.

This is the way that the staff and entertainers of WLW looked when the cold grey dawn of the early morning began to break over the studios of station WLW after about 48 hours had passed of the 62 hours of continuous broadcasting that marked the seventh birthday celebration.

Reading from left to right in the front row are Marjorie Moerlerin, continuity writer; Fred Roehr, staff pianist; and Irene Downing, pianist of the Bandbox Entertainers. Standing at the left is William C. Stoess, musical director of WLW.

In the back row from left to right are Francis Wolfe, staff cellist; Tommy Reynolds, tenor of the Bandbox Entertainers; Uberto Neely, violinist; Les Backer, Gennette Recording Ace; Ralph Haburton, WLW announcer; and Austin Husten, bass violinist.

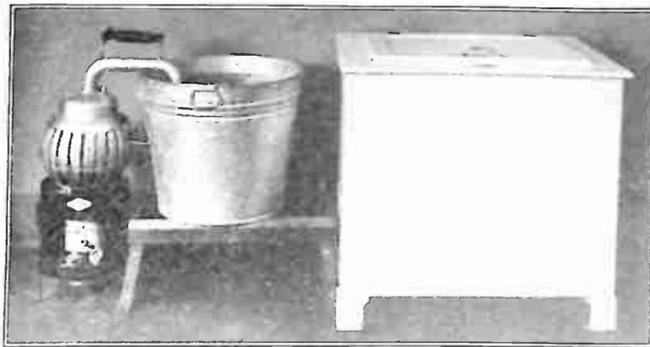
Much of the "art" in the programs of the Cincinnati Art Publishing company, broadcast through WLW every Friday at 8:00 P. M., is furnished by Helen Nugent, contralto, and Rose Milanise, soprano. Miss Milanise is also the composer of "Pal of My Heart" which is used on the programs as the theme for the program of sentimental music.

Four out of five weren't quite lucky enough. The five were the WLW listeners who guessed 1815 3-4 pounds as the difference in the weight between Charlotte and Mary, harmony team of WLW and the cabriolet-coupe that was the prize.

The lucky one was Miss Elizabeth Willenborg of Coldwater, Ohio, whose guess was the first correct one discovered among the 31,517 letters entered in the contest. Miss Willenborg received the cabriolet coupe. The other not-quite-lucky four were those whose correct guesses were written later than that of the winner. However, each of them received a Crosley Bandbox receiving set as a prize. A Crosley Bandbox Musicone and an Icyball refrigerator were the other prizes. The contest was conducted during WLW's recent 62-hour birthday celebration.

More interest is said to have been aroused in a shorter time by it than by any other contest in WLW history. The mailing department of the station reports that almost every one who entered a guess has written or called since then to beg for the prize announcements.

Crosley Distributor Doing Constructive Work With Icyball



Unique Icyball Set-Up Shown--Attractive Chevrolet Truck Covers Territory

Some exceedingly fine promotion work is being done in connection with the Crosley Icyball by the Tenk Hardware Company of Quincy, Illinois. This Distributor has discovered that the thing that makes the sale to the prospective customer easiest is a convenient means for heating the Icyball Unit.

To take care of this, the set-up shown in the illustration above is used. The Tenk Hardware Company sells the dealer the complete equipment as shown in this illustration. Of course, the large tub comes with the Icyball Unit. In addition to this, however, the Tenk Hardware Company sells with each outfit the oil burner and a small stand, shown in the illustration above. The little wooden stand is made so that the legs can fold under and thus be shipped flat. The stove, together with the stand, can be retailed for \$7.50. This offers a very convenient set-up.

The Chevrolet Truck, shown to the left, makes the round of the

territory among the dealers, showing them just how the Icyball should work and the best methods for interesting the consumer. Mr. Perry, who drives this truck is completely familiar with the Icyball. By the time he gets through talking with the dealer, the dealer is not only completely enthusiastic, and not only completely sold on the Icyball, but is ready to intelligently sell it to others.



It is needless to say that the dealers of the Tenk Hardware Company are busy pushing the Icyball, and that from present indications they will enjoy record sales with the Icyball Refrigerator during the coming months.

Reception From 704 Bandbox Wonderful

The Crosley Radio Corporation, Cincinnati, Ohio. Gentlemen:

I feel it my duty to let you know we received our first No. 704 Single Unit Bandbox yesterday. Had it all set and ready to go only a few minutes after it arrived. The results received at that time of the day for this section was wonderful. The whole store force was soon back after supper and from then on up to midnight the new Crosley certainly brought in the various programs.

Personally I think this is about the best looking job I have seen in a long time, the results it brings in certainly backs up the motto that "You're There With A Crosley."

We take this means of complimenting you on the wonderful job you have made on this single unit, and we find it will stand up with any set for reception regardless of price.

We beg to remain,

Yours very truly

C. H. MEAD COAL COMPANY,
W. F. Clark, Store Manager,
East Gulf, W. Va.

This summer's ice will be nearly FREE

1928 ice 2c per day

Cook your ice instead of buying it.

Your Cookstove Is Your Iceman.

CROSLY ICYBALL

A mechanical ICE BOX unit by which you can produce your own ice and refrigeration at a cost FAR LESS than artificial ice.

A new idea! An old principle! Now perfected after two years' development work by The Crosley Radio Corporation to a point where it is as simple and easy to operate as your teakettle!

In ordinary summer weather, once a day you lift the ICY BALL unit from the cabinet and place the hot ball over a fire with the cold ball immersed in a tub provided for that purpose. (See the small sketch). A signal warns you when it is ready and you replace the unit in the cabinet (the cold ball inside and the hot ball outside) and your refrigerator delivers a lower temperature for the next 24 hours than you can ever get from an ordinary domestic ice box and artificial ice.

The cold ball contains an ice tray and a supply of ice cubes is available at all times. Desserts, ices and mousses are easily frozen.

There are no moving parts—nothing to get out of order—no noise—no odors.

Its only cost of operation is the fuel needed to heat the ICY BALL every 24 hours. Tests have shown the kerosene consumption for this to be about 2c per operation.

The cabinet is white inside and out, easily cleaned and is as perfectly insulated as the finest of refrigerators.

This marvelous device is now being demonstrated here in our store. The price of \$80 covers the ICY BALL, including cabinet and installation in your home.

\$80.

REQUEST AD 294. Mats of this Ad of the size shown above can be furnished on request.

Dealer Introduces Icyball Refrigerator With Excellent Window Display and Effective Newspaper Campaign



Thousands Flock To Icyball Demonstration Held By Kreimer Furniture Co. ---Their Plan Affords Good Suggestions To All Crosley Dealers

The Kreimer Furniture Company, who has recently taken over the entire Crosley line, including the Icyball, is located right in the heart of the business district of Cincinnati. Their introduction of the Icyball last month, the first formal announcement of this new Crosley product in Cincinnati, created such favorable reaction and such city wide interest that we feel it only fair to Dealers everywhere to pass on the plan which they used.

Above is reproduced the Kreimer window display, which is so unusual in character that during all times of the day and evening there was a little crowd viewing it. On the opposite page is to be seen the newspaper campaign which appeared in the local papers on three consecutive nights and centered the attention of the reading public in

the opening of the Icyball demonstration on Saturday. The effectiveness of this campaign and of the window display was proved by the steady stream of the inquiring public which made its way to the large attractive basement room where the Icyball was on display.

More Than Satisfied

Al Kreimer, the president of the Kreimer Furniture Company, is more than pleased with the tremendous interest shown in his introduction of the Icyball. He is enthusiastic over the prospects of the Icyball and is anticipating big sales.

The results of the introduction of the Icyball here in Cincinnati show that there are four elements to be considered in making the most effective announcement of this latest mechanical refrigerator. These four

points are: First, introductory announcement of the Icyball demonstration, either by newspaper or direct mail; second, attractive window displays; third, properly planned demonstration arrangement and fourth, systematic record of Icyball prospects.

Introductory Announcement

The newspaper campaign used by the Kreimer Furniture Company in making its introductory announcement was very effective. The nature of the Icyball enables you to work up intense public interest. This novelty, the fact that you cook the Icyball to produce ice cubes and a chilling temperature is a paradox, which immediately touches the curiosity instinct. Thus the first announcement which you make in the paper should be of a teaser nature, that is, stir up curiosity without

actually giving definite information. This was done by the Kreimer Furniture Company. The opening of the demonstration was scheduled for Saturday. On Wednesday night a series of one column teaser ads, a number of which are grouped at the top of the reproduction of the Kreimer campaign on the opposite page, were run. These ads did not even mention the Kreimer name. They appeared in various sections of the paper and created a wide spread interest.

Teaser Ads Used

On Thursday evening a two column ad, shown at the lower left hand side of the campaign reproduced on the opposite page, were run. These ads brought out that they were Kreimer announcements and that a full page announcement

(Continued on Page 12)

FEBRUARY 16, 1928—THE DAILY TIMES-STAR 21

Kreimer's

and demonstrate and show tomorrow for the first time publicly in Cincinnati this amazing new refrigeration device

CROSLY ICYBALL

A mechanical ICE BOX unit by which you can produce your own ice and refrigeration at a cost **FAIR LESS** than artificial ice.

A new idea! An old principle! Now perfected after two years' development work by The Crosley Radio Corporation to a point where it is as simple and easy to operate as your toaster!

In ordinary summer weather, once a day you lift the ICY BALL unit from the cabinet and place the hot ball over a fire with the cold ball immersed in a tub provided for that purpose. (See the small sketch). A signal warns you when it is ready and you replace the unit in the cabinet (the cold ball inside and the hot ball outside) and your refrigerator delivers a lower temperature for the next 24 hours than you can ever get from an ordinary domestic ice box and artificial ice. The cold ball contains an ice tray and a supply of ice cubes is available at all times. Desserts, ices and mousses are easily frozen.

There are no moving parts—nothing to get out of order—no noise—no odor.

Its only cost of operation is the fuel needed to heat the ICY BALL every 24 hours. Tests have shown the average consumption for this to be about 2c per operation.

The cabinet is white inside and out, easily cleaned and is as perfectly insulated as the finest of refrigerators.

This marvelous device is now being demonstrated here in our store. The price of \$50 covers the ICY BALL, including cabinet and installation in your home.

See it tomorrow!

Divided payments arranged! A whole year to pay!

\$80. COMPLETE including cabinet and installation in your home

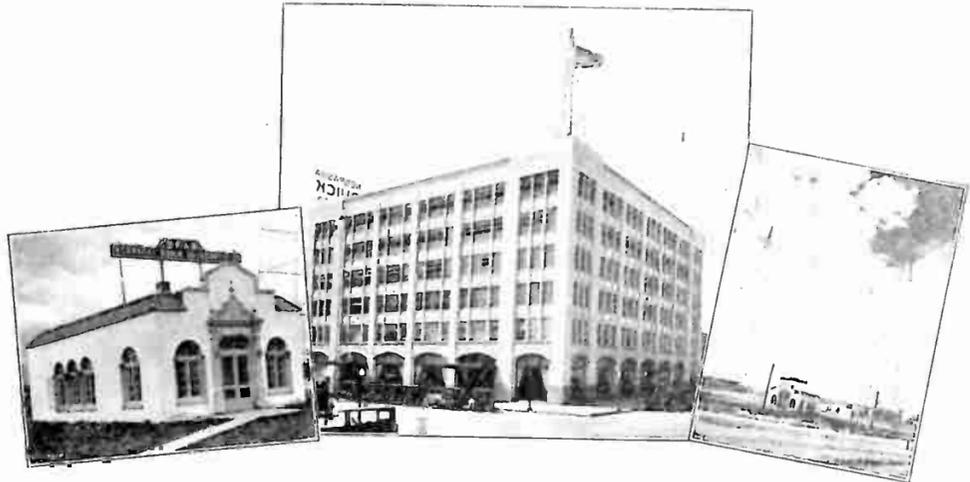
Alfred & Stanley Kreimer

Kreimer's

28 East Fourth

Nebraska Buick Auto Company, Outstanding Middle Western Distributors, Operate Station KFAB

This Live Wire Crosley Distributor Has Done A Big Job With Crosley Radio And Now Is Anticipating Big Business With The Icyball Refrigerator



Above is to be seen views of the Nebraska Buick Auto Company, Crosley Distributors at Lincoln, Nebraska. This Company is one of the largest distributors of Buick automobiles in the country, and through



MR. BUTLER, Star Salesman.

their Supply Division distributes radio equipment and supplies, Crosley Radio Receivers and Musicones and the Crosley Icyball. Besides the buildings at Lincoln, Nebraska, the company has a branch office at Omaha, with a building identical with the home office with the exception of the two upper stories.

Owens Station KFAB

Thousands of listeners, including many of our own Crosley dealer organization, have heard the Nebraska Buick through their radio sta-

tion, KFAB. The main studio station is located in the huge building shown in the center.

To the right is seen a view of the power plant and sending apparatus of Nebraska Buick Company, which is located about a mile outside of Lincoln Nebraska. To the left is to be seen a close-up view of their power plant and a smaller studio, an exact reproduction of that at the main office.

Mr. C. L. Carper, Vice President of the Nebraska Buick Company, heads the Supply Division. This Division has been responsible for doing a big job with Crosley Receivers during this season. Mr. Carper is also one of the directors of KFAB, which is daily telling thousands the story of Crosley Radio Receivers and Icyball Refrigerators.

The Supply Division at Omaha, which operates in cooperation with the Lincoln office, is headed by Mr. Walter Sherry.

The Nebraska Buick Company is having a unique experience with the Icyball Refrigerator. Mr. Gale Grubb, announcer of KFAB, is shown here. He is truly an enthusiastic Crosley salesman for twice a day, on the morning, six o'clock, program and then again at noon, he tells the merits of the Crosley Bandbox and the Icyball. The Icyball is particularly featured in the morning broadcast and hundreds of letters are being received from farmers showing their interest.

Station KFAB however, does much more than act as a good will builder and salesman of the Nebraska Buick Company. It is performing a wonderful service over the section which it covers. A staff of thirty five musicians, aside from the

regular Buick Master Six Orchestra, provide the entertainment broadcast. In addition to this the station cooperates with the University of Nebraska and thus assists greatly in the educational and recreational work of the community.

The Nebraska Buick Company has a live group of salesmen who do more than just sell various articles of the line, but really cooperate with the dealer in aiding them to merchandise their products. To the left is shown a picture of Mr. Butler, the star Icyball salesman of the Nebraska Buick Company. On his first trip through his territory with the Icyball, he spread such enthusiasm among the dealers that they showered him with orders. Not only does he sell the dealer on the Icyball, but he passes out all the information he has on the Icyball which is all there is and thus enables the dealer to most effectively push the Icyball.

With this type of constructive

If You Wish to BUY or SELL SECURITIES

Or Own Some About Which You DESIRE INFORMATION Communicate With Us. Our Statistical Department Is At Your Service

WESTHEIMER & CO.

Members of— The Cincinnati Stock Exchange The New York Stock Exchange

Telephone: Main 567 326 WALNUT STREET CINCINNATI, OHIO



MR. GALE GRUBB, Announcer Of KFAB

work, which the Nebraska Buick Company, is doing in their territory not only with Crosley radio apparatus, but with the Icyball, the biggest sales are assured throughout a season.

American Indian Likes Bandbox

Sells Bandbox In Crow Creek Indian Reservation

The American Indian is taking to radio. This is word which we have just received from our Crosley Dealer, Theodore H. Steen at Chamberlain, South Dakota.

Mr. Steen reports, that one sale of a Bandbox to an Indian on the Crow Creek Indian Reservation has led to three other sales. He closes his letter by saying: "The American Indian is taking to the Bandbox in great shape."

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 4th Street Cincinnati, Ohio



Ground Hog Day Distributor Holds Successful Dealers Meeting---Enthusiasm Expressed Crosley Calendar Party A Success In Argentina

The Standard Battery & Electric Company Entertain Dealers Unique Way

A dramatic fight between a ground hog (?) and a dog, a fine luncheon at noon and a big banquet in the evening, with variety entertainment for all, were some of the features of the Ground Hog Day Party which the Crosley Distributor at Waterloo, Iowa, The Standard Battery and Electric Company, gave for their dealers on the second day of February.

About three hundred Crosley Dealers turned out for the party and everyone reported a very profitable and enjoyable time from the start to the finish.

During the day the three new Crosley products, 704 and 401 Bandbox Receivers and the Icyball Refrigerator, were shown. They were received with enthusiasm and proved a real sensation among all the dealers who prophesied a very successful future for all three units. Many of them said that Crosley had again anticipated the consumer demand and there was a market waiting for the new members of the Crosley line.

Mr. John Hanson, President of The Standard Battery & Electric Company, in reporting the Ground Hog Party, states as follows:

"We showed the 401 Bandbox Jr., as well as the 704 A. C. Model, and such Models as 601 and 602 with the full line of Showers Cabinets. Also the Icyball was on display



Dealers Of The Southern Tier Electrical Supply Co., Enjoy Great Get Together At Kalurah Country Club

The Southern Tier Electrical Supply Company, Binghamton, N. Y., distributors for The Crosley Radio Corporation and The Amrad Corporation, held a two day dealer meeting on February 6th and 7th. Icyball demonstrations were given at their store and warehouse during the morning of the first day. The dealers were then driven to the Kalurah Country Club, which is ideally situated about six miles from town and commanding a beautiful view of the Susquehanna River and Alleghany Mountains.

The afternoon was devoted to demonstrations and talks with individual dealers. A banquet was held in the evening attended by eighty six dealers from all portions of the New York and Pennsylvania territory served by the Southern Tier Electric Corporation. This is

indeed a remarkable turnout when it is realized that 50% of the Crosley Dealers attended, some traveling several hundred miles.

Following the banquet, Mr. I. E. Greene, president of the Southern Tier Electrical Supply Company, made an address and then introduced the speakers of the evening. Talks were given by W. L. Sayre, and V. B. Level of The Crosley Radio Corporation and William King and Carroll Downes of the Amrad Corporation.

The meeting was enjoyed immensely by all those present. It was voted the best within the experience of the dealers in this section, their enthusiasm and confidence being proved by the large number of orders received for the full Crosley line.

both at the show and in our sales-room.

"We had a very good entertainment in the evening which seemed to be very much enjoyed by all of those present. We had quite a variety of entertainment, using the Old Time Fiddlers for several numbers, the Coontz Juvenile Enter-

QUINN BROTHERS RADIO CORPORATION
Neenah, Wis.
Wholesale
Crosley Distributors
Write us for Dealers Proposition

TAYLOR ELECTRIC CO
MADISON, WISC.
Exclusively Radio
Wholesale Only
CROSELY DISTRIBUTOR

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

SCHUSTER ELECTRIC COMPANY
WHOLESALE
CROSELY DISTRIBUTOR
2169 Spring Grove Avenue
412 Elm Street, Cincinnati, Ohio
Phone West 144 Main 820

RECEIPTS
RADIO CROSELY
SMITH & KIRKWOOD
ROSARIO ARGENTINA TELEFONO 4731

ENERO						
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

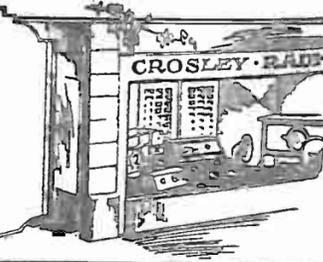
This illustration shows a very attractive Calendar prepared by one of our most progressive foreign Distributors, Messrs. Smith & Kirkwood, of Rosario, Argentina. Messrs. Smith & Kirkwood are Crosley Distributors for the Provinces of Cordoba and Santa Fe, Argentina, and have put the name "CROSELY" very prominently on their local map. This is an indication of the world-wide distribution of Crosley Radio.

scene which was very good. "The last act was the fight between the Ground Hog and a dog, selected for this special occasion. As it was Ground Hog Day, it seemed quite fitting that we should have something of this kind. I will not tell you how the fight came out. We had the ground hog in a box, although it was necessary to have it in the form of links."

Radio Sets and Icyballs
CROSELY RADIO
Sherwood Hall, Ltd.
Grand Rapids



CROSLEY DEALER'S PAGE



New AC Bandbox Makes Hit

Crosley Dealer At McMinnville, Tenn., Enthusiastic Over This New Set

Enthusiasm is over half the secret of sales success. Thus we know that V. E. Semones, Crosley Dealer at McMinnville, Tenn., is doing a real job with Crosley Radio.

Wonderful reports of this new set are coming from every section. This letter from V. E. Semones gives some conception of the enthusiastic reception with which the Crosley Bandbox is being greeted by dealers everywhere.

"Just received yesterday the first Crosley 704 and wish to state that this is some addition to the Crosley Family. At 7:00 A. M. this morning I picked up fifteen stations all perfect and all the volume a good speaker could carry. This 704 I consider the best buy on the market in a radio receiving set and am hoping to greatly increase my radio sales with this new set."

Introducing Icyball

(Continued from Page 8) was to appear the next day, Friday.

In the papers the following night, on Friday, a full page announcement appeared, stating that they were announcing the demonstration of both the Icyball and the Crosley Radio Receivers. Thus the whole page was not devoted to Icyball. That section of the page exclusively covering the Icyball is shown on Page 9, lower left hand corner. The reader interest in this campaign was tremendous. People in every section of the city were wondering what this new product was that Crosley was putting on the market.

Effective Window Display

The interest of the public was not allowed to lag, for all who passed the Kreimer store on Saturday saw the Icyball window pictured on Page 8. This window announcing that the Crosley Icyball was demonstrated within actually drew the public inside the store.

This window can very easily be duplicated by any Crosley Dealer.

Bandbox Takes Trip

Miles From Civilization In Death Valley 601 Bandbox Gives Perfect Reception

If all the romantic stories of the Bandbox would be told, what a tale it would be. The Lee & Bush Company, Crosley Dealers at Columbus, Ohio, have told of the trip taken by the first 601 Bandbox which they sold.

This Crosley Dealer sold a Bandbox to Mr. Acton, salesman for the Columbus Buick Company. A week later Mr. Acton left on an extended tour to California and took the Bandbox with him, installed in his Buick car.

The above picture shows Mr. Acton and his son tuning in the Bandbox in Death Valley, miles from civilization. The wonderful reception received lead Mr. Acton to remark, "You're there with a Crosley even in Death Valley."

Needless to say, Mr. Acton is ex-



ceedingly enthused over the performance of his Bandbox. Immediately upon his return to Columbus, he placed an order with Lee & Bush for the first 704 Model Bandbox that they receive.

The snowmen are made of cotton and the cardboard placards can easily be printed. Window display is a very important part of the effective introduction of the Icyball.

Demonstration Of Icyball

The demonstration of the Icyball is, of course, the thing that it has been leading up to. It should be very carefully arranged. If possible, get this off in a section away from the main part of the store. Kreimer Furniture Company used a large airy basement room which proved very good for demonstrating purposes.

The demonstration arrangements were made so that a couple of Icyballs would be functioning while one Icyball unit was being heated. The heating process attracts as much, if not even more, interest than the Icyball itself. The demonstrator is asked all types of ques-

tions and it is important that he should be able to answer them. The people enter the demonstration room very skeptical and an effective demonstration convinces them. One lady after she had seen the heating process and looked inside the refrigerator was still skeptical. "How can ice be cooked," she reasoned. The person demonstrating the Icyball took out the ice tray and showed it to her, and she said, "That isn't ice, is it?" It was not until she touched the ice that she was convinced.

Getting Prospect Names

Some that flock in your store may not be logical prospects, but you can quickly determine this factor from the questions asked and the interest shown in the demonstration. The demonstration truly affords a wonderful opportunity for

Dealer Strong For Bandbox, Jr.

Augsburger & Schallip Co. Hamilton, Ohio, Bring In KFI With Loudspeaker Reception on Bandbox, Jr.

That the Bandbox, Jr., is the greatest little set of its kind, to be found everywhere, is being demonstrated more conclusively each day. Dealers everywhere are going wild about it. That is a sure sign that it will prove a real seller.

Here is what the Augspurger & Schallip Co., of Hamilton, Ohio, Authorized Crosley Dealers, wrote to the Schuster Electric Company, Crosley Distributor at Cincinnati, Ohio.

"The Crosley, Jr., is a real four tube set. Have had KFI very fine on a loud speaker on short antenna the first night we tried it."

working up a valuable prospect list. A good method for obtaining the names of the prospects would be to tell them that you will have some interesting literature coming out from time to time on the Icyball and will be glad to keep them informed and forward this to them. This will enable you to get the name. The salesman making the demonstration can note on this card the interest shown.

Try Plan Yourself

Now you have the method of introducing the Icyball outlined. Some ideas of your own may improve this materially. The important thing is to have careful plans laid out and then follow that plan. Also in this issue of the Broadcaster you will find reproductions of the ads shown on the opposite page and you can order mats or stereotypes of these ads. The Crosley field man in your section and your distributor will be glad to help you lay the plans.

Will you please keep the Editor of the Broadcaster informed as to results? Should any new ideas prove effective, write in and state your experience. Just address your communications to the Editor of The Crosley Broadcaster, The Crosley Radio Corporation, Cincinnati, Ohio.

New Crosley Folder Is Ready

A new Folder, Form 777, is off the press which covers the complete Crosley line, including the 704 and 401 Bandbox and Type D Musicone. Upon request we will send you a hundred or so of the new folders. Request form 777.

THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio.

Crosley RLF 90

AT BARGAIN PRICE

\$25

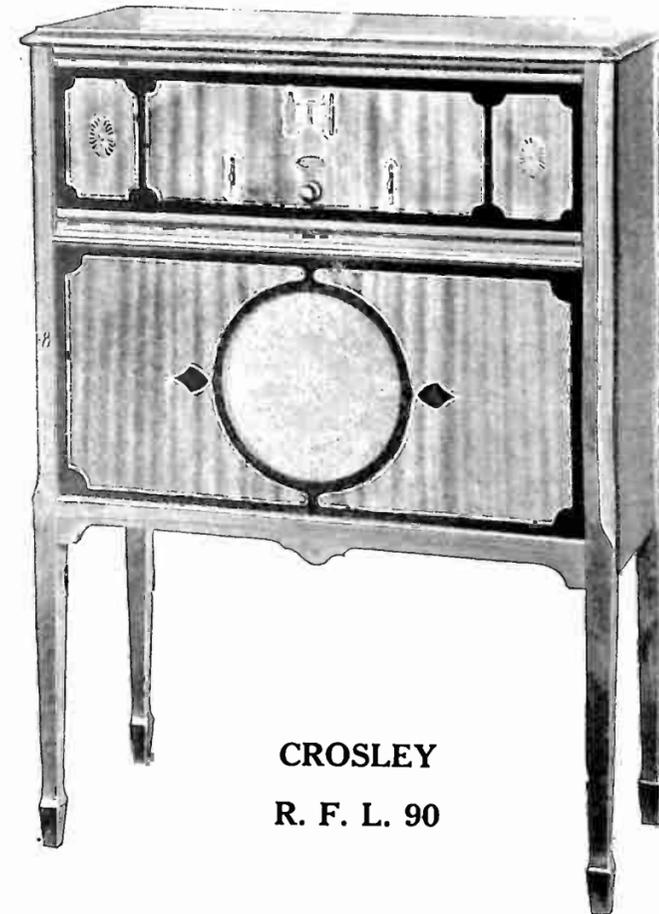
TO AUTHORIZED CROSLEY DEALERS

This Famous Six Tube Receiver Installed In Beautiful Console Cabinet With Built-In Musicone Formerly Retailed At \$98, Now Sells To You For \$25

OFFER MADE IN ACCORDANCE WITH USUAL CROSLEY POLICY ON DISCONTINUED MODELS

NEW In Original Shipping Cartons

THIS SET IS A REAL BARGAIN TO YOU AT \$25



CROSLEY R. F. L. 90

A FAST SELLER Enables You To Offer a Real BARGAIN TO CUSTOMERS

Following the usual Crosley policy to give Authorized Crosley Dealers an opportunity to sell in their stores discontinued models, we offer the Crosley RFL-90. This custom of selling discontinued models through Authorized Dealers rather than through other channels, was carried out last year in regard to the Crosley Model 51.

We now offer a quantity of RFL-90's at a price below their actual cost direct to Authorized Crosley Dealers. The quantity allowed each dealer is not to exceed ten sets.

Description Of RFL-90.

The RFL-90 is a six tube radio receiver, installed in a beautiful console cabinet, with built-in Musicone. It consists of three bridge balanced stages of radio frequency, detector and two stages of audio frequency amplification. In it the famous RFL circuit has been developed to the very highest

degree of efficiency. The two toned mahogany cabinet with built-in Musicone fits in beautifully with every surrounding.

Terms To Authorized Crosley Dealers.

Because of the very low price at which this set is offered, it can not be sold on open account. Each order must be accompanied with cash, money order or express order. Should you desire C. O. D. shipments, accompany your order with 25% of the total amount, and shipment will be made, charging you with the remainder C. O. D. Shipments also will be made with sight draft attached to bill of lading.

In Original Shipping Carton.

All the RFL-90 sets which are offered are brand new—they have never been taken from their original shipping carton. They are all accompanied with the usual Crosley guarantee.

Now act quick—send in your order while the supply lasts.

THE CROSLEY RADIO CORPORATION CINCINNATI, OHIO

Hear the *Exquisite* Tone of the *Royal Series* AMRAD

Now you can hear the sweetest, purest tone in Radio. A tone of thrilling richness and depth.

For quick sales, show your customers these new, purely electrical models.

No batteries
No makeshift devices
No acids or water

Latest A. C. tubes and latest electrical engineering combined with exclusive construction have produced the Radio Set that sells!

Take the time to listen—then decide!



The HASTINGS \$395

A. C. operated, requiring no batteries, Single-dial control, seven-tube Console operated by loop or antenna. Built-in cone speaker, mounted on special baffle board.

THE AMRAD CORPORATION MEDFORD HILLSIDE, MASS.

F. E. HAHN, President
POWEL CROSLY, JR., Chairman of Board

Amrad sets are manufactured under license contract between Radio Corporation of America and Crosley Radio Corporation. Licensed under Hazeltine and Latour patents, issued and pending for radio amateurs, experimental and broadcast reception.

Crosley Service Manual

No. 101.

General Service Information---Part III.

12-1-27

(Continued from Last Issue)

g. Each lead-in conductor must be provided with an approved lightning arrestor operating at 500 volts or less, situated inside the building, between the set and the point of entrance of the lead in; or outside of the building, as near the entrance of the lead in as possible. The arrestor must not be mounted near easily ignitable material.

h. An antenna grounding switch, may not be used as a substitute for a lightning arrestor, but it is recommended that both be used. In the closed position, the switch must form a shunt around the arrestor. The switch must be rated at not less than 30 amperes, 250 volts.

i. The ground wire from the arrestor may be bare, and shall be of copper, bronze, or approved copper-clad steel. It shall in no case be smaller than the lead-in wire, and shall not be smaller than No. 14 if copper is used.

j. The protective ground wire must run in as straight a line as possible from the arrestor to a good permanent ground. As a means of grounding, water piping is preferred. Other permissible grounds are grounded steel frames of buildings or other grounded metal work in buildings, and artificial grounds, such as rods, plates, etc., buried in the ground. Gas piping must not be used for the ground.

k. An approved ground clamp must be used for attaching the ground conductor to the ground. Where there is liability of mechanical injury, the ground wire must be protected adequately.

l. The ground wire may be run either inside or outside the building. The protective ground may also be used as the operating ground for the set. In this case, the ground wire leading from the set should be run to the ground terminal of the protective device and connected to it, the protective ground wire being used as the common grounding system from that point on. If desired, separate operating and protective grounds may be used.

m. Wires inside buildings shall not come closer than 2 inches to power or light lines not in conduits, unless separated from these by continuous, extra insulation, such as porcelain tubing, or approved flexible tubing.

n. Storage-battery leads shall consist of conductors with approved rubber insulation. These leads must be protected by fuses or circuit breakers operating at not more than 15 amperes, placed as close to the battery in the line as possible.

B. The Ground

A good ground connection is essential to proper reception. The type of ground, size of wire, method of connection, etc., should follow the recommendations outlined in the Underwriters' Rules above. As stated therein, a ground clamp should be used for connecting the ground wire to a pipe, as soldered joints made to pipes are often ineffective. Before the ground clamp is applied, all corrosion, laquer, etc., should be removed from the pipe by scraping and sandpapering.

C. Tubes.

1. Standard Equipment. Radiotron and Cunningham tubes are the standard equipment for Crosley sets. Each Bandbox model is intended to be used with certain types of Radiotron or Cunningham tubes. Full details of the proper types of tubes are given in the instruction sheets and in the service sheets dealing with the different set models.

2. Types of Tubes. The types of tubes recommended for use in the various Bandbox models are as follows:

a. UX-201-A or CX-301-A. An all-around "storage battery" tube which may be used as detector, radio-frequency amplifier, and audio-frequency amplifier. Filament current, 0.25 amperes with 6 volt supply. "B" voltage, 45 for detector, 90 for radio or first audio amplifiers, 90 to 135 for output stage. "C" battery if desired for amplifier tubes. Maximum undistorted output, 55 milliwatts.

b. UX-171 or CX-371. Power-output tube use in last audio stage. Filament current, 0.5 amperes with 6 volt supply. "B" voltage 180. "C" voltage 40½. Maximum undistorted output, 700 milliwatts.

c. UX-226 or CX-326. A new amplifier tube using alternating current for its filament supply. Filament current, 1.05 amperes (A. C.) at 1½ volts. "B" voltage 90. "C" voltage 6.

d. UY 227 or CY 327. A new alternating current detector tube having a heating unit with separate emitter and using a. c. for its filament supply. Heater current, 1.75 amperes at 2½ volts (A. C.). "B" voltage 45.

D. Batteries, Chargers, Eliminators.

Only reliable batteries, chargers, and eliminators of good makes should be supplied with Crosley sets. For Crosley AC models the standard Crosley Power Converters designed for these models should be used. Each instruction sheet and set of service sheets designates the battery requirements for that particular model.

E. Grid Leaks.

Grid leaks of from 2 to 3 megohms resistance will be found to give satisfactory results with all Bandbox models when using standard tube combinations. In some instances, grid leaks of lower resistance, from ½ to 1½ megohms, will be found advisable.

F. Speakers.

The Musicone is especially adapted to use with Crosley sets because it was designed in the Crosley laboratories with the idea in mind that it would be used with these sets. It is recommended therefore, that Musicones be supplied with all Crosley sets.

IV. Testing Sets And Accessories Before Installation

A. Testing Sets.

The most reliable test that a Dealer or Distributor can give to radio sets before he delivers them into the hands of the purchaser is an actual reception tryout under ordinary receiving conditions. In a service shop equipped as outlined above, this test may be made on the test table provided for that purpose. If desired, the accessories to be supplied with the set may be used with it in the test, so that the condition of the complete equipment may be determined at once. If only the set is to be tested, standard tubes and other accessories, known to be in good condition should be used. If reception does not prove satisfactory, a standard set, known to give satisfactory results, should be tried in comparison with the set on test, in order to determine if the trouble is due to poor receiving conditions, a defect in the aerial system, or some other difficulty outside the set.

B. Testing Tubes.

The most satisfactory way for the Dealer to test tubes before delivering them with a set is to try them in the set under actual receiving conditions, at the same time that the set is tested. Should such a tryout be impractical, the tubes may be tested for shorted internal elements and continuous filament simply by touching the contact points of the headphones tester to the proper tube prongs. Thus by touching these contacts to grid and plate prongs respectively, it may be determined whether or not there is a short-circuit between grid and plate; by touching the contacts to the two filament prongs, the continuity of the filament circuit may be tested, etc. If desired, a small test board may be made up with a tube socket and lamp bulbs connected in

the circuit in such a manner as to indicate shorts and continuity of the filament.

Description of testing equipment such as that supplied by the Radio Corporation of America to Radiotron distributors is beyond the scope of this service sheet. Full directions for using this equipment are supplied by the tube manufacturers.

Testing Batteries.

The most convenient way to test the state of charge of storage batteries is by means of a hydrometer. A fully-charged battery should give a reading of from 1250 to 1300. One that is almost entirely discharged will give a reading of from 1100 to 1150. Be sure that storage batteries are fully charged when they are delivered to the purchaser. Starting him out right may avoid future difficulties.

The best way to test dry batteries is not with an ammeter, as generally supposed, but with a voltmeter. The batteries should be tested under load, that is, preferably when they are connected to the set and the set is in operation. The voltmeter is shunted across the terminals of each battery and the reading noted. New batteries should show their full voltage on this test. Dry batteries are usually considered worthless after their closed circuit voltage has fallen to a value of 75% or 80% of the normal rated voltage. Intermediate values indicate intermediate periods in the life of the batteries.

D. Testing Other Accessories.

Power Converters and battery eliminators should be given tests with the sets with which they are to be used under actual receiving conditions.

V. Installations And Operation.

A. Installation.

Matters pertaining to the installation of each model are discussed in the service sheets devoted to that model. Brief instructions for installing are also given on the instruction cards accompanying each set.

B. Operation.

The proper method of operating the different models is fully covered in instruction cards and service sheets devoted to the different models. There is but one point that need be stressed here. That point is, be sure that the purchaser understands how to operate the set before you leave it with him. Ignorance of how to operate their receivers causes a large percentage of the complaints that radio owners make. Insist that your customer show you

(Continued on Page 16)