

WLV The CROSLLEY WLV RADIO BROADCASTER

Published by The Crosley Radio Corporation

VOL. VI. NO. IV.

FEBRUARY 15, 1927



Dawn of Another New Era In Radio Reception Is Seen In Announcement of Six Tube Batteryless Receivers; Eliminator Is Proclaimed "Wonder Box of Radio"

Chicagoan's Letter Wins First Prize In Crosley Contest

Tunes in Baltimore During Day Time When Many Local Stations Are Broadcasting.

The letter that won first prize in the recent "Spend An Evening With the Crosley 5-50" contest for Archie Oboler, of 5513 Drexel avenue, Chicago, Ill., follows:

"At last everything was completed. The aerial was up, the batteries connected and the tubes were all in their sockets. The family was grouped around the new Crosley 5-50 eager to see what the new set was going to do. Personally, as I took the rheostat knob in my hand and started to turn it, I was, for two good reasons, in doubt as to whether the results would be satisfactory or not.

"In the first place, operating conditions were just about passingly fair. The aerial, because of conditions on the roof, consisted of little more than a 40 foot lead-in. Furthermore, the building we were in was set back just a short way from a busy street car line and I could if anything, pick up a lot of car noises.

"Secondly, the people to whom I was demonstrating the 5-50 had already received a demonstration on another nationally known radio, with which they had been able to pick a few of the larger distant stations right through the barrage of Chicago's twenty odd locals. Consequently the family was not altogether 'green' as to what to expect from a good radio, although they admitted the distant signals on the first receiver had been extremely weak.

"In spite of any actual and psychological difficulties such as the ones I had overcome, I had one point in my favor and that was the fact that I was demonstrating a Crosley-made radio. With this thought in mind I turned on the rheostat and twirled the drum control from 0 to 100. The first remark of the lady of the house was a very significant one, I thought. 'Why that radio seems to be really alive,' she said. And that is true. The 5-50 seems to throb under one's fingers, alive and eager to do its masters bidding.

"Then I went ahead and tuned in a station at random on the dial. With a slight turn of the Crescen-

SHOW THIS TO YOUR PROSPECTIVE CUSTOMERS

"426 Sunset Road, West Reading, Pa.

"Gentlemen:

"I noted your advertisement in Popular Radio, issue of February, 1927. The statement of Mr. X. — is certainly correct. I have a similar set, the Crosley 5-50, single drum control. I have 65 stations logged on the paper strip and have not enough room on it to write the rest of them. Last evening I tuned in Miami, Fla., and Baltimore, both working on the air at the same time. Miami has a power of 1000 Watts, and Baltimore 5000 Watts. There is but a separation of two meters between them, Miami is on 247.7 meters and Baltimore on 245.8 meters. I was able to detune Baltimore completely and bring in Miami with a volume that was astonishing. The incredulous may ask how it was done on a one control radio. I want to say that a Crosley will do it, and other things that will astonish them. The trick was done by a slight adjustment of one "Acuminator" combined with the "Crescendon" and an increase of filament current in order to pull in the more distant and less powerful station.

"KFI, Los Angeles, California, and other west coast stations have been logged repeatedly by myself and others owning Crosleys in this vicinity and if that isn't real radio performance, I would hate to own any other kind of a set.

"I have for several years built and experimented with many radio sets, but when a friend of mine demonstrated his Crosley 5-50, I laid down my tools for I had the set I had been waiting for.

"Yours in appreciation,
"Henry J. Wagner."

don I was able to increase the volume of the music two-fold. It was about 5:30 by that time and the sky was just growing dark so I hazarded a guess that the station to which we were listening was one of the well-known locals broadcasting dinner music. In order to get some idea of the relative logging of the set, I allowed the local to play, while the people listening all remarked about the beautiful, life-

(Continued on Page 3)

Summary of Achievements Incorporated in Six Tube Sets and Eliminator Designed for Use With Them Only.

Receivers Called "World's Greatest Radios".

Many Exclusive Features Incorporated In Battery Eliminator are Described by Engineer—Listeners to Welcome Sets.

By producing results that have actually amazed the most critical radio engineers, the new six tube batteryless Crosley A C-7 and A C-7-C have earned for themselves the titles bestowed upon them by those who had the first opportunity of testing them—"The World's Greatest Radios."

Not only is the circuit an exceptionally efficient one, but the battery eliminator, which provides "A", "B" and "C" current, is so wonderful that it has been referred to by "men who know" as the "Wonder Box of Radio." And so we have "the world's greatest radio and the wonder box of radio"—two units that are destined to bring about a new era in radio reception.

These sets themselves consist of three stages of radio frequency amplification, detector and two stages of audio frequency, a circuit of unusual efficiency which provides excellent reception from stations at very great distances. The cabinets are of mahogany, beautifully finished in two tones, and the A C-7-C is installed in a very attractively designed console in which there is a genuine Crosley Musicone built in. The single dial control, power tube adaptability, metal shielded chassis, Crescendon, etc., are features that combine to make the sets what they are—"The World's Greatest Radios"—but these advantages, important as they are, are commonplace when compared with the extraordinary results given by the Crosley battery eliminator—the "Wonder Box of Radio"—which was designed and built for use with them exclusively and which, by the way, is not intended for use with any other type of radio receiver.

This eliminator gives all the "A", "B" and "C" current required in perfect operation of the sets. Imagine the joys of your customers when you show them such a beautiful radio that is operated without batteries. Imagine how they will appreciate a radio that can be relied upon at all times—a radio that does not have to depend upon the service of storage batteries that seem to be run down at every psychological moment. Imagine how the housewife will smile when she realizes the opportunity of doing away with the batteries that are so bunglesome about the house and which so often damage the carpets and the curtains.

The Crosley battery eliminator is designed to operate on ordinary 110 volt, 60 cycle lighting or power circuits, and is the result of months and months of research work conducted in the Crosley laboratories under the direct supervision of Charles Kilgour, chief engineer. "Child," as Mr. Kilgour is known among his friends, has this to say about this unit:

"It makes batteries entirely unnecessary as the unit furnishes power for the filament circuits, plate circuits and grid circuits, thereby replacing the 'A', 'B' and 'C' batteries. The eliminator makes use of units that have no depreciation and which require no attention or servicing. The only possible exception to this is the rectifier tube, which has a long life. "The filter circuit is of novel design and is not only very successful in eliminating the hum due to the 60 cycle alternating current supply, but is so arranged that common coupling between the plate circuits of the various tubes of the receiving set is made extremely low so that the quality obtained from the receiver is exceptionally good."

"One of the important advantages of this rectifier unit is the fact that Mershon condensers are used in the filter. These condensers make available very high capacities, much greater than can be economically obtained from the use of paper condensers and have an added advantage which is very important, that if for any reason high

(Continued on Page 3)

THE CROSLY RADIO BROADCASTER

Published By
The Crosley Radio Corporation,
Manufacturers of Radio Apparatus
Colerain and Sassafras Streets,
Cincinnati, Ohio

Telephone: Kirby 3200
Robert F. Stayman, Editor
Crosley manufactures radio receiving sets which are licensed under Armstrong U. S. Patent No. 1,113,149 and under patent applications of the Radio Frequency Laboratories, Inc.

SPRING TONIC

Remember back in the good old days when, at about this season of the year, Mother would dig deep into the medicine chest and get out the Spring Tonic. It made us feel better, didn't it? Put pep and energy into us.

And remember how Powel Crosley, Jr., just a few weeks ago, gave to every authorized dealer a similar tonic in the form of new six tube radios, including those radically different batteryless models?

Mother knew what was good for us. Powel Crosley, Jr., knew what was good for you. Facing a lull after the busiest of all seasons, radio dealers were more or less inclined to let Spring fever get the best of them. But when the new models were announced, radios that were certain to meet nation-wide approval, every dealer sprang to his feet and immediately felt the results of the Crosley tonic.

Interest in radio was revived immediately after announcement was made of the new sets, dealers everywhere reporting having received inquiries from their customers regarding the new Crosley models. Dealers recognized at once an opportunity to bring back their sales curve to the December peak, and they appreciated it. They welcomed the new line as they formerly welcomed the Spring Tonic—and it had the same results. It put new life and new energy into them and made them feel like getting out and selling instead of taking their morning and afternoon naps in the rear of their store.

BOOST THE MUSICONE

The Crosley Musicones are the best reproducers on the market. You dealers know this, and you know they can be sold. Therefore, you are overlooking a chance to make money when you fail to boost them. A Musicone is needed by every radio owner. Who can make his town 100 per cent Musicone first? In other words, who can sell a Musicone to every radio listener in his town or community?

Chicagoan's Letter Wins First Prize In Crosley Contest

(Continued from Page 2.)

like tones of the Musicone I was using. As we sat there listening the number ended and the announcement came. 'WBAL,' a voice said, 'broadcasting from Baltimore, Maryland.' Imagine the excitement this announcement created among us. Daylight outside; locals going full blast and the Crosley 5-50 reaches out and brings in an Atlantic coast station. You cynics living in small towns may think this is not wonderful reception, but here in the Windy City a set has to be more than good even to separate the locals.

"After tuning in a few more distant stations, most of which came in with but a degree or two difference between their settings and that of a local station, I turned the set over to the now more than enthusiastic family. With but a few instructions they could tune the 5-50 as well as I could. Sale? I couldn't have taken that Crosley away from them with anything less than a machine gun.

"After five years of one radio after another, it is hard for me to become enthusiastic over any new set. But the Crosley 5-50 has done, as you have seen, the impossible and so I am as enthusiastic over the 5-50 as I was over my first set. The beauty about the Crosley to me is its honesty. Its shielding is used, not to facilitate manufacturing processes, but to really make the set better. Its coils are not 'losers' but are honestly made efficiently to make use of every last bit of energy received. It actually radiates efficiency. In other words 'It's a Crosley!'"

The letter that won second prize for Howard Graff, of New Haven, Conn., will be published in the next issue of the Broadcaster.

SKIPPER ON SHIP IN MID-PACIFIC HEARS WLW

A few years ago, when windjammers sailed the seas that are now plowed by more or less storm-proof steel steamers, a typhoon used to be the occasion for reefing the canvas and cursing loudly if some of it was blown away.

Now that situation is cleared up somewhat but the sailors still have occasion to use their favorite swear words—for instance the radio antenna might blow down and that would spoil the evening's amusement.

WLW, the Crosley station at Cincinnati, has received a letter from R. R. Willmot, skipper of the Shipping Board vessel "Awoihavre". Willmot and his chief engineer heard WLW in mid-Pacific.

From WLW at Cincinnati to the middle of the Pacific is some jump.

BROADCASTER IS PRAISED BY WESTERN DEALER

"Verdon, South Dakota
"January 25, 1927.

"The Crosley Radio Corporation.
"Gentlemen:

"I am in receipt of the Crosley Radio Broadcaster of January 15, 1927. I have been going to tell you what I think of your little publication ever since I have been getting it. It is a wonderful house organ to me. I read every word of it every time it arrives. It is such a thing as this that keeps so widely scattered a family together. (I am sure that the Crosley family is scattered throughout the ends of the earth). Every article in it is worth reading and many are worth money to whoever reads them. I want to thank you for the receipt of this publication as well as to tell you that I like it.

"The dope you are putting out regarding the various tubes and tube combinations that are workable in your receivers is particularly great stuff to me. I am filling these so that I can always get at them in a minute.

"Yours truly,
"R. J. Strauch."

Every rural schoolhouse in Connecticut is to be equipped with a receiving set.

Dawn of Another New Era In Radio Reception Is Seen

(Continued from Page 2.)

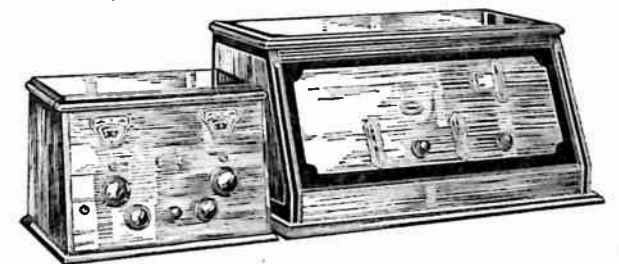
tension voltages are impressed upon them, they will not permanently puncture as is the case with paper condensers, but will immediately and automatically heal the puncture and as a consequence, no injury of any kind to the condensers will result. This advantage can scarcely be overemphasized.

"There are only five connections to be made between the supply unit and the receiving set. These are conveniently provided for by cabled leads with phone tips which can easily be secured in the binding posts of the receiver. The leads are colored and the sub-panel of the receiver is marked so that no mistake can be made in the connections.

"The unit is equipped with a cartridge type fuse which may be placed in either of two positions to compensate for high and low line voltages. A rheostat is provided on the front panel of the unit for making adjustments to take care of small line voltages."

Radio engineers are considering the possibilities of further safeguarding commercial airplanes between Venice and Vienna which fly over the Alps en route.

The New Crosley Lowave For Short Wave Reception



PRICE \$40.00 WITHOUT TUBES

Popularity of short wave broadcasting is increasing rapidly. Listeners are desirous of obtaining units with which they can tune in the short wave stations. The Crosley Lowave is just what they want. Can be used with any tube set. This is certain to become a fast seller immediately. Order a reasonable supply from your distributor NOW. Be prepared to meet the demands of your customers.

The Crosley Radio Corporation
CINCINNATI, OHIO

"THE BEST ELECTRIC SET WE HAVE EVER OPERATED"

"The Crosley Radio Corporation,
"Gentlemen:

"I tried one of your new batteryless radios last night and was amazed at the performance. With an eighteen foot indoor aerial, I brought in twenty-five distant stations in one hour. W J Z, a thousand miles away, came in like local stations. This set is unsurpassed in tonal qualities and distance getting abilities. It is by far the best electrical set I have ever operated. "L. W. Hesse, Motor Car Supply Company,"
Chicago, Illinois.

Every One Enthusiastic About the New Batteryless Radios

The AC-7-C

The new AC-7-C batteryless six tube radio has taken the country by storm. Never before has a radio been praised so highly. It is certain to become the fastest selling receiver ever offered. Every dealer must have a reasonable number in stock. The radio season has just begun for those dealers who feature these new sets.

Price \$95.00

The AC-7

This is the same as the AC-7-C except it is installed in a table cabinet. Its very low price will appeal to thousands. Californians are hearing eastern broadcasting stations regularly with this radio. Everyone proclaiming the new batteryless sets the very best ever produced by Crosley.

Price \$70.00

The "A", "B", "C" Battery Eliminator

The Crosley "A", "B" and "C" battery eliminator was designed solely for use with these radios. It has been referred to by radio experts as the "Wonder Box of Radio." A battery eliminator is shipped with each batteryless radio.

Price \$50.00
Raytheon Tube for Eliminator \$6.00 Extra

Other Four, Five and Six Tube Radios

Model 4-29—Four tube radio, one stage of tuned radio frequency amplification, Crescendon controlled detector and two stages of audio frequency.—\$29.00.

Model 5-38—Five tube radio, same as 4-29 with additional stage of radio frequency.—\$38.00.

Model 5-50—Five tube radio, single dial control, power tube adaptability, Crescendon, acuminators, etc.—\$50.00

Model 5-75—Five tube radio, same as 5-50 except installed in console cabinet, with built-in Musicone.—\$75.00.

Model 6-60—Six tube radio, three stages

of radio frequency, detector and two stages of audio frequency. Single dial control.—\$60.00.

Model 6-85—Six tube radio, same as Model 6-60, except installed in console cabinet with built-in Musicone.—\$85.00.

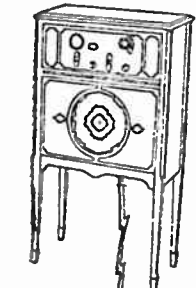
R. F. L.-90—Six tube radio, using famous R. F. L. circuit. Console cabinet with built-in Musicone.—\$98.00.

R. F. L.-75—Five tube radio, using famous R. F. L. circuit.—\$65.00.

Lowave—Device permitting tuning in low wave stations. Used with any radio set.—\$40.00.

CROSLY RADIO

BETTER · COST LESS



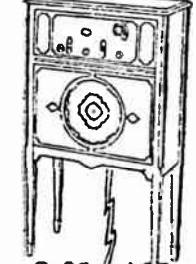
AC-7-C \$95



ABC BATTERY ELIMINATOR \$50



AC-7 \$70



6-85 \$85



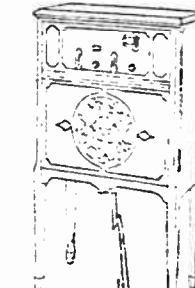
4-29 \$29



MUSICONES SUPER \$14.75
ULTRA \$9.75
DELUXE \$23.50



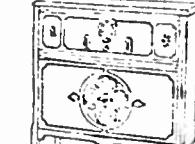
MEROLA \$15



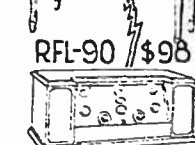
5-75 \$75



5-50 \$50



RFL-90 \$98



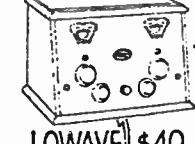
RFL-75 \$65



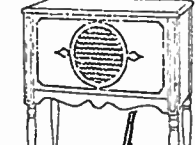
5-38 \$38



6-60 \$60



LOWAVE \$40



MUSICONSOLE \$32



Minneapolis, Minn.

January 21, 1927.

MANUFACTURERS
SPARKON STORAGE BATTERIES
BATTERY PARTS



EXCLUSIVE DIST.
Red Jacket AND BULL DOG DRY CELLS



LAMPS
NATIONAL MAZDA MINIATURE LAMPS

RADIO EQUIPMENT

MARVEL CARBURETERS

AUTOMOBILE TIRES
"NOTT'S THREE POINT" INNER TUBES

Crosley Radio Corp.,
Cincinnati, Ohio.

Attention: Powel Crosley, Jr.

Dear Sir:

We received the sample AC7 and AC7C batteryless radio receivers. The writer tested the AC7 last night and wishes to congratulate you on the excellent performance of this set.

On a very short aerial - not over 50 feet long and at no point over 10 ft. above the ground - coast to coast loud speaker reception was enjoyed, tuned through three powerful locals; there is no AC hum or noise.

There is a waiting market for this set and we feel sure that these two numbers will be very popular.

Yours very truly,

W. S. NOTT COMPANY

Paul Goldsborough
Paul Goldsborough
Assistant Manager

PG:GKN

Invention Modernizes Old Style Phonographs By Linking Them With Modern Radio Receiving Sets

Dealers Advised To Confine Dealings To Few Jobbers

Dangers of Buying Indiscriminately from Unlimited Number of Sources Bared by Distributor.

"Trilling and Montague, Crosley distributors at Philadelphia, point out, in the following article appearing in their interesting house organ—"Radio Talks"—the advantages of a dealer purchasing merchandise from a limited number of jobbers:

It has long been accepted as a business axiom that a dealer gains many advantages by confining his business dealings to as few supply houses as possible. The reverse, however, seems to be the rule with many radio dealers, who buy indiscriminately from an unlimited number of sources. Indeed, it is not uncommon to see a small retail dealer doing business with as many as a dozen wholesalers, which adds greatly to the burden of the retailer's problems, as will be shown later, instead of being to his advantage, as he presumably supposes.

On the surface, there appears to be two reasons which would prompt a dealer to buy from numerous houses instead of confining his purchases to the fewest number consistent with his needs. First limited working capital or credit, which condition the dealer tries to alleviate by limiting his purchases in any one quarter and thus keep the true state of his finances from being closely checked by his creditors. Second, playing one wholesaler against another with a view to gaining an advantage in prices, terms, or other consideration.

To attempt to cover up financial short-comings in the manner first above indicated, is to imitate the ostrich, which buries its head in the sand to avoid being seen by its pursuer. No man can succeed long in escaping the dreadful consequences of such erroneous design. Indeed, he hastens his downfall by adding to his burdens the constant vigilance and manipulations required to prevent discovery, which activities prevent him from attending to the proper functions of his business. It is obvious that a dealer in this position has more to gain by confining his dealings to a few, or even a single supplier, and in that way be in position to meet his obligations more promptly and to receive

(Continued on Page 13)

Thousands Of Obsolete Machines Are Saved From The Scrap Heap By Recently Invented Merola

Device Developed by Crosley Engineer Converts Mechanical Phonograph Into Electrically Reproducing Machine, With Excellent Tone and Volume.

By John R. Loofbourow
Department of Physics, University of Cincinnati

Thousands of old fashioned mechanical phonographs, made obsolete by newly developed electrical talking machines, have been saved from the scrap heap by a new and unique invention.

This device, known as the Merola, has been developed by Charles W. Peterson, Cincinnati inventor, employed by The Crosley Radio Corporation.

The unit, operating in conjunction with a radio set, converts any mechanical phonograph, playing a laterally cut record, into an electrically reproducing machine. This increases volume, eliminates needle scratch and enables a more complete reproduction of the entire musical range, without distortion.

The MEROLA derives its name from the initial letters of "magneto electric reproduction."

Briefly, the MEROLA is a substitute tone arm for the phonograph. It is attached by a cord to the detector socket of a radio receiving set and the music from the record is thereby reproduced through the radio set and loud speaker. The MEROLA also is equipped with a volume control device.

Before explaining the theory and operation of the new device it might be well to scan the fundamental problems that have made undistorted mechanical reproduction practically impossible. The ordinary phonograph record collects sound impressions on a disc. These sound impressions are represented by "wiggles" in the grooves of the records and they are transmitted to a reproducing diaphragm by means of a needle.

It is in this diaphragm that we encounter one of the major stumbling blocks in the way of perfect mechanical reproduction. Every diaphragm tends to vibrate with a certain frequency characteristic of its size, shape, material and other qualities. Consequently diaphragms tend to reproduce some musical notes better than others. Some notes are reproduced with true tone quality, others are augmented too

much and others are almost entirely blotted out.

The same difficulty is encountered with horns. Every horn tends to "resonate," as scientists say, at some particular frequency. That is, it augments some notes and neglects others.

An analysis of electrical reproducing methods, which overcome these obstacles, may be conveniently given by a description of the MEROLA, which is typical of such methods of reproduction.

The interior construction of the MEROLA consists of a light, hollow iron armature carrying a needle. This is made so light that it follows easily any wiggles in the record groove, even those representing the highest sound frequency, that is, the highest musical notes. The armature is too small and too light to have any appreciable effect on the reproduction due to natural vibrating frequencies of its own. Thus the distortion characteristic of diaphragms is done away with.

About the armature is placed a coil of wire, and a permanent magnet of the circular type is so mounted that the armature lies in the intense field between its pole pieces. Every movement of the armature in this field will cause a current to flow in the armature coil, because of the same electromagnetic laws which make possible the generation of electricity by the rotation of a coil of wire in the magnetic field of a dynamo.

Thus the wiggles, or waves, in the record groove cause corresponding electric currents to flow in the armature coil. It is merely necessary to amplify these current fluctuations in the audio-frequency stages of a radio set, and to deliver the output from the set to a high-grade loudspeaker, and the result will be electrical phonographic reproduction of the finest quality.

It is the loudspeaker which overcomes the difficulties ordinarily encountered in phonograph horns. The radio speaker corresponds to

(Continued on Page 13)

California Fan Is Enthusiastic Over Five Tube Radio

Range and Clarity Unusual for Territory Where Thermometer Goes to 115°, and Static is Always Bad.

(The following interesting article appeared on the first page of a recent issue of the Coalinga, California, Progress):

"Otto C. Smith, the very efficient and congenial salesman, at W. W. Smith's sporting goods house has been an ardent radio fan, or bug, or whatever it is they call 'em, for a period of five years, and has a wide knowledge of the 'game of reception' gleaned from careful study and personal observation. He has experimented with instruments of every description and at this particular stage of his experiments, admits that he is 'sold' absolutely and permanently, on the Crosley 5-50.

"The Coalinga district averages a topographic altitude of 565 feet, and is considered one of the poorest places in existence for 'reception.' We are in a valley surrounded by hills and mountains, and in the summer the thermometer occasionally stampedes to a point of 110 to 116 degrees. There is an abundance of static nearly always. However, Mr. Smith has found that the Crosley 5-50 'brings them in' clearer than any radio he has heard here. And its 'range' is unusual.

"The following list comprises a few of the stations logged by Mr. Smith on a single 'fishing' trip:

- KDKA, Pittsburgh; KPSN, Pasadena; KOA, Denver; WJAZ, Chicago; KMOX, St. Louis; KFWS, Chicago; WJR, Detroit; KGW, Portland; WHO, Des Moines; KLX, Oakland; KHJ, Los Angeles; KFOA, Seattle; KPO, San Francisco; CFON, Calgary, Can.; OKCD, Canada; KHJ, Times, Los Angeles; KMTR, Los Angeles; KJR, Seattle; KFBC, San Diego; KNX, Hollywood; EGO, Oakland; WLS, Chicago; WJAZ, Chicago; CFCT, Victoria, B. C.; KOIN, Portland; KSL, Salt Lake City; CNRV, Canadian Natl. Ry.; WQJ, Chicago; KMLJ, Clay City, Nebr.; WOAW, Omaha, Nebr.; WOI, Ames, Iowa; KYOO, Bristow, Okla.; KFVD, Venice, California; KMS, Fresno; KFON, Long Beach; KOWV, Walla Walla, Wash.; KFKX, Hastings, Nebr.

Kentuckian Tunes In Port Au Prince With Crosley 5-50

Montana Listener Listens for More Than Two Hours to Australian Station, Using 5-38 and Musicone.

How a Newport, Ky., listener tuned in a station in Haiti, and a Montana fan listened for more than two hours to a station in Australia, both using Crosley receiving sets, are related in the following letters, which may be pointed out by Crosley dealers as proof that far-away stations easily are tuned in by Crosley set owners:

"Dear Sir: "Last evening I had the pleasure of listening to the broadcasting station at Port Au Prince, Haiti. I have one of your Model 5-50 receivers and I am very much pleased with my set. I purchased this set about a month ago and have received more than one hundred and seventy-five broadcasting stations, including two in Mexico City, five in California, six in Canada and two in Colorado.

"I have not listened to a set yet that equals the Model 5-50 in tone and selectivity. I am enclosing a copy of the letter which I mailed to the station at Port Au Prince.

"Wishing you a Happy New Year, I beg to remain,

"Harold A. Abbe,
Newport, Ky."

"Dear Sir: "I have just signed off from listening for two hours and seven minutes to a program from Sydney, New South Wales, Australia, and I do not believe there was a single selection on the program during this time that I did not pick up.

"The set I used was a Model 5-38, which I have set up in my home. This set is equipped with five 301-A tubes, dry cell "B" and "C" batteries and a storage "A" battery. I used an iron pipe for a ground and an outside single wire antenna about 90 feet long and 25 feet high. The tubes I used have been in constant use since about the first of March. I used a regular Musicone all the time.

"Now as to the program I received. I returned home from a dance at a little before four and tuned in this station at just about 4:00 a. m., but did not pay any particular attention until the announcer started giving a weather forecast for Sydney and New South Wales. From them on I logged it. I picked it up between WLS, Chicago, and WWJ, Detroit, or 36 on the dials, which ought to be

CROSELY PUBLICITY IN JAPAN



Reproduced above are the covers of two Japanese radio magazines, on which Crosley Radios are featured. Both were beautiful three colored covers. Crosley radios are very popular in Japan, are advertised extensively and "draw" a large amount of publicity.

very close to 350 meters wavelength.

"There was very little fading until after 6:00 a. m. when the sky started to get gray in the east and I presume it would be excusable not to get daylight reception quite that far. At any rate it would be pretty hard to get much more distance until we get broadcasts from Mars.

"You have some radio and please accept my congratulations.

"Albert J. Dorton,
Glasgow, Montana."

"Gentlemen: "Tuning in long distance with a Crosley 5-50 may be an everyday occurrence, but when an R. F. L-75 will pick up KDKA, Pittsburgh, Pa., at 4:30 in the afternoon, without the use of an aerial, is some feat to boast of. This was the experience of R. G. Martin, Crosley dealer for Emmett, Idaho, a far-out Western town, when a week or so before Christmas he had to climb up on his roof to repair the aerial which had broken down in a snow storm.

"Disconnecting the aerial in order to make the repair, he was surprised to hear a program com-

ing in while on the roof, and calling to his son, Glenn, who had been left in charge of the store, he heard the announcement over the radio—KDKA, Pittsburgh—with a program that he could hear very plainly while on the roof. The aerial was left disconnected until the completion of the program which was heard by a large crowd gathered to witness the almost unbelievable results with a Crosley R. F. L-75.

"Mr. Martin is proprietor of Martin's Radio & Service Station, exclusive Crosley dealers for Emmett, Idaho, and has been successful in putting out a large number of Crosley radios this season. He says he has 'em all talking Crosley and expects to treble his business for the coming season.

"Fred J. Hotes, Correspondent, The Radio Broadcaster, Marshall-Wells Company, Portland, Oregon."

"Gentlemen: "Last night I was at home alone so I amused myself by tuning in on the four tube 4-29 Crosley radio set recently bought off you. Between the hours of six o'clock and midnight, I listened to 35 sta-

tions in 17 states and one in Canada.

"My list includes stations in Toronto, Buffalo, New York City (3), Atlantic City, Baltimore, Pittsburgh, Cincinnati, Nashville, New Orleans, Jacksonville and Clearwater, Fla., Tulsa, Denver and Minneapolis, besides stations in Michigan, Indiana, Illinois, Iowa, Missouri and Nebraska.

"All these stations were heard through the Crosley Super Musicone, and all were heard clearly and distinctly except Clearwater, Fla., which was not clear owing to interference from Indianapolis.

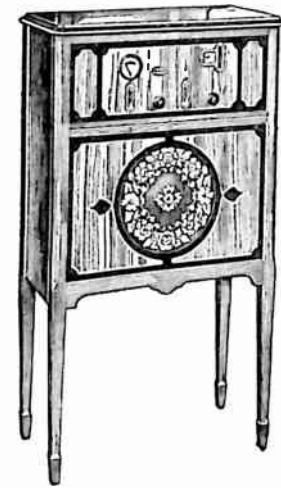
"You may be interested in knowing the kinds of programs these stations were giving at the time I listened. Eighteen stations were giving orchestra selections, eight vocal numbers, three piano and violin duets, one an organ recital, one a saxophone solo and five educational talks and lectures.

"From the above statements you may rightly infer that I am well pleased with my Crosley 4-29.

"J. J. Crowder, Peoria, Ill." The letter from Mr. Crowder was sent to Clifford Bros., Crosley dealers at Peoria, Ill., and later sent to the editor of The Broad-

ADVERTISE THESE NEW BATTERYLESS RADIOS

6 TUBE BATTERYLESS A.C. 7.C. CONSOLE



\$95

ABC Power Unit \$50... Extra



THE LATEST CROSELY ACHIEVEMENT

The very latest achievement of the world's largest radio manufacturer. A six tube batteryless radio and battery eliminator designed especially for it. Operated direct from your light socket or floor plug. No batteries to worry about. The new set is exceptionally efficient, capable of bringing in broadcasting stations from coast to coast. Incorporates all the latest refinements of radio. Single dial control. Built in Musicone—a genuine Crosley reproducer. See this new and wonderful radio now at our store.

FOR SALE BY

USE THESE MATS AND "ELECTROS" ORDER BY NUMBER

"M" Stands for "MAT" - "E" Stands for "ELECTROTYPE"

Use these mats and electrotypes in advertising the new Crosley Batteryless Radios locally. Tie in with the national advertising campaign being conducted by The Crosley Radio Corporation by advertising in your newspapers. You will be surprised at the results.

For complete radio enjoyment...



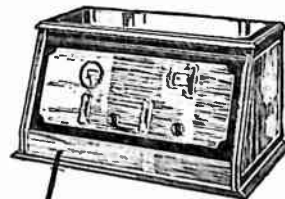
Here they are! A table model and console radio without a battery needed. A simplified, compact efficient little power unit supplies necessary A, B and C battery current direct from house lighting outlets or a lamp socket.

No batteries to renew! No batteries to recharge! No trickle charger to watch! No water to refill batteries! No acid to spill! No run down batteries just as good program begins!

Snap your lamp switch. The set is full powered instantly and constantly at highest peak. Snap it off. Everything is shut off at the electric light connection.

This unique power supply unit is designed solely by Crosley, solely for these two Crosley radios. It incorporates new and advanced ideas and principles exclusive to Crosley.

Both the radio sets are six-tube tuned radio frequency circuits of amazing efficiency, incorporating three stages of radio amplification, detector tube and two stages of audio frequency amplification.



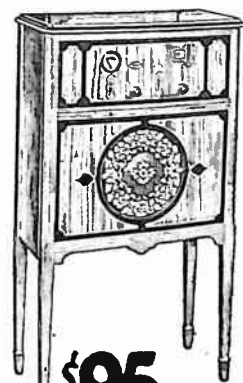
The CROSELY
6 tube...
batteryless
A.C. 7. \$70

The greatest Crosley achievement. A six tube batteryless radio for \$70.00. Operated direct from light socket in conjunction with specially designed Crosley battery eliminator. See this wonder radio on display at our store.

FOR SALE BY



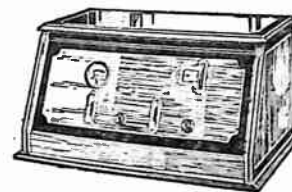
ABC Power Unit \$50 extra



\$95
AC-7C Console

FOR SALE BY

ABC Power... Unit \$50 extra



AC-7... \$70

6 TUBE BATTERYLESS A.C. 7.C. CONSOLE



\$95

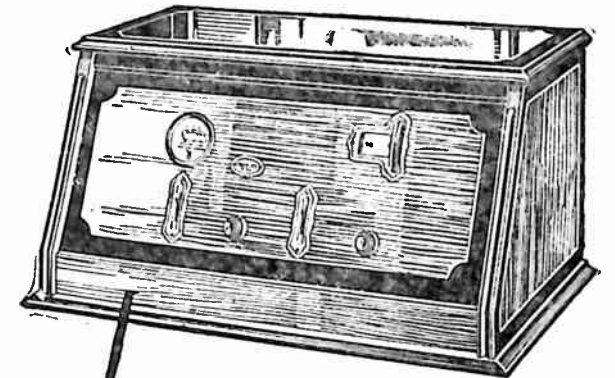
ABC Power Unit \$50... Extra



The Wonder Box of RADIO

Beautiful batteryless console radio for \$95.00. Eliminator designed solely for Crosley. Truly an exceptional offer. Coast-to-coast receiver operated direct from light socket. See this new radio on display at our store NOW.

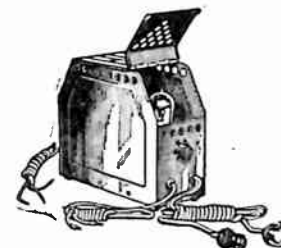
FOR SALE BY



The CROSELY 6 tube... batteryless A.C. 7. \$70

The sensation of the radio season! A six tube batteryless receiver for but \$70.00. Incorporates all recent developments in radio. Power unit, at \$50.00 extra, built especially for this set. This battery eliminator is truly a wonder box. Has been proclaimed by experts to be the most efficient one on the market. Throw away those troublesome batteries. Install an up-to-date batteryless Crosley radio.

FOR SALE BY



ABC Power Unit \$50 extra

Universal Language Is Needed In Europe As Result of Radio

American Listeners Also Soon Will be Favoring Adoption of an International Language.

Radio fans in Europe are rapidly beginning to realize the need of an international language, so as to be able to enjoy all of the programs that they hear.

Need of an international radio language was realized several years ago in America, and lessons in the language Ido (an improvement on Esperanto) were actually broadcast from station WLW, the Crosley station in Cincinnati.

Although Ido has not been popularly adopted by foreign broadcasters as a means of international understanding, the need for some such language as Ido is now being keenly felt by European radio listeners.

Up to the present time American fans have not had to contend with the problem of receiving programs in foreign tongues, since European reception has not been practical.

Another Full Page Advertisement

O. D. TUCKER IV & CO. Distributors

CROSELY RADIO

Model 100	\$97.50	Model 100	\$60.00	Model 100	\$95.00
Model 101	\$229.00	Model 101	\$75.00	Model 101	\$177.50
Model 102	\$38.00	Model 102	\$85.00	Model 102	\$15.00
Model 103	\$50.00	Model 103	\$120.00	Model 103	\$15.00
Model 104		Model 104	\$145.00	Model 104	\$10.00

O. D. TUCKER IV & CO. 207-9-11 West Third, LITTLE ROCK, Phone L. D. 87-4-5604, 7741, 4500

This full page advertisement in a recent issue of a Little Rock newspaper resulted in the sale of a large number of Crosley Radios.

BUSY STREET CORNER IS "STUDIO" FOR WLW

Charles P. Taft, brother of the Chief Justice of the United States Supreme Court, overcame "mike" fright" several days ago and made his first appearance before a radio microphone.

The occasion was a special broadcast staged by WLW, the Crosley station, on a crowded Cincinnati street corner, with Ford and Glenn, the WLW Lullaby Boys, furnishing

the entertainment. The broadcast, the first of its kind in radio history, took place in front of the building occupied by Mr. Taft's newspapers. The veteran publisher was persuaded with some difficulty to approach the "mike," but once

THE JOHNSON ELECTRIC SUPPLY CO.
331 Main St. Cincinnati
Wholesale
CROSELY DISTRIBUTORS
Write Us For Dealer Proposition

Authorized Distributor
CROSELY RADIO
Prompt Service
Young, Lorish & Richardson, Inc.
710 W. Jackson Blvd., Chicago
Phone: Haymarket 8240

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 NATIONAL BANK - CINCINNATI

there he acquitted himself with distinction by saying only five or six words and thereby earning an affectionate place in the hearts of speech-ridden radio fans.

Powel Crosley, Jr., radio manufacturer and Col. C. O. Sherrill, city manager of Cincinnati, also made short and snappy talks.

The unique sidewalk broadcast attracted a mob at the street corner that blocked traffic for fully half an hour. It was lunch time and hundreds of office workers from nearby buildings thronged the street.

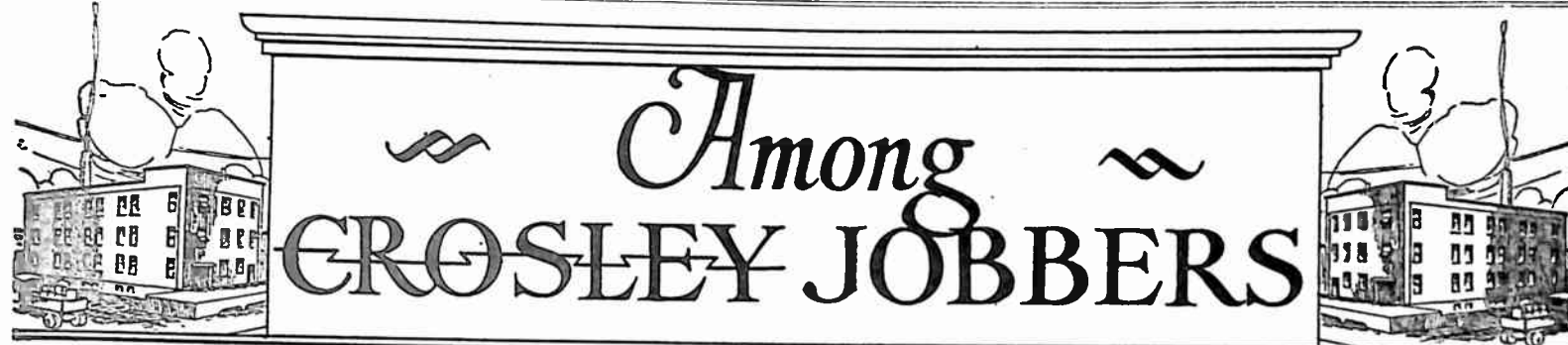
If You Wish to BUY or SELL SECURITIES Or Own Some About Which You DESIRE INFORMATION Communicate With Us. Our Statistical Department Is At Your Service

WESTHEIMER & CO.
MEMBERS OF—
THE CINCINNATI STOCK EXCHANGE
THE NEW YORK STOCK EXCHANGE
Telephone: Main 567
326 WALNUT STREET

NEW ELECTRIC SIGNS ARE FLASHING EVERYWHERE
Order Your Three-Color Electric Crosley Advertising Sign Immediately.

This neat and attractive sign, which can be seen at great distances during the day and at even greater distances when illuminated at night, is certain to attract immediate attention.

PRICE OF GLOBE AND EXTENSION ARM \$12.00
F. O. B. CINCINNATI
Cash, Check or Money Order Must Accompany Your Order Which Should Be Sent To Advertising Department,
The Crosley Radio Corporation
Cincinnati, Ohio



Minister Enjoys Hearing Crosley Jobber Broadcast

Station WOAI Receives Interesting Letter from Methodist Pastor, Who Also Praises His Crosley Radio Set.

One of the most popular of the Southern broadcasting stations is WOAI, owned and operated by the Southern Equipment Company, Crosley distributors at San Antonio, Texas.

"Humble, Texas. "Broadcasting Station WOAI, "San Antonio, Texas. "My dear sirs:

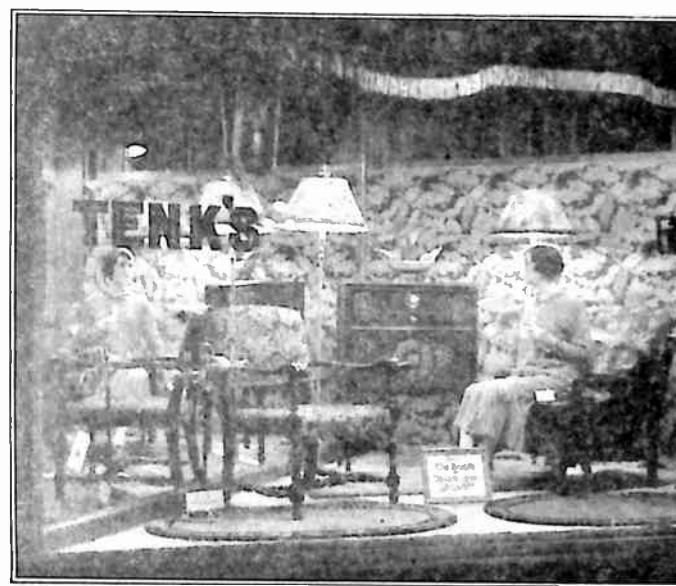
"I do not think it is right for a person to sit for so many hours and enjoy programs such as you have put on the air without taking time to show appreciation in a real way.

"I am pastor of First Methodist church at Humble—twenty miles from Houston and my radio set is where I can enjoy it while I work. I am sitting here now listening to 'Bye bye blackbird,' as played by your afternoon pianist.

"This reference to the afternoon programs alone does not mean that we fail to appreciate those on the air at night. In the making up of them you certainly show fine taste and discrimination.

"We have a Crosley radio and have been using it two years. And what I mean is, that we have USED it. It is in operation at least six hours every day, at this season of the year.

Attractive Radio Window



The picture above is that of the show window of the Tenk Hardware Company, Quincy, Ill., distributors of Crosley radios.

"This photograph shows the east window of our city store, 512 Maine St. We had the RFL-90 on display in the window during our radio show which was held last week, Jan. 17th to 22d.

"Our radio show was sponsored by the Carroll Broadcasting Company, of Chicago, who had a portable broadcasting station operated on 100 watts and 215 meters.

they are good and strong. We get all the stations that the people get who have sets that cost three or four times as much as ours 'set us back.' From coast to coast we reach out and rake 'em in, and the fine part of the story is, that the reception we get is not jazzed up with all kinds of distorted 'throatiness.'

"We have a Crosley radio and have been using it two years. And what I mean is, that we have USED it. It is in operation at least six hours every day, at this season of the year.

The afternoon and evening. We sponsored the program between seven and eight o'clock each evening and called it the "Crosley hour." Three of the local dealers paid part of the expense and we paid the balance.

"We had responses as far west as Marysville, Kans.; St. Paul, Minn. and one from some town in Ohio, so you can see it more than covered our entire trade territory.

our set. And the neighbor's set was what you might term 'the cat's pajamas.' It cost him something like three hundred and fifty bucks.

"Frank Platt."

Interesting Story Is Told By Jobber In Letter To Trade

Radio Season Still On In Full Swing For Those Who Keep Selling, O. D. Tucker, IV & Co., Says

In an interesting letter to the dealers in their territory who are handling Crosley merchandise, O. D. Tucker IV & Co., Crosley distributors at Little Rock, Ark., says: "This is the season when you can either sell radio or not sell it. Before Christmas you could sell all you could get. Now conditions have changed; you can get all you can sell. Some dealers already have made up their minds that the radio season has ended.

"This condition reminds me of an incident in the business of a company that made flower pots out of brick clay. Their business had always been good about three months a year—the other nine months shut down. Each late winter they would organize a new sales force, but the sentiment around the plant would convince these men about April that the season had ended and very shortly it was ended.

"However, one late winter the flower pot plant was having trouble completing its sales force so they put this boy to work in one of the hardest and farthest distant territories. He did not make enough money to come to the plant and no one at the plant took the time to write him when the season ended and the darn fool went on selling flower pots thru, May, June, the summer, fall and the next winter. The sales plan of this plant has changed and it now works the twelve months of the year. So it is with the radio business. There is good reception all the year, good programs, and every reason why there should be some all-year business in the radio business."



Radio Reliability Costs You Less, Dealer Declares

Neatly Arranged Show Room—Only Nationally Advertised Radios Sold

Adopting a principle and following it scrupulously is one of the best ways of succeeding in any business.

By this maxim Silver Marshall means dealing in good products that are known to be dependable.

One of the outstanding features of the Silver Marshall store is the display room. This is not so much a room as a cozy nook, where prospective purchasers may look over various sets and choose the one that appeals most to them.

Dealer Logs 287 Broadcasting Stations With Crosley Five Tube Model 5-50 Set; Out-Demonstrates High Priced Receivers

Roy G. Utne, Crosley authorized dealer at Ortle, South Dakota, tells, in a letter sent to the Broadcaster, about out-demonstrating many high priced radios with the five tube 5-50 and how he has tuned in 287 broadcasting and 40 amateur stations.

Dear Sirs:

I am a Crosley dealer and think it is only fair that you should know several of the achievements that I have accomplished with one of your 5-50 sets since November 1, 1926.

The Broadcaster upholds the traditions of Crosley radios; it's wonderful.

Yours very truly,

Roy G. Utne.

And here is a letter from one of our dealers at Oil City, Pa.:

Gentlemen:

We are enclosing herewith a let-

tune in a station with little or no difficulty.

Only nationally advertised sets are sold at the Silver Marshall store. Naturally enough, these are very much in demand.

The radio business is becoming more stabilized," Mr. Young said.

Radio programs have a direct bearing upon the business of the

ter which we received from a user of a Crosley 5-50 Radio. It speaks for itself.

We might add that this is only one case of about fifty as we have sold about that number of Crosley sets in the last four weeks.

Never in all our radio experience have we found a set that has sold like the 5-50 and the 5-75.

We are wondering what we are going to be able to do with the new A C sets. They certainly should be wonders.

Yours for more Crosley Sales, M. A. LALONDE & SONS, A. R. Lalonde.

The letter he enclosed follows: Prospect Park, Franklin, Pa.

Dear Sir: Just a line about the Crosley 5-50. It sure is satisfactory.

Sunday morning, between two and four o'clock, I had good reception on the speaker from KFI, Los Angeles, KFVD, San Pedro, a small station, KGO, Oakland, KPO, San Francisco, KOMO, Seattle, Washington. I think that is a record.

Yours very truly, Lee Prosser.

dealer, Mr. Young reported. Immediately following any major broadcast, such as the presentation of the World Series or a similar event of general interest, there is a noticeable increase in sales.

Like all alert retailers, Silver Marshall realizes the inestimable value of good window displays. The windows of this store are changed at least once a week and care is taken always to tie up the displays with current advertising.

It is an interesting fact that 95 per cent of the sales are based upon time payments. Needless to say, this is an apt indication that people are immediately interested in radio and that they prefer to invest in good sets that are nationally known rather than to buy cheap brands.

Dealers Again Are Urged To Oppose New Postal Rates

Proposed Increases Will Work Hardships on Every Merchant Who Circularizes Local Mailing List.

In the last issue of the Broadcaster we urged every Crosley dealer and distributor to send a letter to his congressmen and U. S. Senators, asking them to vote against the proposed changes in postal rates, and now we wish to repeat this request, realizing that only by concerted and immediate action can increased rates be avoided.

In circularizing your consumer mailing list, you naturally use third class mail. Such letters as these formerly were mailed for one cent, but almost two years ago the rates were increased to 1 1/2 cents.

But your Congressmen are reasonable and will not adopt legislation if they know it will work hardships on their constituents.

Another feature which helps to insure faithful reproduction is the "deadener", a piece of soft rubber attached to the armature which helps to dampen out the high frequencies and thus overcomes what little natural period is actually characteristic of the armature.

For adjusting the loudness of the reproduced music, a volume control is provided. This consists of a rheostat which is connected across the armature coil in such a way that when all of the resistance of the rheostat is cut out, the coil is short-circuited.

Let us know how many of you send protests to Congress. Do your share in preventing adoption of the measure that soon will be ready for a vote.

Merola Is Saving Old Phonographs From Scrap Heap

(Continued from Page 6.)

the link in the reproducing chain which, in mechanical phonographs, is represented by the sound chamber of horn. Horn-type speakers have been replaced almost entirely by the more modern cone-type speakers.

Thus the two vital features of the electrically reproducing system which explain its superiority to mechanical systems of reproduction are, first, the replacing of the usual diaphragm by a light, sensitive armature, and second, the replacing of the horn by a distortionless, cone-type speaker.

In order to make the MEROLA armature just as sensitive as possible to all tones, a special design, covered in the patents on this device, is used. The entire armature and needle chuck consists of a single piece of light, tubular magnetic material which has been formed into shape so as to provide a chuck needle holder at one end.

Installing the MEROLA is simply a matter of putting the MEROLA plug in the detector socket of the radio set and connecting the extra lead wire to the detector "B plus" terminal of the set.

When connected the armature coil of the MEROLA is placed across the primary of the first-stage audio-frequency transformer of the set. One terminal of the

Why You Should Boost Crosley

By FRANK GRIECO, Representing Motor Car Supply Co., Chicago, Ills.

CROSLEY is a national name in radio.

CROSLEY dominates in advertising in the moderate price field.

CROSLEY for years has been the pioneer in broadcasting which makes the sale of his merchandise easier.

CROSLEY has probably the greatest number of dealers in the U. S. A.—Therefore Crosley sets are easily purchased.

CROSLEY leads—never follows.

CROSLEY factories are equipped for mass production—a dealer is always sure of merchandise—and quality at low cost.

CROSLEY has no competitor—he builds radio sets for the masses—for the great American workingman's pocketbook.

CROSLEY has kept pace with the times—he is now the FORD of the radio industry.

So push CROSLEY, save time and make money.

into the set and less of it flows through the rheostat resistance. The rheostat controlling the volume is of a special design which will not wear out, even with extensive use.

To compensate further for minor distorting, frequencies introduced by mechanical characteristics of the vibrating system, a condenser and resistance are connected in series across the terminals of the armature coil.

The detector tube must, of course, be removed from the radio set before the MEROLA plug is inserted in the detector socket.

When connected the armature coil of the MEROLA is placed across the primary of the first-stage audio-frequency transformer of the set.

MEROLA armature coil is connected to the plate terminal of the detector socket. The other terminal is connected to "B plus 22 1/2".

Thus the current variations caused in the MEROLA armature coil by the vibrations set up in the armature as it travels along the record groove are impressed across the first audio-frequency transformer.

The unit may also be permanently connected to the radio set, if desired. If this is done, it is sometimes necessary to de-tune the radio set when using the MEROLA in order to prevent the reception of the radio signals simultaneously with the phonographic reproduction of music.

Dry-cell tubes may be used in the set, but better results are obtained when the standard storage-battery type tubes are used, and best results are obtained when the standard storage-battery type tubes are used, and best results are obtained when the standard storage-battery type tubes are used.

Dealers Advised To Confine Dealings To Few Jobbers

(Continued from Page 6.)

the utmost of cooperation which is usually accorded a good account, regardless of the size of its business. Accounts of the right calibre though small, are always more appreciated than troublesome ones of bigger proportions.

As regards the second consideration, it unquestionably holds some possibilities of temporary advantage, but upon reflection it will be found that the disadvantages of the arrangement outweighed its advantages.

The time element involved in doing business with a large number of supply houses amounts to a very considerable item of loss, much greater than the average dealer realizes.

Summarizing, it becomes evident that a merchant's best policy is to confine his business to a few reliable houses.

By placing the bulk of his business with one or two houses his account is usually considered worthwhile. The house and its salesman take a personal interest in his welfare; he is often tipped off to his advantage; he is advised in a wholehearted and sincere manner, and usually he can depend upon his interests being as carefully guarded as those of the house itself with whom he deals.

TABLE OF TUBES FOR CROSLY RADIOS

The accompanying table gives a resume of the information with regard to radio tubes for Crosley sets which has been printed in the last three issues of the "Broadcaster". It is intended for your reference in quickly choosing suitable tubes for Crosley sets.

Type of Set	Type Tubes to Use	Remarks
All "50" Models	..199—Recommended for dry-cell installations. ..12—Satisfactory. ..201-A—Recommended for storage "A" installations or dry-cell "A" installations. ..200—Satisfactory for storage "A" installations. ..200-A—Satisfactory for storage "A" or dry-cell "A" installations. ..120, 112, 171—Cannot be used.	"4-29" Regular199—Recommended for dry-cell installations. ..12—Satisfactory. ..201-A—Recommended for storage "A" installations. ..200-A—Satisfactory as detector. ..200, 120, 112, 171—Cannot be used (unless an adapter is used).
"Pup"	..12—Recommended for dry-cell installations. ..199—Satisfactory. ..201-A—Recommended for storage "A" or dry-cell "A" installations. ..200—Satisfactory for storage "A" installations. ..200-A—Satisfactory for storage or dry-cell "A" installations. ..120, 112, 171—Cannot be used.	"4-29" Portable199—Recommended. ..12—Satisfactory—These two types of tubes only can be used in 4-29 Portable.
All "51" Models	..199—Recommended for dry-cell installations. ..12—Satisfactory. ..201-A—Recommended for storage "A" installations. ..200—Satisfactory for detector. ..200-A—Satisfactory for detector. ..120—In audio socket only. ..112—In audio socket only. ..171—In audio socket only.	"5-35"199—Recommended for dry-cell installations. ..12—Satisfactory. ..201-A—Recommended for storage "A" installations. ..200-A—Satisfactory as detector. ..200 120, 112, 171—Cannot be used (unless an adapter is used).
All "52" Models	..199—Recommended for dry-cell installations. ..12—Satisfactory. ..201-A—Recommended for storage "A" installations. ..200—Satisfactory as detector. ..200-A—Satisfactory as detector. ..120—In both audio sockets if used. ..112—In both audio sockets if used. ..171—In both audio sockets if used.	"5-50" and "5-75" ...199—Recommended for dry-cell installations. ..12—Satisfactory. ..201-A—Recommended for storage "A" installations. ..200-A—Satisfactory as detector. ..120—In last audio socket only if used. ..112—In last audio socket only if used. ..171—In last audio socket only if used. ..200—Cannot be used.
All "Trirdyn" Models	..199—Recommended for dry-cell installations. ..12—Satisfactory. ..201-A—Recommended for storage "A" installations. ..200—Satisfactory as detector. ..200-A—Satisfactory as detector. ..120—In both audio sockets if used. ..112—In both audio sockets if used. ..171—In both audio sockets if used.	"6-60" and "6-85" ...201-A—Recommended. ..200-A—Satisfactory as detector. ..112—In last audio-socket only if used. ..171—In last socket only if used. ..199, 12, 200, 120—Cannot be used.
		"RFL-75" Series 1 ...201-A—Recommended. ..200-A—Satisfactory as detector. ..199 12, 120, 200, 112, 171—Cannot be used (unless adapter is used).
		"RFL-75" Series 2 ..201-A—Recommended. and "RFL-90"200-A—Satisfactory as detector. ..112—In last audio socket only if used. ..171—In last audio socket only if used. ..199, 12, 200, 120—Cannot be used.
		"AC-7" and "AC-7C"....199—In all stages except last audio. ..112—For last audio stage. This tube combination must be used. No other one is satisfactory. The 199 type tubes must be rated at 0.06 amperes filament current.

Merola Is Saving Old Phonographs From Scrap Heap

(Continued from Page 13)

production is obtained with a power tube in the last audio-frequency stage. Either a 112 type or 371 type power tube is satisfactory. Both of these tubes give excellent results in the reproduction of the low notes. Ample volume for home use in even the largest rooms may be obtained with ordinary 201-A type tubes.

A growing use of the MEROLA is in supplying music for large halls and auditoriums. For such use, a power amplifier is required. With the proper type of amplifier, sufficient volume may be obtained to fill a large auditorium with music. In churches and motion-picture the-

aters, the renditions of the finest organists may be played. New records make it possible for each selection to last for a considerable length of time, obviating the necessity of changing records frequently. This new use for electrical reproduction is becoming steadily more popular.

The most important service to which units such as the MEROLA will be put, however, is in converting old-style phonographs in the homes of people everywhere into modern, electrically reproducing instruments. This will enable the owner to get an entirely different kind of phonographic reproduction.

The latest invention in radio broadcasting sets in Germany is housed in an armoured motorcycle in such a manner that only two minutes' preparation is required before sending a message.

Radio's Greatest Novelty!!

"BONZO"



Every dealer should carry a reasonably large stock of these Bonzo Pups. They are, without a doubt, the fastest selling radio novelties on the market. Originally made to serve as advertisements, the demand has grown until now many dealers are featuring them in their window displays. Everyone wants a Bonzo. Cash or check must accompany your order for these Pups.

\$1.00

Send your order to your distributor or to

THE CROSLY RADIO CORP.
Cincinnati, Ohio

CROSLY SERVICE MANUAL

Model R. F. L.-90—Part I, Installation and Operation

(Part II Will Describe the R. F. L.-90 Circuit in Detail.)

Type of Circuit

The Model RFL-90 is a six-tube set, incorporating three stages of balanced radio frequency amplification, a non-regenerative detector, and two stages of transformer coupled audio-frequency amplification. The radio-frequency stages are balanced by the RFL bridge method, which will be fully explained in another article. Part II of this series on the RFL-90 will describe the circuit in detail.

Proper Tubes to Use

Balanced circuits of this type should only be used with tubes having the proper characteristics in all radio-frequency stages. In the factory, the RFL-90 is balanced with standard 201-A type tubes. To prevent oscillations in the radio-frequency stages, only tubes having identical or very similar characteristics to standard 201-A's should be used in these stages.

As a detector tube, a 201-A tube, or one of the new 200-A type detector tubes will be found quite satisfactory. Do not attempt to use a 200 type tube, as this will overload the filament resistance. The detector socket is the socket on the extreme right, as seen when facing the front of the set.

The last audio-frequency stage is provided with extra "B" and "C" battery terminals, so that a power tube may be used in this socket if desired. Good results will be obtained with 201-A type tubes in both audio-frequency stages. For greatest, undistorted volume, however, install a 112 or 171 type power tube in the last audio stage.

Whether to install a 112 type or a 171 type tube when power-tube operation is desired with this set largely a matter which may be left to the dealer's own judgment. Many Crosley dealers have their personal preference for one or the other of these tubes, and each has its advantages and disadvantages. It should be remembered, however, that if a 171 type tube is used in the last stage with more than 135 volts "B" battery, it is essential that a 1 to 1 ratio transformer be used between the output posts and the loudspeaker, in order to avoid serious injury to the speaker. Make it clear to the set owner that a power tube, if used, should be put in the socket marked by means of a white arrow on the sub-panel.

Further information about all of these tubes recommended for RFL-90 may be obtained from the articles on radio tubes which have

appeared in the last three issues of the "Broadcaster."

Proper Batteries to Use

Storage-battery type tubes are recommended for this set (see above). It is suggested therefore that for an "A" battery a 6-volt storage battery of at least 80 ampere hours, or a good "A" eliminator be used.

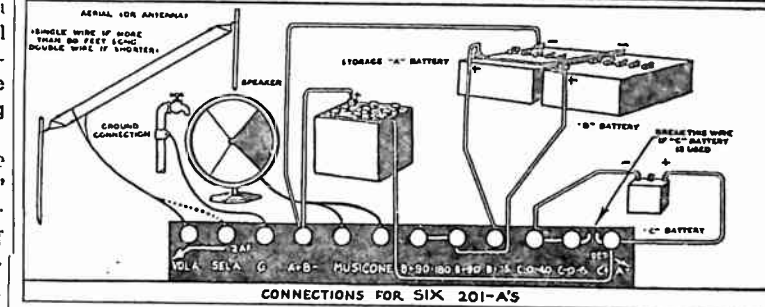
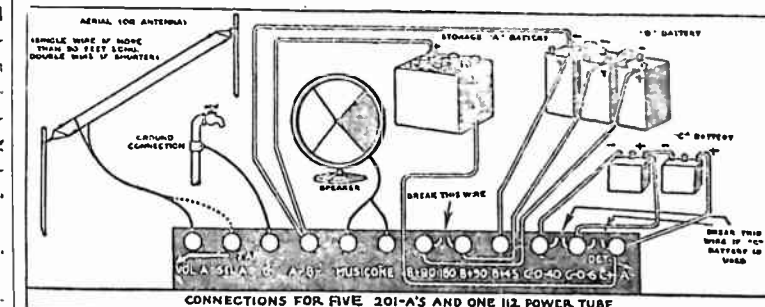
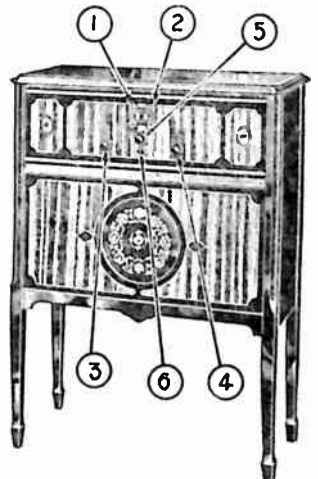
For all amplifier tubes except power tubes, use a 90 volt "B" battery with this set. Do not use higher "B" voltage than this on radio-frequency stages. Follow the tube manufacturers' recommendations with regard to "B" battery voltages

leactivity with it in districts near broadcasting stations short aeriars are necessary. Every Crosley dealer should study his local conditions, and base his recommendations upon tests that he has made himself.

In installing the ground, the general recommendations made in past Crosley service articles and in instruction sheets should be followed.

Connections

A diagram of connections, reproduced from the latest instruction sheets, is shown herewith. A few instruction sheets for this set were sent out which showed the connec-



tion diagrams for RFL-75 instead of those for RFL-90. The manner of connecting RFL-75 is exactly the same, but the terminals are arranged in somewhat different order on the terminal strip. The RFL-90 connection diagram may be distinguished by the fact that it shows a white arrow at the left of the terminal strip, which points to the last stage, audio-frequency socket. The RFL-75 connection diagram does not show this arrow. In case of doubt, follow the diagram shown here.

Two antenna posts are provided on the terminal strip. Both of these should be tried whatever kind of aerial is installed, and the one used permanently which gives the best results.

Always caution the user to cut the wires between the "C" battery terminals before connecting "C" batteries to them, and to cut the wire between "B plus 90" and "B plus 90 to 180" before connecting a "B" battery across these terminals.

Occasional instances are reported from time to time of users who have ruined "B" or "C" batteries by not following this rule.

Tuning is accomplished by means of the two drum-type station selectors, "1" and "2", and the "accumulators" "3" and "4". With some practice, the best approximate setting for the two accumulators for picking up stations with any particular installation will be found. The station selectors may then be rotated until a signal is heard, and the selectors and accumulators adjusted until the signal is loudest. If necessary, the volume may then be reduced by turning back the volume control.

As each new station is received it may be logged, or recorded, on the selector drums.

Every radio listener
must have a
CROSLY Musicone



Every radio listener needs a Crosley Musicone, regardless of the type of receiving set used. Good reception is greatly improved. Development of the Super Musicone, illustrated at the left, has amazed and delighted hundreds of thousands of listeners. You, as dealers, realize the wonderful qualities of this reproducer, but you must convince your customers that it excels anything on the market. This can be done very easily. Demonstrate the Super Musicone. Send salesmen to the home of every radio listener in your neighborhood. Let him demonstrate this reproducer, in comparison with any loud speaker, regardless of price. The difference is so great, the listener will become interested immediately. There is no reproducer that can compare with the Musicone. And it costs but—

\$14.75

The New 12 Inch Ultra Musicone

Many listeners desire a smaller reproducer than the Super Musicone, and still want one just as good. To meet the requirements of these people, the Ultra Musicone has been developed. The actuating unit—and the actuating unit is the real secret of the success of the Musicone—is exactly the same as that in the Super Musicone. The only difference is that the cone is but 12 inches in diameter instead of 16 inches, as in the Super.

\$9.75

Beautiful Musiconsole For Every Table Radio

The Musiconsole is needed by every owner of a table radio. It serves as a beautiful stand for the receiving set, has compartments for batteries and, above all, has a genuine Crosley Musicone neatly hidden behind a silken screen.

\$32.00

