VOL. VII

VII. DECEMBER 15, 1928

NO. 24



hristmas again, and another New Year before us. Inventory or stock taking time! While our material stock is low, I find in

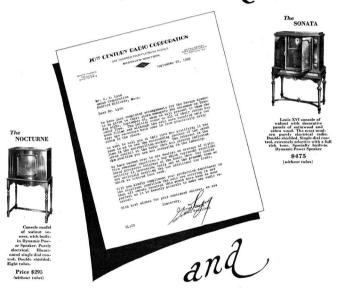
our inventory that Crosley good will---the most valuable thing for any business to acquire---has enhanced tremendously.

The public good will towards Crosley products has never been greater. The dealer and distributor good will are at high tide for those things that we make and sell. The gross volume of our business for the year 1928 has more than doubled. So our thanks go to you dealers and distributors who are responsible for the measure of success and good will that has come to us this year.

We like to think that you have shared in the Crosley success of this year, and assure you that we shall work untiringly to build for your greater prosperity in 1929.

Powellerosley Jr.

# AMRAD has the Finest Jone in Radio



New York knows it/

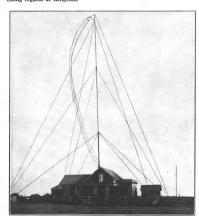
# A Nineteenth Century "Scoop"

# Marconi Broadcasts British Races Terrifying Distance of 14 Miles!

Bold headlines appearing in the "Dublin Daily Express" during the month of July, 1898, indicated that that paper had staged a "scoop".

The events reported were results of the British yacht races during the big annual regatta at Kingston, and the means which made the "scoop" possible was radio. It was the first time that a newspaper had ever made use of radio.

"During July (1898)," says a contemporary report, "the Wireless Company put into execution a novel kind of service directed by Marconl in person, which had found great application in the daily papers; that is to say, he was entrusted with the work of supplying the 'Dublin Daily Express' from oversea the incidents occurring during an intersetting reseat as IX lineston.



A Pioneer Newspaper Radio Station—1900
The Wireless Telegraph Station of the New York Herald, at Siasconset,
Nantucket Island. Massachusetts: From an early work on Radio.

"The wireless despatches were transmitted from the tug 'Flying Huntress,' that followed in the wake of the regatta, to a land station furnished with antennae of about 100 feet in height, and thence were telephoned to Dublin to be published in the evening editions. . . . In this manner the relative positions of the various yeaths were telegraphed up to a distance of twelve miles from the land station, and were published long before the yachts had returned to port. . . . . . During the days that this system was in use, seven thousand despatches were sent between the tug and the land station."

A year later (1889) radio was used to report the international yacht races in New York Harbor. Bulletins outlining the progress of the race were telegraphed from the steamer "Ponce." Messages were sent by the "Ponce" to the Mackey-Bennett cable ship, to be wired to Europe for the foreign papers.

While operation of radio stations by newspapers has not been extensive until recent years (since the development of broadcasting), one of the earliest wireless stations in America was owned by a newspaper. The station of the 'New Yord Herald' at Siaconest, Nantucket Island, Massachusetts, shown in the picture above, was in operation more than twenty-five years ago.

# Dynacone Adapter

With this new Crosley device the type E Dynacone may be adapted to other than Crosley A.C. Receivers!



OUTPUT SOCKET

With the Dynacone Socket Adapter virtually any radio receiving set utilizing a 171 output tube, may secure the exceptional results to be had only with Crosley DYNA-CONE Power Speakers.

Priced for Quick Distribution

The Dynacone Socket Adapter is intended for use with radio sets

having output transformers or output choke systems.

The Type E DYNACONE should be used only with radio sets equipped with 171-A output tubes having 135 volts or more on the plate. Or, on radio sets

having an output tube with a plate current of 20ma. Instructions for installation accompany the Dynacone Sock-

et Adapter.

Order through Your Distributor

OFFIT STREAMS

OFFIT SOME TOWNS

OFFIT CREMAS

# MEROLA

Changes Radio to Phonograph at Will



The Crosley MEROLA is the newest development in radio-phonograph pick-ups. Instant change over from A-C receiver to electrically operated phonograph is possible, using the MEROLA electric tone-arm. Odd-style phonograph and even small portables can be transformed into modern electric reproducers, with tremendous the transformed into modern electric reproducers, with tremendous calculation of the mean of the mean

Your Distributor Can Supply You

somely finished.

Page 4

## THE CROSLEY BROADCASTER

# "School of the Air" for Ohio

# State Education Experts Cooperate in Experimental Programs over WI.W.

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

WW CROSLEY MAAN

Telephone Kirby 3200



crossey manufacturers ratio sets for dio amateur, experimental, and cadcast reception use, under patents the Radio Corporation of America ad Associated Companies, The Haz-tine Corporation, and the Latour Corporation,

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



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

coming in to the editor of the Broadcaster, our "Crosley Dealer's Radio Course" is meeting with warm approval by the Crosley family.

The course is very simple. starts from scratch and works through the essentials of radio. This course was laid out by a very competent man and is well worth the serious attention of all Crosley

It is a known fact in selling merchandise, the more you know about the line you are handling, the better you can sell it. In selling Crosley radio sets, a lot of questions are ed by Mr. John Schuster, president The less they asked by prospects. know about radio, the wilder their of Cincinnati. questions are! You have noticed that yourself. There's nothing like a sound knowledge of the set itself to fortify you against any questions, whether they be sensible or foolish.

A learned discussion of the technical side of radio is seldom necessary to bring about a sale. But it as presented to the Radio Division helps a lot to know the fundamental facts involved in the composition of the set and also the main principles of radio transmission.

takes you through all the material test in your knowledge of radio.

possible.

ing experiment in educational work vance of the broadcasts, to supple- tional survey be knows that thouswhen it starts its "School of the ment the radio course. Air" in January, 1929.

prescribed hours.

school curriculum calls for this new talks on Art and Science. development. "Enough has been determined through careful and systematic investigation during the past few years to justify the definite trial of adapting radio to the educational processes of the school-

Lesson leaflets containing illustra- Schools.

# Radio Code of Ethics

#### Judging from the letters which are Radio Division of Electric Club of Cincinnati Goes on Formal Record

At a meeting held November 16, 1928, the Radio Division of the Electric Club of Cincinnati, brought up for discussion before its members against another member of the orthe proposition of adopting a code of ethics

Previous to this meeting a committee had been designated to formulate a statement of ethical principles. This committee was headof the Schuster Electric Company

The entire statement as presented by the committee in question, is too long to quote in full. The Preamble will interest Crosley dealers who may be active in local organizations in which a code of ethics would be helpful. The Preamble

of the Electric Club, follows: "We re-affirm our faith in the pledge 'Work together and Win together.' We recognize the oppor-In ten lessons the author of this tunity given us through organizacarefully and then ask yourself these the radio industry of Cincinnati. The account follows: questions seriously, you will be en- In this connection we affirm the ab-

The Department of Education of Itions, bibliographies, and suggestions leading authorities on education by the State of Ohio will make a strik- to teachers, will be supplied in ad- radio. From a comprehensive nagested schedule for the Ohio School introduction of radio into the class-The plan is to start with four pro- of the Air is planned to begin on room. weekly, broadcasting over January 2, 1929. It includes the WLW Monday, Tuesday, Wednesday following features: Current Event donating the services of its new 50and Thursday of each week. The talks; Historic Dramalogs; Talks on Kilowatt station WLW, which is programs will go out on the air at Achievements of great men and known positively to be available to 1:30 P. M. and continue for an hour. women; stories and playlets for the every radio set in Ohio, with a com-It is planned for all Ohio schools lower grades Literary Masterpieces; plete coverage of surrounding states. to have their classes listen in at the Health Talks by physicians and ath- Because of WLW's power, it is probletes; Geography in the form of able that other states will co-oper-J. L. Clifton, state director of edu-travelogs with music; Civil Govern- ate with Ohio in supplying their cation, in making the announce- ment; Games and Calisthenics; lesment of this radio course, declares sons in Agriculture and general sci- grams. that the general expansion of the ence for upper grades; and series of

> cational broadcasting has been carried on by the Payne Study and Exactual Mr. Darrow is one of the lar makes.

will foster and promote friendly output value in 1925 was \$176,990,334. competition based on sound ethi- as compared with \$54,000,470 in 1923 cal, constructive business conduct and \$10,627,617 in 1921. and experience." There follow nine articles, defin-

the radio industry to the public, guarantees, unethical acts, etc. Under the section, "Unethical year.

Acts," are given methods of formal complaint by one member of the Radio Division of the Electric Club, ganization. Also are stated allowed methods of lodging informal complaints.

The Code of Ethics calls for the formation of a permanent Fair compared with \$155,247,811 for 1925, Trade Practice Committee. This committee shall function in all cases of complaint both as arbitrator and

# Production Increase in Value of Radio Output

## Census Shows 8.4% Gain in 1927 over 1925 Production

special course for Crosley dealers, tion to obtain and maintain those issue of "The United States Daily," ies, 133,143,601, valued at \$6,035,659; principles of conduct and action in published at Washington, D. C., parts and supplies for dry batteries, At the end of our business life, that shall secure to there is a decided advance in the \$6,756,241; wet primary batteries, each lesson you will find a few ques- us the respect and confidence of the production of radio apparatus and 2.410,927, valued at \$3,358,729; parts If you read each lesson public in our own integrity and of tubes for 1927 over the 1925 record. and supplies for wet batteries, \$123,-

The United States in 1927 producabled to give yourself an excellent solute democracy of this organiza- ed radio apparatus and tubes agtion, in which the action of the gregating \$191,848,665 in value and The lessons are well illustrated majority shall be the guide and representing an increase over the with diagrams and pictures to make practice of its membership. It shall 1925 output of 8.4 per cent, it was each important point as clear as be our endeavor at all times to strive stated November 12 by the Depart-certainly much above the average." for such unanimity of opinion as ment of Commerce. The aggregate

The sug- ands of educators will welcome the

The Croslev Radio Corporation is schools with these educational pro-

State Director Clifton advises one receiving set to each school, with a loud speaker in each class-room. Much of the investigation in edu-This would make it possible to receive in some of the rooms, leaving others undisturbed. The state periment Fund. Mr. B. H. Darrow, department furnishes a list of availchief investigator, is to make the able receiving apparatus but offers experiment with Ohio no recommendations as to particu-

> The production of socket-power devices in 1927 aggregated 1,405,191.

ing mutual relations, the duty of with a value of \$23,357,814, or 13.4 per cent of the total value of radio apparatus manufactured during the The production of socketpower devices was very small in 1925, and the value was not reported separately but was included in the value of miscellaneous radio parts. The establishments engaged in the

manufacture of batteries in 1927 reported products valued at \$150,451,-796, a decrease of 3.1 per cent, as the last preceding census year. The production of tube-type re-

ceiving sets in 1927 was 1,938,192, valued at \$94,050,031-a decrease of 19.1 per cent in number and an increase of seven-tenths of 1 per cent in value as compared with 2,395,790 sets, valued at \$93,356,546, reported for 1925.

The total production for 1927 was distributed as follows: Storage batteries, \$80,496,735; parts and suppijes for storage battries, \$17,486,178; 6-inch dry cells, 54,985,815, valued at \$9,287,154; cells for radio B and C batteries, 530,512,320, valued at \$26,-According to a report in a recent 907,806; cells for flashlight batter-

> one of your Bandbox Jr., outfits. We either have an exceptional one of these little fellows, or they are N. G. Sherouse, Jacksonville, Fla.

"About ten days ago I bougnt

# Flirting With Foreign Stations

# California is Getting Chummy with Iapan via Showbox Route

ley set owners on the west coast, at Watsonville, California: "A few telling us that they have picked up days past I bought a Crosley Showsome of the Japanese broadcasting box and Dynacone to come in most clearly is JOAK, at grams from WLW.

er in Valleio, California:

#### Vallejo, Calif., October 6, 1928.

#### Gentlemen:

On Septmber 17th this year, I sold to Mr. E. A. Archer, of 634 Florida street, Vallejo, a Crosley Showbox. The first morning he used the set he picked up JOAK, Japan, and has heard them every morning since. Yesterday morning, October 5th, Mr. Archer heard five Japanese stations. He gets the setting up exercises from Chicago each morning besides innumerable other ed his message three times." distance stations. Mr. Archer works on the Vallejo

Times Herald, a morning paper, and gets home around 4 a. m. You may use this letter any way

you see fit. Thanking you for past favors, I

> Respectfully yours, (Signed) E. W. PRICE, Vallejo Radio Elec. Shop.

A number of letters have been | Another letter tells of getting coming to us recently, from Cros- JOAK. It is G. B. Gross, located Since then I The station which seems have enjoyed some very fine pro-Your station

comes in so loud and strong that I There's a big thrill in getting a have to reduce the volume to half. foreign station but you have to sit I think that is remarkable reception. up pretty late to do it. The Jap- I am not a DX fan but I have anese stations are usually picked up JOAK, JOBK, JOGK, Japan; 4QG, in the wee hours of early morning. Australia: and PWX at Hayana, Cu-Here's a letter from a Crosley deal- ba; and stations from many points in the U.S. A. and Canada.

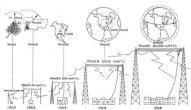
the Crosley, of course.

England Heard in Oklahoma! Here's a surprising thing: Mrs Marie Prewitt, Crosley fan living at Oklahoma City, Oklahoma, wrote us on November 13, 1928: "At 1:50 P M. today, I turned dial to No. 77 on a Crosley Showbox that is in our home on demonstration, and we heard very distinctly; 'Station 6 B. M., Bournemouth, Great Britain, calling Station 2 L. S. He repeat-Imagine a Showbox demonstra-

tion out in Oklahoma which permitted hearers to listen while one English station signalled another station in England. It reads like something out of a Jules Verne romance but doubtless will soon be a matter of usage, to pick up foreign stations as casually as we now listen in on American stations,

# WLW's Increased Power Extends WLW's Area of Influence

## From 5 Watts to 50,000 Watts in 8 Years!



Can you imagine a 10,000% increase? That is the increase in transmission power of WLW in the eight years of its existence. From a small, experimental station in 1920 it has grown into a great national station in 1928. If the diagram were accureately drawn, the present towers would have to be shown many times the size of the 1920 towers.

With this tremendous increase in transmission, the area of Crosley influence is increased but the percentage of population affected is greater in proportion because of the densely inhabited territory in which WLW stands.



This has been our most successful year. It has been successful in more than one way. First, our sales have doubled. alone would be sufficient to cause satisfaction, but in addition to increasing our sales, the excellence of our product in performance, design and construction, have enabled our Distributors and Dealers to have their most successful vear, also.

This year, we have a smaller number of Dealers, but of higher calibre. These are having marked success with our line.

Everyone likes to play a winner. Success is like a powerful magnet. Last Fall, when you cast in your lot with the Crosley line, you were confident it would prove to be one of the leading radio lines for the season. your judgment has been amply confirmed. lust as everyone wants to bet on the winning horse at a race track, just so every other dealer in the country has tried to bet on the Crosley line

There is far more assurance of success in playing the Crosley line than there can ever be in betting on winning horses or the leaders of any contest of sheer physical strength.

In horse racing, golf, tennis, automobile racing, skiing and the like, successful leadership goes to one man alone. Everything depends upon his strength and endurance.

But in the Crosley success, it is the organization which has grown. Doubling the business each year involves great increases in equipment, personnel, a stronger distribution, all the factors which make for continued success.

Each year adds more experience to this tremendous organization and aids us in maintaining our lead in the radio industry. 1928 has been a very successful year both for you and Succeeding years will show even greater success.

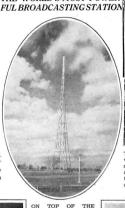
Que clerosley gr.

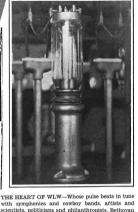
# BEHIND THE SCENES



MASTER OF CEREMONIES—Joe Whitehouse.
Operator in Charge. "He is never dressed up,"
they say. And he isn't. A hard-boiled, ex-Navy
man, he believes in always being on the job, with
no time for frills.

AT WLW
THE WORLD'S MOST POWER





THE HEART OF WIW—Whose pulse beats in tune with symphonies and cowboy bands, ar'tists and scientists, politicians and philanthropists, Bethovan and jazz, oldsters and youngsters. One of the giant tubes which amplify the programs before they go out "on the air."



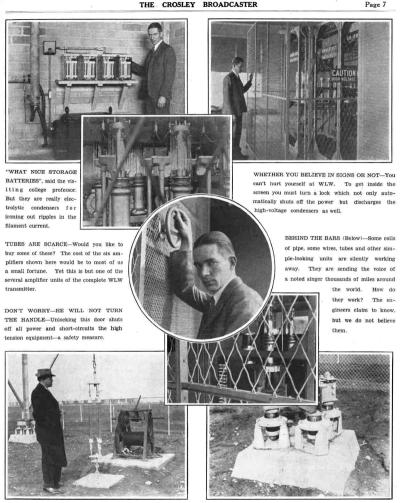
WHAT IS THIS-A POWER PLANT OR A RADIO STATION?-Just between ourselves, it is a radio station. and the most powerful broadcaster in the world at that. It is this view of the transmitting equipment that greet the visitor as he enters the front door of the main building. At the left is a long line of amplifier and oscillator panels. In the background is part of the power supply rectifier system which supplies high-voltage direct current to the plates of the tubes. though now operating at fifty kilowatts, the equipment here pictured has sufficient reserve to enable WLW to broadcast with several times its present

ON TOP OF THE WORLD—WLW broad-casts its message from the highest spot near Cincinnati. As you stand in these desolate surroundings, it is difficult to picture the hundreds of thousands enjoying the programs.



HOW WOULD YOU LIKE TO HAVE THIS "A BATTERY"?—
It requires two of these motor-generator units to light the filaments of the tubes in the new transmitter.

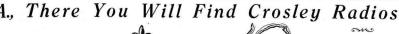
"RED" PUSHA DA PLUG-At the lonesome end of thirty miles of telephone wire, connecting the station with WLW studios in Cincinnati. The amplifier equipment which "Red" is operating boosts the voice and music coming over the line before it is fed into the set. A similar amplifier is at the studio end of the line. Red and the operator at the other end of the line must constantly be on the job while programs are being broadcast. Thus two more persons contribute their efforts to the vast chain of coordinated endeavor necesary to the operation of a broadcasting station.



FOOD FOR THOUGHT—These insulators anchor the antenna lift cable. The gentleman has just touched the wrong end of them and has been both shocked and surprised. In the background is the hoisting tackle.

STANDING ON ITS OWN COSTLY FEET—Each tower of the WLW antenna is completely insulated from the ground. The amount of money invested in these insulators would make a sensational story.







OUNTAIN tops and lake bottoms rather interfere with Crosley distribution. The Great American Desert shows a distinct shortage of Showboxes and the Everglades of Florida, those "dismal swamps" they sing about, would perhaps be less dismal with a few Gemboxes here and there, but aside from these and a few other odd places, Crosley distribution about covers the national field.

enso.

Out of 3068 counties in the U. S., there is Crosley distribution in 2,550 of them. The shaded map in the corner shows the density of population. And you'll notice that where the population is the densest, that Crosleys are likewise thoroughly covering the territory.

ans.

It takes people to use a Crosley receiver. Wherever people are, there you find the demand for Crosley is met by Crosley distribution.

is CROSLEY Distribution in 2,550 as of the U. S. in the Areas of Population

Page 10

THE CROSLEY BROADCASTER



# CROSLEY DISTRIBUTORS

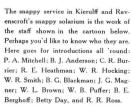


# Kierulff & Ravenscroft Advance on Los Angeles Crosley Distributor Attracts Wide Notice with New Quarters

The Crosley line is an added attraction in Hollywood—more so than usual—since our good friends, Al Ravenscroft and Charley Kierulff, distributors in Los Angeles and vicinity took themselves into their new quarters. Like so many in southern California, they've gone Spanish. As the pictures of their new place show, Spain is helping sell Crosleys.



Taking advantage of this move, Kierulff and Ravens-croft sent out a natty mailing card in large numbers. The inside is reproduced below. This got attention and induced the radio editors to mention the new establishment in their columns. The card was very amusing and human and contained all the essential information. It was printed in black and white.





And here are the boys themselves: Al and Charley blowing the horn for their own setablishment. We think the likenesses are excellent. Under the stimulating influence of this lively pair, Crosley and Amrad sales have been steadily mounting. With the spacious new quarters now at their disposal they ought to find it ever more true: "More room for us—Better service for you."

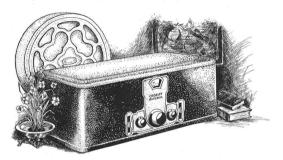
WE HAVE JUST MOVED TO OUR NEW HOME 135-139 W 17th ST. LOS ANGELES—and are now better able to serve you in our larger and better quarters—COME IN AND SEE US SOON.



# Sure, There's a Christmas Radio for Homes Without Electricity!

# The BANDBOX

What, no Socket! No Hope? Yes, There's this Crosley Battery Set



6 Tube -- Genuine Neutrodyne -- Storage Battery Type

HE Crosley BANDBOX is the set Santa is bringing for the unwired home! It is the undisputed leader among storage battery receivers. The perfect gift for those thousands of homes without electric current is this remarkable Crosley set. The BANDBOX was last year's sensation among battery type sets and is maintaining its lead this season!

Prospects for the Crosley BANDBOX run into the millions, for there are millions of homes without electricity.

The BANDBOX consists of 3 stages of genuine Neutrodyne (patented) radio frequency, detector, and 2 stages of audio frequency. It is com-

pletely shielded, it has acuminators for sharp tuning, modern illuminated dial, and is wired for use from power lines with a suitable supply. The BANDBOX is encased in metal, finished in a handsome gold high-lighted ripple effect.

We recommend the Type D MUSICONE as the result-giving speaker with the Crosley BANDBOX.

\$55.
Without Tubes

# Selected Business Helps Increase Your Holiday Sales



Give Yourself a Christmas Present of This Large Electric Sign



# **CROSLEY** RADIO DEALERS NAME

5 ft. x 3 ft.

# \$50.00

f. o. b. Lima. Ohio

At an investment of fifty dollars, you get a \$185.00 sign that will make your store the goal for Christmas shoppers.

com

With your name on the face of this large 5 x 3-foot sign, you command the business attention of your street.

Place an order with your Distributor at once.

# If You're Handing Out Souvenirs, You Are Getting Good Business Response



# BALLOONS

Christmas and New Year are more for children than anyone else, so a souvenir which brings that eager look into young eyes and gives that warm feeling around the young heart, is a darn good souvenir for getting atten-A souvenir balloon goes right to the spot you want to get a Crosley receiver installed - the home! On its bright-colored sides it carries a picture of the Gembox and Dynacone and your name and address.

Send your balloon orders direct



PERFECT RUBBER CO., Mansfield, Ohio

0000

The colors are red, green, yellow, blue, purple, or assorted lots. The airship balloons are fixed up with a noisy squawker Write for price range direct to PERFECT RUBBER CO., Mansfield, Ohio, and get your order in.

No. 28-13 Looseleaf Memo Book bound in genuine pigskin. 50-sheet, check-ruled filler, size 21/2 x 41/4.

f. o. b. Cincinnati

Minimum order, 25 books. Genuine gold leaf imprint on any quantity, at additional flat charge of \$1.50.



Book No. 28-13

russet pigskin. The word "Crosley" appears in gold leaf over your own imprint.

# \$1.19 each

No. 28-12 Pocket Letter Holder, of genuine

f. o. b. Cincinnati

There is a flat charge of \$1.50 for a 3-line imprint, in any quantity, in genuine gold leaf, Minimum order, 1 dozen. Order from your Distributor, enclosing cash with order.

Six-hook key case, No. 28-14, genuine russet leather, new Anchor Swivel. Impossible to lose keys from these hooks. Each, 69 cents, plus \$1.50 for three line imprint, minimum quantity 25. Order

Letter Holder

Market States Page



from your distributor. F. O. B. Cincinnati. Two-hook auto key case, No. 28-15, same material as above. 59 cents each, plus \$1.50 for three line imprint. Minimum quantity 25. Order from your distrib-



utor. F. O. B. Cincinnati

A good lead pencil—round, yellow, nickle tip, white eraser. Each, 3 cents, plus \$1.50 for 3-line imprint, minimum quantity 500. Each, Order from your distributor. F. O. B. Cincinnati.



# CROSLEY **DEALERS**



# In Your Newspaper

The problem of selecting the ideal all-family, lasting Christmas gift has been solved with the perfecting of the a. c. electric radio receiver,

according to Mr. thorized Crosley dealer. While radio sets have long been

ents," explained Mr. upkeep cost and the bother of battery sets have caused the joy the rug; or with each output for new dealer. B-batteries "With the electric radio set, these

handicaps are withdrawn. giving of an a. c. electric set this of entertainment, without costly and messy upkeep.

acceptance as all-family gifts," adds "Single, illuminated dial control and on-and-off every member of the family to tune ing. a set without having to refer to an instruction book."

For the family already supplied with a good electric radio receiver, - recommends a good power speaker, such as the Dynacone, as a family Christmas gift. By the use of the Dynacone Adapter, this power speaker can be used with almost any modern radio set.

# Spain Heard From! Hot? What!

Dear Friends:

Just a line to let you know I have another fine report to make about my new Crosley and you can feel mighty proud of it. I got Madrid, I tell you I feel Spain, EAJ6. mighty proud of this set. I tell others about it. Maybe the agent can sell some here some time. We have a Crosley dealer here. I am going to help him sell some if I can. May God help you for building such a good radio. It is certainly wonderful.

With best wishes. Sincerely. (Signed) Edwin Pflaum, Dale, N. Y.

Holiday Story to Use Gravevard Business Rapidly Expanding

## Paul Haues Anticipates Haas as Pioneer Cemeteru Dealer

Last issue of the Broadcaster we popular as family Christmas pres- ran an account of Frank Haas' suc-"the cessful sale of a Showbox to one of box. We are also told that there the Cincinnati cemèteries. It was Frank's contention that he was first sets bought in December, to fade to open up this field to the radio present time. with each subsequent failure of the business. It seems he has to let that A-battery: with each acid ruined honor go to Paul J. Haves, St. Louis When Mr. Haves saw that article in the Broadcaster he took his trusty Eversharp in hand and The wrote us as follows:

Christmas will be a lasting source to a cemetery. Mr. Haas is not tising plan. quite so fast as the writer, for Bellefontaine Cemetery of St. Louis is soothing the brow of its dead with "The ease of operation featured by Crosley sets, also amplifies their a Showbox, and Calvary Cemetery just experimenting with their deep ones, with another Showbox." Crosley dealers, front and center! switching as easily operated as a A mass attack on all local gravefloor-lamp, make it possible for yards is called for tomorrow morn-

Floyd L. Ray



Floyd has been looking after the interests of The Crosley Radio Corporation in the Middle West for more than two years, and although we are not in the habit of passing kind remarks, we must say, that he has done a very creditable job.

in Your Town?

During the last week or so our attention has been directed several times to the fact that undergraduate students of Colleges and Universities present a remarkably good sales field for medium priced radio receivers such as the Croslev Gemare very few radios in the dormitories and Fraternity Houses at the

If there is a College or University in your town, why not get a stuthe students for you. If the College has a publication, why not run a reasonable sized advertisement in "Note on page 16 about first sale it, on our regular cooperative adver-

College business is always good business. If a "vogue" is started on a particular kind of shoes, candy or other article, it will spread through collegiate circles like wild-fire and left to buy.

Rat Electrocuted

Effective But Costly Method of Killing Rodents Discovered by Marshall Love

If you're bothered with rats, we can tell you one way to get rid of It is expensive and it involves putting a Showbox out of commission for a few days, but it certainly disposes of the rat.

We have testimony of an actual case furnished us by our Crosley dealer at Bowling Green, Kentucky, Marshall Love. In explaining why they are returning a Showbox for servicing, they tell us: "A large rat crawled into the hole in the back of the cabinet and got across the fuse holder on the low side that was not in use, and was electrocuted. It completely ruined the 280 socket and the tubes fail to burn, so I believe that the filament transformer is also short."

In addition to the 280 socket, the rat was completely ruined. It en- sibly have." joyed what they refer to at Sing Sing as the "hot squat."

Is There a College Properly Balanced Sets Cause No Come-backs

> Quiet Radio Reception a Sound Crosley Talking Point

One of the important features of Crosley radio sets, and an effective sales talking point, is the use of the Neutrodyne method of balancing. made possible by patent license agreements with the Hazeltine Corporation. The use of this method of balancing insures that purchasers of Crosley sets will have the advandent-salesman and let him canvass tage of absolutely smooth, quiet reception.

To take full advantage of this sales feature, every Crosley dealer should satisfy himself that all sets that he sells are properly balanced when installed. As outlined in a previous article

every set is carefully balanced at the factory and is subjected to numerous rigid tests and inspections bestop only when there is no one else fore it is shipped. Nevertheless an occasional set may become unbalanced in shipment or through rough handling. It is quite simple,-if you arrange

In Showbox ! ! a corner of your shop for that purpose,-to give every set that you sell, an actual reception test before you install it. In that way you may quickly tell whether or not the set is properly balanced, and at the same time you may check the condition of the accessories. Improper balancing is indicated by a whistling sound when tuning to stations. which changes in pitch as the set is tuned.

Instructions for balancing sets will be found on page 4 of the "Crosley Service Manual."

"We have used, almost hourly, this wonderful radio, and are delighted with it. We enjoy programs from Winnipeg, Manitoba, Mexico City, Pittsburgh, and San Francisco, besides exactly 75 stations scattered over the United States.' (Mrs.) W. E. Thacher,

Fort Worth, Texas.

"About two months ago I purchased one of your Gembox radios, and since have been enjoying the most natural reception that any radio that is made today could pos-

Junior Webb. Eagle Rock City, Cal.

# ROSLEY DEALER'S RADIO COURSE

10 Simplified Lessons Especially Prepared for Crosley Dealers

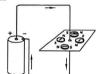
#### Correction

The next to the last sentence in the paragraph "What Resistance Depends Upon." Lesson II, should read: "Resistance of a wire equals Resistance per unit length per unit crossection, times Length, divided by Crossection." The fourth line under the cut at the head of the second column should read: "Current (Amperes) equals E. M. F. (Volts) divided by Resistance (Ohms)."

#### LESSON III

#### Magnetic Effect of a Current

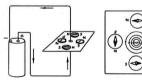
We have studied the flow of currents of electricity through wires, and the attractions and repulsions occurring between magnets. shall see that currents of electricity and magnetic forces are interrelated -in fact, that every current of electricity is accompanied by magnetic





CURRENT FLOWING DOWN

TOP VIEW OF PAPER





CURRENT FLOWING UP

TOP VIEW OF PAPER

#### MAGNETIC EFFECT OF CURRENTS

To prove this, suppose we connect a loop of fine wire to the terminals of a dry cell, so that a current flows through the circuit. Then if we bring a compass close to the wire, the needle will swing around in current varies directly as the voltdifferent directions corresponding to the position of the compass with respect to the wire. If the wire is disconnected, stopping the current flow, the compass needle will immediately assume a north and south direction.

This experiment demonstrates that a flow of current in a wire exerts magnetic forces in its vicinity. We describe this by saying that the

electric current sets up a magnetic field.

#### Direction of the Magnetic Field

By slowly moving a compass around the wire in the above experiment, it will be seen that the magnetic field about the wire is such as to cause a magnetic pole to tend to move in a circle about the wire (a small compass, which may be placed close to the wire, should be used, and In other considerable current should be flowing through the wire). words, the magnetic force due to the current is at right angles to the (Fig. 1).

The positive direction of a magnetic field is taken as the direction in which a free, north magnetic would tend to move if placed in the field. Reversal of the current causes a reversal in the direction of the field. If we are looking at one end of the wire and the current is flowing away from us, the direction of the magnetic field is right-handed; or clockwise. denly destroyed. This rapid change in the magnetic field will, accord-

If the current is flowing toward us, the direction of the field is lefthanded, or counter-clockwise. \*

\*Remember that in this instance, as in every other case except when speaking of an actual flow of electrons, the current is considered as flowing from positive to negative..

#### Corkscrew Rule

An easy way to remember the relation between the current flow and the direction of the magnetic field is by means of the corkscrew rule. If a corkscrew is turned so as to advance along the wire in the direction of the current flow, the direction in which it is turned is that of the magnetic field (Fig. 2).

#### Current and Field Strength If several dry cells, connected



in series, are used instead of one cell in the experiments described above, the effect will be much increased. This demonstrates that the strength of the magnetic field depends directly upon the current flowing. Electromagnets

## By coiling a wire as shown in

Fig. 3 it is possible to take advantage of the magnetic effect of a current of electricity in order to exert strong magnetic forces. Such a coil

is called a "solenoid". If a core of iron is put inside the solenoid, the magnetic attraction for pieces of iron held near the ends of the coil is much increased. A solenoid with an iron core is called an "electromagnet". The iron core acts as a magnet only while the current is flowing through the solenoid, losing practically all of its magnetism the moment the current is turned off

#### Generating Currents with Magnets

Suppose a solenoid is connected to a sensitive galvanometer (an instrument reading very feeble electric currents). If a steel magnet is plunged into the solenoid, the galvanometer needle will momentarily "kick" over, indicating a current. If the magnet is removed, the needle will "kick" in the opposite direction. The amount of kick is proportional to the rapidity with which the magnet is moved in or out of the solenoid.

This experiment demonstrates that changing magnetic fields set un currents of electricity in conductors, and that the strength of the currents set up depends upon how rapidly the fields are changing. Actually it is the induced voltage that depends upon the rapidity of change of the field, but in this instance (resistance remaining constant) the age induced.

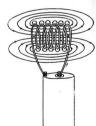
It is upon this principle, as we shall see, that radio choke coils, transformers, electric generators, and many other electrical devices depend.

#### Self-Inductance

Connect a solenoid to a dry cell (Fig. 3). Now suddenly disconnect At the moment the circuit is broken, a spark will jump across the HOW A COIL OF WIRE ACTS AS What causes this spark?

To explain this, we must consider the interaction of the current in the coil and the magnetic field about the coil.

When a steady current flows through the coil, a steady magnetic field is set up in the vicinity. The moment the circuit is broken, the battery current stops flowing. Thus the magnetic field about the coil is sud-



A MAGNET

ing to the principles outlined above, set up a current in the solenoid. The galvanometer experiment demonstrated that the more rapidly the field changes the greater will be the current and voltage set up in the cell. In this instance, the field is changed with extreme rapidity, and a high voltage is set up, sufficient to cause a spark to jump across the break in the circuit.

It is found that the direction of the current set up in a conductor by changes in its own magnetic field is always such as to oppose the changes Thus, if the circuit is broken, the induced current set up will be in the same direction as that of the original current flowing in the coil. If, on the other hand, the circuit is suddenly made, or connected, the induced current set up will be in such a direction as to oppose the flow of battery current.

This characteristic of circuits such that their magnetic fields tend to oppose any changes in the currents flowing through them is known as "self-inductance". Every conductor has the property of self inductance, but the effect is much intensified if the conductor is wound into the shape of a solenoid, so that the fields due to different portions of the wire reinforce each other. Applications of Self Inductance.

Self inductance has wide application in radio, in choke coils, in the tuning of radio circuits, etc. We shall have more to say about it in the lesson to follow

Carefully answer the questions below. If you have any questions to ask about them or about portions of the Lesson text, write to the Editor, Crosley Radio Broadcaster.

#### QUESTIONS

- 1. Suppose a rapidly changing electric current is sent through a solenoid and another solenoid, connected to a sensitive meter, is placed beside it. Would you expect current to be indicated by the meter?
- 2. How does the electromagnet used in your electric bell differ from the one described in this lesson?
- 3. Suppose that the experiment with the magnet and solenoid, as described in this lesson, were modified so that the solenoid were plunged over the magnet instead of the magnet being plunged into the solenoid. Would the results be similar? 4. Suppose an alternating current is applied to the terminals of a

solenoid or choke coil. What will be the effect of the self inductance of the coil on the current flowing through it?

5. How do you explain the sparking at the switch when an electric motor is shut off?

# Picking Up WLW Program on Fast Train

# 60 Miles an Hour No Handicap for Crosley Station

Proofs of the perfect transmission from Crosley station WLW multiply thick and fast. Here's a telegram sent from Minot. South Dakota, giving report of a WLW program heard en route:

POWEL CROSLEY, JR. NATIONAL BROADCASTING PARTY ON BOARD GREAT NORTHERN RAILWAY FAST MAIL, ARE SPEEDING ACROSS CONTINENT SIXTY MILES PER HOUR, AND HAVE JUST PICKED UP AUTOMATIC WASHER PROGRAM FROM WLW WITH PERFECT CLAR-

ITY AND GOOD VOLUME.

JOHN W. ELWOOD.

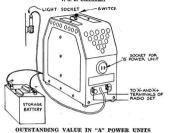
# Another Telegram Registering Good Showbox Reception

CROSLEY RADIO CORPORATION, CINCINNATI: USING CROSLEY SHOWBOX TODAY, DECEMBER FIFTH, HEARD WGY TIME SIGNALS AT 10:59 A. M. AND KDKA MARKET QUOTATION AT 3:45 P. M. AND ANNOUNCEMENTS. WITH LOUD SPEAKER VOLUME.

ROGERS SALES CO., BLOOMINGTON, ILL.

Crosley "A" Power Unit for Storage Battery Receivers

\$12.50 Fach



HIS Crosley A-Battery Eliminator, when attached to a 6-volt

storage battery supplies power to a storage-battery type ra-dio set, direct from the light socket. The light socket current is consumed only when the radio set is in operation, and there is no drain upon the storage battery.

Unit at a phenomenally low price.

Easy to connect, quiet in op-Unit at a phenomenally low price. Easy to connecration, no intricate parts to get out of order. You'll find a ready market for this item among owners of battery type receivers.

Enclose Postal Money Order With Your Order Order Direct From:

The Crosley Radio Corporation, Cincinnati, Ohio

# The Bandbox Gets Its Just Reward

An "airgram" from Oklahoma City brings us enthusiastic praise of the Crosley Bandbox from Frank Edwards of that thriving city.

"Right at this time I would like to say a few words about my wonderful Crosley Bandbox. Words can not express how well pleased I am. This is my third Crosley, the first being a two tube set, the second a four tube, and now a Bandbox. "My Bandbox will outperform ra-

dios costing several times as much For volume and distance I can not say too much. It brings in distant stations in the daytime with much volume. I have heard all makes of radios, but none equals my Band-"I also think as much of WLW as

I do of my radio. Your programs are wonderful and I do not see how they could be much better. WLW is one of my favorite stations." A well pleased Crosley Owner,

(Signed) Frank A. Edwards.

#### TAYLOR ELECTRIC CO. MADISON, WIS. Exclusively Radio

Wholesale Only CROSLEY DISTRIBUTOR

# 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

№ FIFTH THIRD UNION (OMPAÑY

14 West Fourth Street Cincinnati, Ohio

100% Crosley Distributors "THIS IS A CROSLEY YEAR"
"THERE'S A REASON" Distributors in Chicago Territory

— TRY OUR SERVICE —

HUDSON-ROSS, Inc. 116 S. WELLS

## SCHUSTER ELECTRIC COMPANY WHOLESALE CROSLEY DISTRIBUTOR 2169 Spring Grove Avenue 412 Elm Street, Cincinnati, Ohio West 144—PHONES—Main 820



tubes! No competitor can equal this value! Display it prominently in your window — advertise it in your local paper. Cash in on the Christmas buying spirit with this truly great radio value. Write Dept. 81, specify whether electro or mat is wanted.

SHOWERS BROTHERS CO.,

Bloomington, Indiana.