

What Stations Will Stay on the Air?

Radio Digest

TWICE
A MONTH

Illustrated PROGRAMS

FIFTEEN
CENTS

SECOND FEBRUARY NUMBER, 1927

Title Reg. U. S.
Pat. Off. &
Dom. of Canada

Vol. XX No. 3



Finishing Touches on the 1927 DeLuxe Philippine Super; Seventh Section of Whozit; How Scranton Fought Interference Noises and Won; Have You a Good Voice for Radio?

AUSTRALIAN VISITOR INVESTIGATES RADIO

TELLS OF BROADCASTING METHODS IN ANTIPODES

Lieut. Eric J. T. Moore, of Station 2FC, Sydney, Combines Honey-moon with Ether Survey

Now that Australian stations are being heard by America with some regularity we are happy to meet and chat with Lieut. Eric J. T. Moore, I. E. E., A. M. S. C., who is spending a few months in this country to gather data and information for Australian Radio broadcasting and reception. Incidentally the trip is a honeymoon and the bride is getting a great thrill out of the New York shops.

Lieut. Moore besides being an expert Radio engineer has a distinguished record as an aviator during the world war. He owes his life to a pigeon which carried news of his plight after he had been drifting on a wrecked seaplane for eighty hours without food or water.

Arrive in California
Last autumn Lieutenant and Mrs. Moore landed in California and began their tour to the eastern side of the continent, visiting Radio stations and apparatus manufacturers enroute. He comes from Sydney where he is associated with the Farmer's station, 2FC. This station began broadcasting only last March, but many of the most distinguished personages of Australia and the greatest artists and operas have been heard over its wave.

Regarding broadcasting in Australia, Lieut. Moore said:
"The regulations now in operation permit two 'A' Class broadcasting stations in each of the five states and Tasmania; these stations are remunerated from a license fee of twenty-seven shillings six pence collected by the government from each Radio installation, but no restrictions are placed on the owner as to the type of construction of his receiver.

The Listener Pays
"From each license fee the government retains five shillings and the remainder is divided between the two 'A' class stations in the state, in proportion to their power and range and hours of service. In New South Wales, for instance, the two 'A' Class stations are 2FC owned and operated by Farmer & Co., a large department store in Sydney, and 2BL, owned and operated by Broadcasters Limited. Station 2FC is 10 K. W. and transmits on a wave of 442 meters. Station 2BL is 5 K. W. and transmits on a wave of 252 meters. The former station receives 70 per cent of the

TRUTH WHITEWASHES MILWAUKEE ELECTRIC

So-Called Interference Suit Only for Right-of-Way

MILWAUKEE.—A recent report that Radio interference had won a judgment of \$2,000 against the Milwaukee Electric Co. is entirely fanciful, according to G. W. Van Derzee, vice-president of the company.

"The case, that of Peter Walters against the company was brought to determine compensation to be paid by the company for right-of-way for steel tower transmission lines," Mr. Van Derzee said.

"A Milwaukee county court made a net award of \$1,893 to the plaintiff and the supreme court upon appeal by the company affirmed the decision without opinion."

The record of the case, Mr. Van Derzee pointed out, contains only a single reference of eight words concerning Radio interference in which the witness, a neighbor of the plaintiff, states that there "might" be Radio interference.

No effort was made to prove this contention and on January 13, 1927, the plaintiff told Electric Co. employees who called at his farm that he had never complained of interference to Radio reception and that he did not detect any interference in the operation of his set. Mr. Van Derzee declared.

The Electric Co. here is one of the pioneer utilities in having established a Radio trouble finding service.

GLADYS JOHNSON ON THIS ISSUE'S COVER

BACK to the Pacific coast we go for our cover girl of this issue. The fluffy-haired blonde who greets you this mid-February morning is the staff cellist at KGW, Portland, Ore., and her name is Miss Gladys Johnson. Miss Johnson is well known to Radio listeners throughout the territory from Alaska to Yucatan. She plays in concert and has been identified with some of the most famous orchestral organizations.

'Ello, 'Ello, 2FC



Lieut. and Mrs. E. J. T. Moore of Australia who are spending their honeymoon in America. Lieutenant Moore is one of the most prominent Radio engineers of the southern continent and is gathering useful information for his broadcasting station, 2FC at Sydney.

license money and 2BL is awarded the remaining 30 per cent."

Long Wave for Range
Until recently 2FC used a 1100-meter wave, according to Lieut. Moore, because it was believed that there was less discrepancy in the range between daylight and night transmission. Very few American Radio receivers are equipped to receive a 1100-meter wave and in order to conform to the generally accepted standard the shorter wave was adopted.

"Australia has an area greater than the United States," explained the lieutenant, "yet we have a population of only a little over 6,000,000. Greater distances must be and are covered by our more widely scattered broadcasting stations. We are not troubled as you are with interference. A number of 'B' Class stations is allowed, but these stations are of smaller power and are non-participating, being operated by companies and societies for publicity purposes."

CONTENTS

Radio Digest, Illustrated, Volume XX, Number 3, published Chicago, Illinois, February 15, 1927. Published semi-monthly on the first and fifteenth of each month by Radio Digest Publishing Co. (Incorporated), 510 N. Dearborn Street, Chicago, Illinois. Subscription rates yearly, Three Dollars; Foreign Postage One Dollar additional; single copies Fifteen Cents. Entered as second class matter May 3, 1926, at the post office at Chicago, Illinois, under the Act of March 3, 1879. Title Reg. U. S. Patent Office and Dominion of Canada. Copyright 1927 by Radio Digest Publishing Co. All rights reserved.

"All the News of Radio".....	2 to 4
Woman's Program Index.....	4
Scranton Fights "Big Noise," Success Rewards Listeners Who Wage War Against Interference, by C. R. Elsbey.....	5
"The Green Mamba," a Two-Part Love and Adventure Story, by Wynndham Martin.....	7
Directory of Radiophone Broadcastingcasting Stations, Part IV, Alphabetical List of Calls and Data.....	8
1927 DeLuxe: The Finest Super, Conclusion, by M. W. Thompson.....	9
Seventh Section of Whozits Pictures.....	10, 12 and 13
Editorials; Indi-Gast; Condensed by Diectric.....	14
An Evening at Home with the Listener In (Eastern Time); Stations by Wave Lengths.....	15
Advance Programs for the Larger Stations, February 15-25.....	16 to 28

Looking Ahead

"Green Mamba" Ends in a Way You'd Never Guess! The conclusion of this fascinating story will appear in the next issue.

After Having Put Together the First Seven Sections of Whozit, you wouldn't want to miss on the eighth and final section, would you? Get your First March issue early—order it now—for the demand is great. Remember the \$26,000 in prizes.

Mr. Elsbey Will Give Good Advice to Radio Clubs in the next Radio Digest, on the newsstands March 1; the "State-City Index" of the Station Directory will appear, and in the same issue you'll find many other interesting and valuable features.

Special articles about broadcasting stations and artists, with photographs, and NON-RADIO fiction 5,000, 10,000 and 20,000 words in length are desired. No manuscripts accepted unless typewritten and prepaid, or returned without return postage being inclosed. All manuscripts are sent at owner's risk.

Newsstands Don't Always Have One Left

WHEN YOU WANT

Radio Digest

YOU WANT IT!

BE SURE OF YOUR REGULAR COPY BY SUBSCRIBING NOW

PREPARE WHOZITS NOW—A VOID RUSH!

But Two Weeks Now Until Eighth and Final Section of Pictures Appears

The great hour approaches! Have you begun to get your Whozit entries into shape?

Fifteen days more and the last of the Whozits will be ready for you to identify and get into order for the big prizes. It has been something of an endurance test as well as game of reasoning and judgment.

Ingenuity will count. We all have a sense of proportion and orderly arrangement, perhaps a flair for fancy designing. Such a faculty can be used to good purpose in preparing the Whozit entries for the \$26,000 in prizes to be awarded by Radio Digest.

Last Whozits March 1

Remember, the last of the Whozit pictures will be published in Radio Digest March 1. After that there will be fifteen days allowed to complete identifications and arrange the entries for the competition, and then it will be up to judges to decide who wins. The last entry must be postmarked not later than midnight of March 15.

Contestants must remember that the rules state that only complete sets will be considered. That means if you are working from WHT or any other particular station you must turn in all sixteen of the Whozit artists whose pictures have been published in Radio Digest. If one or two games have been missed, the Whoziteer should obtain bank numbers and fill in the missing faces at once to complete the set.

Stations Give Reviews

Some of the stations have arranged to give a final review of all their artists in order to help the Whoziteers check up and make sure on the progress already made. Pat Barnes of WHT was one of the first to start a weekly review from the beginning and has received many letters from listeners in appreciation of this special service.

You are on the home stretch now. Go to it and may the best Whoziteer win!

SHORT WAVES

By Marcella

Little Jack Little; Marigold Cassin of WOC; WLW Phantom Clarinetist; "Joy Boy" of WKY; John Clark KMOXward; WJR's Bernice; Carlos Meier; Alwyn Bach of WBZ; Ralph Patt of WDAF; Henry Burr; Mr. and Mrs. Hired Hand of WBAF.

FEBRUARY is the lucky month for birthdays. Look what happened to little George Washington and little Abraham Lincoln when they grew up! Statistics show that a large majority of the great people have had their birthdays in February. Wonder how that applies to Radio artists?

Jack Little was not born in February—LITTLE Jack Little. He always insists on both of those "Littles"—but he certainly ranks among the first in popularity. "Blondy" of Platt, S. D., is typical of Marcella's inquirers.

Writes: "My favorite Radio star is Little Jack Little. I haven't been able to get a picture of him yet. I heard him say from Davenport that this is his last tour of the country. What is he going to do? I'd hate to think of not hearing him again." Here's the thumbnail, "Blondy," and I understand he is "going" the theaters for a while. But do not be too despondent, the dear boy thinks he is through broadcasting—actually believes it himself—but I wager he'll be back some of these days. You wait and see.



"How should I go about it to get into correspondence with Marigold Cassin of WOC?" This and other questions of a personal nature comes from a young man who signs himself George. It is written on hotel stationery at Rockford, Ill. Not mentioning George or his letter in particular I sat right down and asked Marigold all about it. She answered:

"I am flattered to death. . . . I am four foot eleven, have brown hair and green eyes. Anyway, I've been told they were green ever since the kids at school called me 'Cat-Eyes.' I am not married, having all I can do to worry about myself; but I like to dance, skate and play basket ball. So I don't feel like an old maid, even if I am twenty-three years of age. (I hate to say twenty-three years old)"

Several letters have been written requesting information about "The Phantom Clarinetist" of WLW. Cine't. Here is her picture. Many will be surprised to learn that she is a high school girl and not a veteran concert entertainer playing in disguise.

Introducing, Miss Louise Reszke. Thousands of inquiries were made at WLW; was "The Phantom Clarinetist" a man, woman, girl, boy or phonograph record? This thumbnail doesn't show the long braids that hang down to her waist.



Two letters, one from K. W. B. and another from "Gorma," ask for a picture of Herb Cook, "The Joy Boy" at WKY.

Oklahoma City. Herb, just poke your head through the type here and let the ladies have a peek at you. As to particulars: Mr. Cook stands about five feet nine inches, is light complected and has gray eyes. Is he married? I specifically asked him and he did not state. Draw your own conclusions. He is known to the audiences at WWJ and WCX, Detroit; WDAF, Kansas City, and KVOO, Oklahoma City. He has written about thirty-five popular songs and his latest, "Oklahoma, I'm Coming Back to You," has just been officially adopted by the Oklahoma legislature as a state song.

"Station WWSW (Straus, Chicago) having blown up through wave length and ownership tangles. I am leaving tonight for St. Louis," writes John L. Clark, director-announcer. He adds, "My stay in St. Louis is indeterminate, but I am going to do production work with George Junkin, director at KMOX."

A gentleman signing the name of "Dixie" wants to know all about "Bernice" at WJR, Detroit. And John Patt says of her, "That's a secret. However, I can say that she is neither married nor engaged. She plays the piano from WCX and WJR and owns a little Radio shop on the side."

Herbert C. Post of Wilnot, S. D., Old King Cole at WILO, informs me that L. Carlos Meier is still at the Capitol. (Continued on page 4)

SEND IN THE BLANK TODAY

Publisher Radio Digest, 510 N. Dearborn St., Chicago, Illinois.

Please enclose check M. O. for Three Dollars (Four, Foreign) for One Year's Subscription to Radio Digest, Illustrated.

Name

Address

CityState.....

CUT IN STATIONS DEEMED LIKELY

COMPROMISE RADIO ACT PASSES HOUSE

AIR CONTROL ADVOCATES NOT ENTIRELY HAPPY

Commission's and Commerce Department's Divided Powers May Lead to "Passing the Buck"

WASHINGTON, D. C.—The "Radio Act of 1927" is already a Radio law—or it isn't. As this story is being written, the house had passed the compromise bill reported by the senate and house Radio conferees, and the senate had scheduled the bill for early action.

Following the senate's passage of the act, only the President's signature would be needed to make it a law, and ere this is read, it may have been done. As the bill was carried by the house it provides the Federal Radio commission which was not favored by the President, as he is against any new commissions. It was pointed out, however, by those who are close to him, that this commission in its present form is only to function one year, after which most of its powers revert to the secretary of commerce.

They state that he will sign the bill. It is believed that Secretary Hoover is not dissatisfied with the bill, although it is not in exactly the shape that he would like to have it.

Better This Bill Than None

The real "how-down" on the matter seems to be that those who have Radio most at heart at the Capitol are pretty much disgusted with the bill but they realize if the bill is not passed as agreed to it would be impossible to get any legislation through at the present session and they take the stand that any legislation is better than none for another year.

The bill as it will become law will leave some powers with the department of commerce and give others to the new commission which will probably mean that it will be a matter of "passing the buck" from one body to another with very little becoming accomplished.

At any rate, as the bill is expected to become law, a Federal Radio commission of five members is created which will have complete control over Radio for one year, following which time it will have final authority in all matters of controversy coming from the department of commerce, which body will have initial control over all Radio matters after the first year.

President Appoints Commission

The first year the commission will have authority to classify Radio stations; prescribe the nature of the service to be rendered; assign wave lengths to the various classes of stations; determine the location of stations; regulate the kind of apparatus to be used with respect to its external effects; make regulations to prevent interference and, in fact, the bill gives the commission almost unlimited powers along these lines, together with the power to hold hearings to compel the submission of books, etc.

At the end of the first year all of these powers are transferred to the secretary of commerce when he can refer any question that he chooses to the commission or any one can appeal a decision of the secretary to the commission.

The bill provides that the five members of the commission shall be appointed by the President and confirmed by the senate, one person to come from each of the five zones which are set up in the bill.

It also vests with the secretary of commerce all of the administrative functions and full control over operators and the issuance of their licenses.

The bill provides that the law shall become effective at once.

PRESIDENT ON 35 STATIONS FEB. 22

Record-Breaking Chain Commemorates 200th Anniversary of Washington's Birth

WASHINGTON.—For the first time since his inaugural, the people of the United States will have the opportunity to listen to their President, Calvin Coolidge, through the nationwide broadcasting of his address before a joint session of congress at 12:30 P. M. Eastern time on Washington's Birthday, February 22.

At this time the President will face a microphone connected to thirty-five broadcasting stations located in a like number of cities in the United States, from the Atlantic to the Pacific oceans.

The utilization of thirty-five broadcasting stations for the transmission of this event establishes a record tie-up for the broadcasting of a Presidential address. The largest chain ever used before for this

SHE'S TALENTED SEATTLE CELLIST



Miss Iris Canfield, above, is a pride of the Northwest. She is not only beautiful but talented, and plays the cello masterfully. Her artistry is often heard from Stations KJR and KFOA, Seattle.

purpose was on the occasion of President Coolidge's Inaugural, March 4, 1924, when twenty-seven stations comprised a coast-to-coast hook-up.

Stations Linked in Program

Following is a list of broadcasting stations which will participate: WEAF and WJZ, New York; WEEI, Boston; WJAR, Providence; WTAG, Worcester; WCSH, Portland, (Me.); WTIC, Hartford; WGY, Schenectady; WGR, Buffalo; WBZ, Springfield, (Mass.); WLIT, or WPT, Philadelphia; WRC, Washington, D. C.; KDKA and WCAE, Pittsburgh; WTAM, Cleveland; WWJ, Detroit; WSAI, Cincinnati; WLIB or WGN and KYW, Chicago; KSD, St. Louis; WOC, Davenport; WCCO, Minneapolis-St. Paul; WDAF, Kansas City (Mo.); WLAS, Louisville; WSM, Nashville; WSB, Atlanta; WMC, Memphis; KOA, Denver; KPO, San Francisco; KGO, Oakland (Cal.); KFI, Los Angeles; KGW, Portland (Ore.); KOMO and KFOA, Seattle, and KHQ, Spokane.

Speaking in the House of Representatives, President Coolidge's voice will be "picked up" by microphone and brought by special telephone circuits to New York City. There it joins the distributing lines which carry the voice to the various sta-

RADIO CLUBS NOTICE! SEND US YOUR NAMES

RADIO DIGEST desires as nearly complete a list of all Radio clubs as possible. To help make this list, the corresponding officers are asked to send the name of their club, number of members, and mailing address at once to the Radio Club Editor, Radio Digest, 510 N. Dearborn Street, Chicago.

Each club sending in this information in due course will receive a mimeographed list of all Radio clubs and their addresses which this publication has on file. Other valuable information will follow.

tions participating. Approximately 25,000 miles of wire will be utilized in bringing the President's address to every city, village, mountainside, hill and valley in the United States.

WGY and KDKA will in all probability broadcast this event on both long and short wave lengths in addition to their regular broadcasting waves.

BALLOT FOR FAVORITE STATIONS

Who will remain on the air with broadcasting licenses?

Use this ballot to state your choice as a Radio listener. Fill in the blanks with the call letters of your favorite stations in order that a national list may be compiled by Radio Digest to aid the proposed Radio commission in finding the broadcasting stations most enjoyed by the public. Send the filled ballot to Radio Digest, 510 N. Dearborn St., Chicago.

I VOTE FOR THE FOLLOWING TEN STATIONS TO REMAIN ON THE AIR, IN CASE THE GOVERNMENT DECIDES TO LIMIT THE NUMBER OF LICENSED BROADCASTERS:

- 1..... 2..... 3..... 4..... 5.....
- 6..... 7..... 8..... 9..... 10.....

Signed
Street Address or Rural Route.....
City and State.....

ASK FANS FOR VOTE ON BEST ONES TO KEEP

Government May Be Forced Into Drastic Action to End Ether Chaos

Feel Pulse of Listener

CHICAGO.—Who gets the air?

Prospects are bright for a federal Radio commission to rule the air as this issue of Radio Digest goes to press.

Drastic and vigorous action is anticipated for the near future. How will it be accomplished? Nobody knows at this moment, but it is more than probable that there will be a trimming of licenses and many a steel antenna tower will be coming down to earth before many weeks have passed.

Which and whose towers will be swept away by the commission?

That's another problem. Radio Digest hurries to ask its readers which of the broadcasters they would vote to be preserved.

Radio Engineers Cite Crowding

Doubtless an expression from a large number of Radio listeners would bear weight with the commission when it comes to awarding licenses to those stations destined to continue with their programs after the superfluous stations have been eliminated.

Radio engineers give it as their expert opinion that by a proper division of time, utilizing the entire twenty-four hour period, only four hundred broadcasting stations could operate successfully without interference. At present there are considerably over six hundred stations on the air with only such time regulation as they choose to adjust between themselves.

There is only so much air time to be had. After that, there "isn't any more," as Ethel Barrymore says.

What Stations Are Desired?

Who gets this air? Let's hear from the Radio listener. Whom do the listeners declare to be the most desirable stations?

A ballot for listeners is printed at the bottom of this page. Name ten of your favorite broadcasters, particularly those in your own vicinity. If you want to vote for a chain program vote for the station through which you hear this program, rather than the key station.

Here is an opportunity for every Radio listener to speak up for the station he likes best. You have been tuning in night after night and getting your pleasure from a group that often does not exceed ten (if you could help it) and you have probably on numerous occasions jumped up from your dials in a furious rage because some station you did not care for lapped down on your favorite wave whining a distracting whistle into your ears.

Here's Your Chance to Vote

You probably have had the unhappy experience of tuning in your favorite station only to find the program ruffled by an undertone of jazz or lecture from a station not on your list of favorites.

Now is the time to indicate the stations you want to hear before the commission begins putting the axe to the antennas. All of these ballots will be sorted and counted so that the stations receiving the most votes will come to the top in order of popular preference.

Get out your pencil, pick up your shears, mark your ballot and mail it NOW, because if you put it off you may forget it.

Who gets the air with regular wave licenses?

Unannounced Circuit Keeps Van Horne Tube Plant Busy

CINCINNATI.—It is understood that contracts with several leading set manufacturers call for the delivery of production quantities of a new Van Horne tube which is to be used in a new and unannounced circuit.

The demand for this new tube and another special Van Horne Tube will make all-summer production necessary according to reports.

When the new circuit will be divulged is not known.

The Van Horne company, located in Franklin, Ohio, has recently increased its capital stock. J. S. Van Horne is retained as president.

“Microphone Voice May Be Cultivated By Practice” Says Rosaline Greene

Girl with “Perfect Radio Voice” Who Is Star Audio Player at WGY Tells What She Believes Are First Needs for Success—Receives Touching Tribute

By Marshall Taylor
AS THE world grows older and wiser many new little pockets are created where persons with odd characteristics may fit in to fulfill a destiny that might in other days have been blighted. Rosaline Greene, according to Eric H. Palmer, is the girl with the “Perfect Radio Voice.” It complies with those eccentric and unique demands of the super-sensitive microphone which are imperative for best results in broadcasting. Because of this peculiar talent and ability to use it Miss Greene holds a trophy cup awarded by the 1926 Radio World's Fair as a token of her superiority.

“And, what is a ‘perfect radio voice?’” inquired Mr. Palmer. “Tells Qualities of Radio Voice” “A certain quality of resonance is perhaps the first requirement,” answered the former leading lady of the WGY Players. “This calls for placing the voice where it receives the utmost re-enforcement. My unusual lung capacity, with an unadlylike chest expansion of four inches, I am told, aids me here. The next, I think, is richness due to overtones in the voice.

“This I possess at the sacrifice of song; for as a child I had a lovely singing voice while now, it seems, all the music has entered my speaking voice and left me unable to sing at all.” “Receives Touching Tribute” Miss Greene's ability to adapt her voice to a great variety of characters was demonstrated with amazing results during her radio drama career at WGY, Schenectady.

“These characters included the low modulated voice of the cultured woman, the whiskey voice of a suffering Madame X,” explained Miss Greene, “the joyous treble of the enthusiastic school girl, and even the nasal coarseness of a woman of the streets. No costume nor makeup could help me make these characters live for my audience—only the flexibility of voice, with its almost astounding propensity for creating a living character.”

SHORT WAVES By Marcella

(Continued from page 2)

Theater in Des Moines and, if you have not already heard him, there are prospects that you soon will.

J. E. Murley of WBZ, the far-flung Boston and Springfield station, writes to Marcella, referring to a recent thumbnail photo we had of Arthur Edeas announcing the Symphony last year: “I know the Digest does not live in the past, so I am sending you a picture of Alwyn Bach, the WBZ announcer who has already announced thirteen of this year's Boston Symphony programs and has twelve more to go. These concerts go over the Blue Network, with WBZ as the key station. I take great pleasure in presenting to my readers this thumbnail photo of Mr. Alwyn E. W. Bach. (No, my dear, not Batch, but Bach. I believe he is, but I'm only guessing.)”

One of the youngest and best looking announcers at any of the more prominent broadcasting stations, in my opinion, is the young man who glances at you from the edge of this paragraph. This is Ralph, the younger of the two Patt brothers of Kansas City. The other brother is John and he has recently joined his former employer, Leo Fitzpatrick, at WJL, Detroit. Ralph continues to announce from WDAF. He has the darlinest big brown eyes, a beguiling wistful smile, and when he gets a little older—I believe he is still in his teens—he is going to be exceedingly popular with my fair sisters.

I dare say many of you never heard of Mr. Harry McClaskey, whose face you

IS YOUR VOICE LIKE THIS YOUNG STAR'S?



Is your voice like Rosaline Greene's? She gave up a singing career to develop resonance and control for variety of audio drama roles in her work at WGY. Read what she has to say about the perfect radio voice.

see here, but you will immediately associate the name of Henry Burr as one of the singers with the Goodrich programs. They are one and the same. Henry Burr is one of the best beloved of the famous Zippers. His fame began as one of the regular recording artists of the Victor Talking Machine Company. He is matured and safely past the age of flaming youth. In fact, he has a grand daughter five years old. But he has grown with human understanding and feeling, and this he has been able to put into his voice, as many Radio listeners will agree.

Once more I must proclaim to half a dozen inquirers that the Hired Hand at WBAP, Fort Worth, Tex., is married. His wife is Mrs. Harold Hough and, as the

H. H. says himself, “there are no little Hired Hands—not bragging about that, of course—just telling it.” The topknott? “Sort of a dark bay (when clean).” However, he says of the Sunflower Girl, whom romantic listeners imagine to be his mammoth, “The Sunflower Girl is a very attractive little, red topped, 104-pound batch of interesting personality, and the thing that causes me to be rather wildly enthusiastic about her is that she is not on a diet and is not trying to reduce. She is in love—but not with the Hired Hand—and he ought to know, because she told him so forty times.” So, that's that.

“Gladys” wanted to know about the Smith Brothers, “Trade” and “Mark,” and now I am officially informed that the whiskers so familiar to those subject to relief for larvageal disturbances have nothing to do with static or interference in Radio reception. In fact, the Smith Brothers are just a couple of boys, “Scrappy” Lambert and “Billy” Hillpot, who made a name for themselves as organizers of the student orchestra at Rutgers University. During the last summer they were associated with Ben Bernie in a series of entertainments over the WEAF system.

“What deep secret would you like to know about your favorite broadcast star? Drop me a note, girls and boys, and I'll do my best to answer here. MARCELLA.”

C. B. A. Benefit Party To Feature Air Artists

Chicago Broadcasters Prepare for Annual Performance

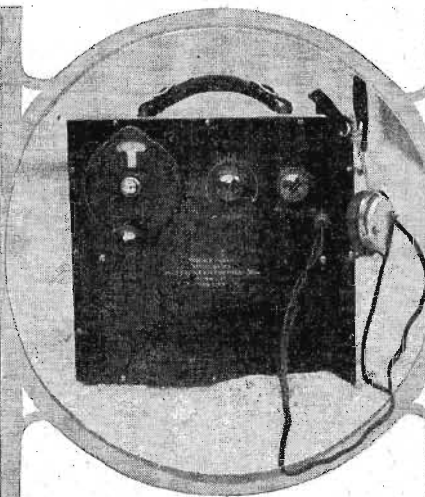
CHICAGO.—The members of the Chicago Broadcasters Association have selected Monday night, February 28, as the date of its annual benefit performance, at which time the twelve member stations will cooperate in a joint program to be held at the Rainbo Gardens.

McClain Directs WDBO WINTER PARK, Fla.—Jack McClain, formerly assistant announcer at WBE, Atlanta, has been named director and announcer of Station WDBO, the Central Florida Broadcasting Station, Inc., here.

WOMAN'S PROGRAM INDEX (Daily Unless Indicated)

Table with columns for program names and times across various stations. Includes sections like Household Economics, Health and Beauty, Women's Clubs, Fashions and Sewing, and Aunt Sammy.

Scranton Fights "Big Noise"



Left and right, the author himself, C. R. Elsie, who is secretary of the Lackawanna Radio Club, of Scranton, Pa. Mr. Elsie's club has eight hundred members and employs an expert trouble shooter in running down mysterious ether noises to their lair. Above, and held by Mr. Elsie at the right, is a Davis Trouble Finder, a most helpful "close range" noise detector. The club always is looking for trouble and finding it.

ON February 5, 1925, a large number of Radio fans met in the studio of Station WQAN of the Scranton Times and discussed plans for a permanent organization of adult Radio fans, with the main object of locating and eliminating man-made interference. Forty-seven persons signified their desire for such an organization and, on March 6, the Lackawanna Radio Club was organized in the same meeting place.

Since that time semi-monthly meetings have been held, without exception. The organization members now number seven hundred and eighty. To the four fans who first conceived the idea, who worked up interest in the first few meetings and who still continue their activities, belongs all the credit for this and what will eventually be a big factor in a future national organization of broadcast listeners.

Meet Electrical Problems

Scranton is not only the metropolis of the Anthracite Coal Fields but the second city in the production of silk. In it are located factories producing underwear, textbooks, stoves, bolts and nuts, pumps, motor trucks, beds, dyes, white lead, boxes, lace curtains, pianos, steel castings, knit goods and a multitude of other products. The motive power for the machinery in these establishments is electricity. It has an extensive street railway system evolved from the first street car ever run in America.

Extensive use of electricity in Scranton and the great prevalence of power lines created a serious problem for the new Lackawanna Radio Club. It was decided to follow the lead of the local automobile club with its successful membership of 10,000. "Let our motto be: 'As the motor club is to the motorist, so the Radio club is to the listener,'" they said.

For several months various members, using their own automobiles, carried a standard Radio set with its necessary batteries, around the city, endeavoring to locate interference with small success.

A Trouble Shooting Set

In the meantime, the Radio Corporation of America had been using a portable super-heterodyne for locating interferences throughout the country, and were about to place a similar model on the market. (The RC-26). Feeling that this was the set needed the club purchased one, to their complete satisfaction. Work then started in earnest.

The local power producing company gave whole-hearted cooperation. The president of the corporation passed the word down to his subordinates to give every assistance possible to the Lackawanna Radio Club, and results verified the fact that his orders are being complied with. Their own central plant and booster stations were found to be perfect, thus increasing the work ahead of the club, since any interference must be found along the lines or in the places where power is being used.

The main object of the club, as has been stated, was the location and elimination of man-made interference. The ultimate aim was to have a paid trouble shooter, with an automobile truck, properly equipped for the work, when the finances

SUCCESS Rewards Listeners Who Wage War Against Man-Made Interference

By C. R. ELSBY
(Sec'y Lackawanna Radio Club)

and membership of the organization might warrant. In the meantime, a great deal of effectual work was being accomplished.

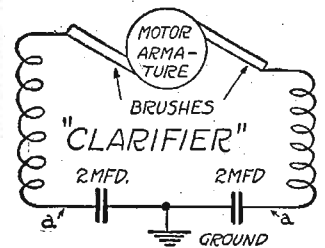
Fourteen members (seven of whom own automobiles) volunteer their services. Each night of the week, two of these volunteers work together. One drives the car and the other handles the trouble set. All members are furnished, gratis, with return post cards on which they may report their interference. The chairman of the Interference Committee sorts out these cards and assigns them to the volunteer trouble shooters for attention.

Ice Cream Cabinets Disturb

Innumerable disturbances of local nature have been located and promptly remedied. The greatest source of complaints,

shooters, visited the homes of complaining members and obtained "directions" on the noise. That is, they listened to it on their portable set, turning the loop to a point at which the noise was loudest, making a line on a map of the city, showing the direction in a southwesterly direction at one home, and other directions at other homes.

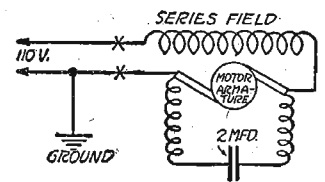
All of these lines intersecting at a certain point, it was self-evident that the disturbance emanated from that particular locality. Visiting that locality, it was found that the noise appeared strongest on the portable set at one pole carrying 23,000-volt high tension lines, indicating that here was the source of the trouble. The matter was reported to the power



Ice cream cabinets, electric refrigerators, oil burners and other devices driven by motors, ungrounded on either of the two supply lines, are great sources of "man-made" interferences. Placing 2 mfd. condensers in series with the brushes and the ground, the noise is often eliminated. If motors are "fused" with more than 15-ampere fuses, insert 5-ampere fuses at two points marked 'a'.

which interfere with reception within a few blocks, has been found to be in ice cream cabinets, electric refrigerators and oil burning furnaces. The organization purchased condensers of various capacities, in wholesale lots. These they sell to owners of offending equipment at cost price. If the owners refuse to purchase, then the club, with their consent, apply the condensers without cost. However, only a few cases have been found where the owners of offending electric equipment refused to cooperate with radio fans and the club.

Occasionally, a disturbance which is characterized as a "big noise" appears and affects fans within a radius of a few miles. During the winter of 1925, such a disturbance appeared in a section of the city and affected reception for a radius of about two miles. The volunteer trouble



When one of the two supply lines is grounded on a "series commutator" motor, one 2 mfd. condenser, applied across brushes as shown, will often stop the noise. If power supply leads to motor are arranged so that the one going to series field is the one that is grounded, then reverse the power supply leads at points XX.

company, who sent workmen to the scene the next day with a portable set. They reported back, however, that everything was as it should be, and their set showed nothing unusual.

Noise Disappears

That night, and several after, the interference locators visited that location and the noise had disappeared, in that tantalizing manner that makes a good Radio set refuse to function when visitors drop in. Shortly after, the noise became obnoxious again, and again the trouble shooters visited the scene, with the same results. The noise had disappeared when they arrived. Finally some bright mind conceived the idea of kicking the pole. The interference immediately commenced.

Taking a large iron bar, and striking the pole, it was found that the disturbance could be started and stopped at will, thus proving that disturbance was on the spot. Night men from the power company were soon on the scene and one climbed the pole to inspect a transformer there. As he passed through a network of wires, the noise commenced, again.

Taking one wire at a time, he shook each one, and discovered that one came in contact with a heavy guy wire between two poles, making an arc that was scarcely perceptible, but due to the high frequency of the line, was carried along. The reason for the erratic conduct of this "big noise" was then apparent. The vibrations of the wind or caused by heavy vehicles passing the poles, started and stopped the noise. The matter was quickly repaired and that disturbance became a thing of the past for radio fans in a radius of about two miles.

Newspaper Plant Noisy

Recently another "big noise" appeared, which interfered with fans in a radius of three and a half miles. Strangely enough, many fans in the area of the above mentioned interference were affected by this noise, which lasted for about six months, before it was located. In character it was similar to the first noise, except the intensity was greater.

To many fans it sounded like a violet ray machine, but after considering the wide range of interference, the idea of violet rays was abandoned, proving, as later shown, that in locating interference, nothing is to be taken for granted. The area of disturbance was so great that the Interference Committee found it necessary to cover, practically, the entire city, to obtain directions, which indicated a local newspaper office, with very poor electric equipment, which was partly remedied, without effect, however, on the big noise.

Trolley companies and their power plants were blamed, huge flashing signs were blamed and many other causes, except the right one, again showing the fallacy of jumping to conclusions.

Cover Entire City

Finally return postcards were sent to every member, asking if they experienced the big noise, to tune their sets for two consecutive nights and report on the card its intensity and loop direction, at maximum. Upon receipt of the cards, the various directions were plotted on a city map, most of the lines intersecting near the central, or business, section of the city.

Taking the portable set, two members of the committee made a survey of the central city and noticed that at one central point, the loop showed no direction. The noise was terrific, regardless of the direction of the loop, evidencing the fact that noise was emanating from some nearby point.

A Davis Trouble Finder (which is highly efficient for short range work), manufactured by the Davis Engineering Company, 67 Wall street, New York City, was enlisted and led the powerful violet ray machine in treating patients. The physicians, however, increased the area of trouble, by using a suspended extension cord, so that they might treat more than one patient at a time, thus creating a veritable broadcasting station of interference.

As in most cases, they were glad to co-operate, when they realized the effect
(Continued on page 11)

CROSLLEY 1927 RADIOS

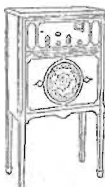
Each set giving the utmost in radio enjoyment at its price. All prices slightly higher West of the Rocky Mountains. All prices are without accessories.



The 5-50—\$50

Enthusiastic owners report amazing performance—a drum, delivering stations loud, clear and sharp; each an almost imperceptible turn of the drum apart. While station letters on drum, return them at will. Single drum Station selector. Acuminators, power tube adaptability and all metal chassis that shields the units from each other. Beautifully finished, Mahogany cabinet, with rose gold trimmings.

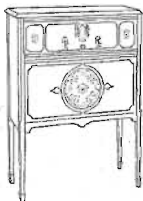
6 Tube Model 6-60—\$60



The 5-75 Console—\$75

This set includes ideas for radio reception perfection not found in any other radio. Marvelous exclusive Crosley "Crescendons" and "Acuminators" increase volume on distant stations and bring in programs entirely missed and passed by on ordinary one-dial control radios. Console model stands 40 inches high. The Crosley Musicone is skillfully built into the cabinet in a manner which is both an artistic and an economical triumph. Ample space for batteries and accessories.

6 Tube Model 6-85—\$85

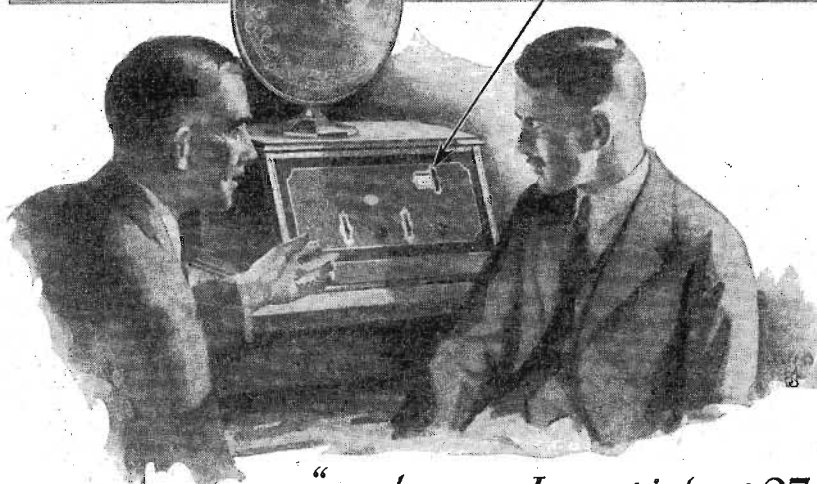


"6 Tube RFL-90" Console, \$98

Introducing the double drum station selector. Crosley's winning non-oscillating perfectly balanced tuned radio set. Includes Musicone skillfully built into exquisite console mahogany cabinet of two-tone finish to match finest surroundings. Room for batteries and all accessories. 40 inches high; 30 1/2 inches wide.



THE CROSLLEY MUSICONE The secret of the popularity of this biggest selling loud speaker on the market lies in its actuating unit. This and RFL are the same share is the reason for its perfect reproduction of all audible sound. BEWARE of imitations. There is only one genuine Musicone. It is built solely by Crosley under mass production methods which makes its unmatchable value possible.



"—as long as I can pick up 27 programs in 30 minutes beside our 3 locals interference won't bother me

I sat down the other night with this Crosley set. One control. Beginning at one end of the broadcasting wave band, I tuned in 27 stations, loud and clear, just like the Cincinnati stations, three of which were going full blast. I listened to each program; identified it; didn't hear any others in the background, and passed on to the next,—all with one finger. It was between 7:00 and 7:30 P. M. Central Standard Time.

The air was certainly full. Some of the stations were less than a dial marking apart. It is amazing how the jiggers they call "acuminators" helped on such fine separation.

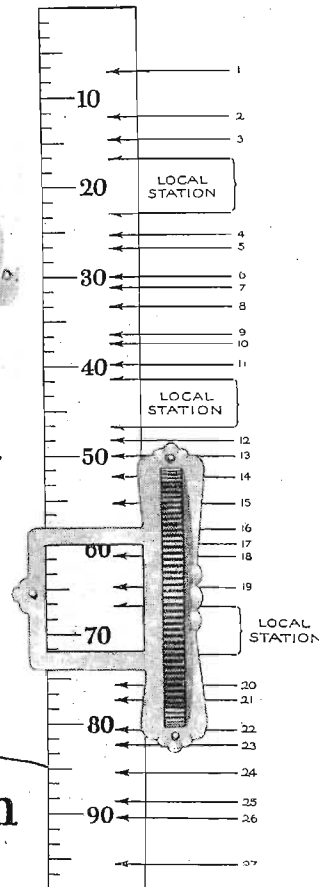
Even using a hundred foot aerial the local stations were easy to go through. One of them only a few blocks from my home.

Some radio, I call it! \$50.00 seems too little. I'd like to see some two hundred dollar sets do as well!

Write Dept. 49, for Catalog.

The Crosley Radio Corporation
CINCINNATI, OHIO Powel Crosley, Jr., Pres.

Crosley sets are licensed under Armstrong U. S. Patent No. 1,172,149, or under patent applications of Radio Frequency Laboratories, Inc., and other patents issued and pending.



The above scale reading shows how stations picked up by Mr. X appeared on the Crosley graphic drum station selector. Name on request.

Single Drum Control

\$50

Prices slightly higher West of the Rocky Mountains.



CROSLLEY 1927 FEATURES
Many exclusives—others found only in highest priced radios.

THE "CRESCENDON"
When, on ordinary radios, ears must strain to catch a station miles away, a turn of the Crescendon on Crosley radios instantly swells reception to room-filling volume. An exclusive Crosley feature.

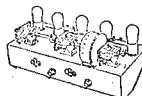
ALL-METAL SHIELDED CHASSIS

This truly great radio achievement, found in several Crosley sets, furnishes a substantial frame for mounting elements, produces excellent alignment of condensers, shields the units from each other, prevents interference, improves the stability of the circuit, increases selectivity and saves cost by standardizing this phase of manufacture.

THE SINGLE-DRUM STATION SELECTOR

Nothing in radio equals the joy or the convenience of single drum control. Crosley single drum control enables you to find the stations sought without log book or "tuning."

"THE ACUMINATORS"
Crosley Acuminators permit tuning in—loud and



clear—weak stations passed over and entirely missed by ordinary single dial radios. In tuning high powered and local stations they are not used. They are an exclusive Crosley feature.

POWER TUBES
Power tube adaptability marks the Crosley "5-50," "5-75" and "RFL" sets. This feature yields Crosley provision for best radio reception at moderate cost.



The GREEN MAMBA

*PRIDE, Folly, Love and Reproach Mingled Unseen
Among the Guests at the Jarrold Mansion, Weaving a Strange Fate
for the Exquisite Alda and Clandon of Africa*

By WYNDHAM MARTYN

Illustrations by W. O. ROBERTS

NOT even in those parched and waste lands from which he was recently returned, had Clandon felt so alone, so unallied with his kind, as he did in Jarrold's great summer home by the Sound. Men passed him by as though he did not exist. Girls, elaborately undressed, and as beautiful even as he had imagined they could be when he dreamed of them in African solitudes, laughed and clattered, casting never a glance at him. At thirty-three Clandon had conquered much of that impatience which would have sent him raging away a few years earlier. He was even able to smile when he thought of this frank unconcern.

Stephen Jarrold, financier, had invited him to spend a weekend under the impression this distinguished hospitality would result in the disclosure of certain matters of which the capitalist wished to be informed. Jarrold, arrogant with success and power, would hardly have believed that the explorer was his guest only because Clandon had a definite mission to perform in this very house.

As he dressed for dinner, Jarrold called up his daughter Alda. "By the way," he began, "Clandon, the African hunter and explorer, is coming for the week-end. You need not include him in your schemes—he's here to see me."

It was Jarrold's way to drain a man of his specialized knowledge and then let him go.

HE walked down the broad marble stairway with the sneer on his face which the spectacle of his daughter's friends invariably brought to it. Wasters and loafers, these golden youths and maidens whose parents had dowered them with great wealth and no responsibility. It was sufficient for him that they amused Alda—and from these light-footed lads she would someday select a husband.

The aura of discomfort which Jarrold brought was dissipated when Alda stood at the stairway's top. At twenty-two she was the most noted of that brilliant and lavish group which made up young society in America. She was a slim, lissome girl with dark eyes and hair almost black. Her hair bobbed as a boy's is, and this coiffure became, not the usual caricature, but something created as it were to show her beautifully shaped head and her slender neck. She had that vividly pale coloring which neither wind nor sun has power to tan or reddens.

She had forgotten the African traveler. She was looking among the crowd for her two special favorites of the moment, Biff Morton and Tom Coryell. Biff Morton, saxophonist supreme, had achieved the distinction of being asked to join a touring orchestra as soloist at the salary of one hundred dollars per week. Since he cost his father not less than a hundred dollars a day, the offer was not accepted. Yet it stamped him as a bright adornment to his set.

STEPHEN JARROLD eyed Biff and Tom with particular distaste because one of these two youths seemed destined to become his son-in-law. Tom's distinction in a critical set was due to a peculiar complex which manifested itself in a detestation of the lesser of the two

automobiles manufactured by Mr. Henry Ford. It was Tom's habit, when flushed with wine, to drive his great Sunset roadster in such a fashion as to remove the left hind wheel of the detested car. He had developed so much skill at this exercise that he rarely damaged any other portion of Mr. Ford's masterpieces. Young Coryell, therefore, as befits one with a serious object in life, was somewhat above the pleasure seekers with whom he passed his days.

Tom watched Alda come down the stairway perfectly aware that she intended to dominate the scene. He thought it was her right. He was aware that an unknown man at his right was addressing him.

"Is that Miss Jarrold?" asked the stranger.

Tom Coryell looked at the speaker almost insolently.

"You must come from the middle of the Dark Continent," he sneered.

"I do," said Clandon unexpectedly. He disliked Coryell on sight. "But that hardly answers my question."

Tom caught hold of the arm of a tall blond boy who was passing.

"Hold on, Biff," he commanded, "and I'll show you the only civilized man on Long Island who doesn't know Alda by sight."

BIFF looked at the stranger and shook his head.

"Lead the poor devil to a drink," he suggested. "It isn't his fault if they've removed his brain and put it in an observation ward." He turned his back on the traveler.

For the two Onslow Clandon had ceased to exist. He turned his attention again to Alda Jarrold. She wore a dress of green, gold-edged sequins. Clandon saw that this tight-fitting sheath over a slender, swaying, hipless body, gave it an undulatory movement as though she were some snake goddess from West African swamps here in human and fascinating form. It was while he was gazing at her that Stephen Jarrold caught sight of him. His manner was charming.

"I'm delighted you have come," he said. "We must have our little talk after dinner when these young people are dancing."

"I'm not really elderly," Clandon smiled, "and I also dance."

"We'll have our chat nevertheless," the other snapped. Then his manner grew more genial. "Will you join me in a cocktail?" No King could have unbent more obviously than Stephen Jarrold.

"This must seem a curious crowd to you," he said a few moments later. It was unlikely, he supposed, that Onslow Clandon had ever had the opportunity to mix with guests in a great house like this.

"CURIOUS seems the wrong word," he returned. "If you had said a brainless crowd, or an unthinking crowd, I might have agreed with you."

"I'm afraid," said his host, "that some member of it has offended you."

"I suppose that's true," Clandon commented. "That boy with the smiling face and cruel eyes irritated me."

"His father is the president of one of our greatest banking houses. He can afford to pay for Tom's squandering. You moralists should remember that even extravagances are relative."

"I've never been called a moralist before," Clandon observed. "What makes you say that?"

"Because I feel you exhale an atmosphere of disapproval which is one of the signs by which moralists may be known."

Jarrold was quick to take offense at any strictures on the habits and hobbies of his set. While he might criticize as bitterly as he chose, it was not permitted an outsider to do so. Clandon was thus reminded of the social difference of a between poor travelers and the idle children of the very rich.

Clandon noticed that the crowd of guests was giving way to permit the passage of a sedan chair carried by two young men. It was headed for this alcove in which a footman stood serving cocktails.

"STAND back!" the young men commanded. "The Green Goddess comes."

As Alda stepped from the chair, Clandon saw her father's dark eyes light up at sight of her. Here, then, was his Clandon dropped back, and Tom Coryell had seen him. Tom affected geniality.

"Here's my old friend Mungo Park from Darkest Africa. Assuage his equatorial thirst." Alda had not glanced in his direction. Her crowd was drinking to Tom's twentieth left hind wheel.

"And not a bad accident in the bunch," he said modestly. "It needs technique. This, Mr. Ford himself admits, I've got."

He began to recite his latest evidence of his skill. Clandon moved to the side of the graceful sedan chair and was examining it when someone addressed him.

"And what brought you from the middle of Africa?" Alda asked.

He turned to look at her closely. Yes, she was all that had been said and written about her. She had a brilliance, a fascination, natural as well as studied, and an air mundane which was not without its touch of insolence. There was a mocking smile on her face.

"You," he said quietly.

"The obvious thing to say, I admit," she returned, "but one wouldn't expect that sort of thing from you." She gazed

(Continued on page 11)



In her hand she held a landing net into which on-lookers threw money lavishly. Alda paused before Clandon. . . . "Largesse," she demanded. "We who amuse you must be supported." "That excuses me," he said coldly. "I am not amused."

1927 De Luxe: the Finest Super

IN ARTICLE II we completed the filament wiring and the greater part of the work on the intermediate system. We will now complete those circuits which carry Radio frequency currents first, and then go to the audio frequency stages.

The St. James oscillator unit provides no mounting brackets and is secured in place by the wiring. Its position will be noted in figure 7 (turning this illustration upside down) as being in front of socket 1 with terminal No. 1 at the right and 1 with terminal No. 5 at the left. Keep figure 7 upside down while following the wiring instructions below as it will be convenient to wire with set in the position shown. The soldering lugs on terminals 2, 3 and 4 point to the rear, which places No. 2 over wiring hole s and No. 4 over hole r. Put in a wire from terminal 2, up through the sub base, via hole s, and bend it forward to the stator terminal of the .0005 mfd. variable condenser directly over the oscillator unit. Another wire is then placed to go from terminal 4, up through hole r, then to the left to the rotor terminal of the variable condenser.

Figure 7 Shows Wires

Most of the wires now being dealt with show up very clearly in figure 7 and can be found readily. From terminal 3 of the oscillator, run a 2 1/4-inch wire right to right lug of the 1 mfd. bypass condenser. From left lug of that condenser run a wire back and to the left to rear lug on the St. James choke. From G post

PART III: Conclusion—Connections to A and B Power; Adjusting Bias, Tubes, Midget and Dials; How to Tune.

By MARVIN W. THOMPSON

Wiring St. James Transformer Strip
This same wiring going to the negative lugs on sockets 3, 4 and 5 is also connected to the front lug of the 1 mfd. bypass condenser in front of socket 2. From the rear lug of this condenser, put in a wire which goes back and then diagonally up to wiring hole j) on the transformer strip. Have it pass over this hole and proceed to the left to wiring hole mm, passing over kk. It goes through mm to the plus post of last St. James transformer. With short wires passing through holes jj and kk connect this wire to plus posts of second and third St. James transformers.

When assembling the transformer strip, we placed soldering lugs on both sides of the strip on certain mounting screws. At this point I would like to once more make clear the placing of the transformer strip in the set. You have the page containing figure 7 upside down. Below is

through hole a, back 3/8 inch and then to the right to the plus 45 binding post on the rear edge. About 1 inch to the right of this last bend, the wire is just 1 inch behind the rear lug of the first 1 mfd. bypass condenser. Run a wire forward to that lug. The front lug is now connected to the front lug of the Amperlite, which is about 1/2 inch to the left.

On the left side of the Ferranti, at the bottom is an unlabeled binding post to be used for grounding the case. Run a 1 1/4-inch wire forward to the mounting screw of the transformer and solder to it. On the under side, connect this mounting screw to the front end of the Amperlite. From the rear lug of the 1 mfd. condenser just under discussion, run wire forward to the wire on the rear side of the St. James transformer strip which connects the three plus post of the transformers through holes jj, kk and mm. Solder to this wire where it bends to go

I note that in the circuit diagram figure 8, the leads from socket post P and from plus 90 binding post are incorrect and should be reversed, both to fit the foregoing description and that P on the transformer will connect to P on the socket.

As the 500,000-ohm variable resistance unit was placed on the panel, the three terminals are one above the other on the right side. From the upper one run a wire back and up through hole h to the G post on the second Ferranti. From the middle terminal of this 500,000-ohm unit run another wire back to the G post on socket 3. Now from the G, B, post on the Ferranti drop a wire through hole g, then bend forward and go to the lower post on the 500,000-ohm unit. Where it bends to go forward, solder on a wire to go to the left and then back to the left binding post of the three for C battery connections.

Now from the P post of socket 3 run a wire to the right and up through hole k to the P post of the Thordarson output transformer. From the B post of this transformer, drop a wire through hole i, then bend back to plus 180 binding post. Where it bends to go back, solder on a 1-inch piece of wire which goes forward to the rear soldering connection of the 1 mfd. bypass condenser.

To ground the case of the output transformer, put a soldering lug on the under-side of the mounting screw at the left

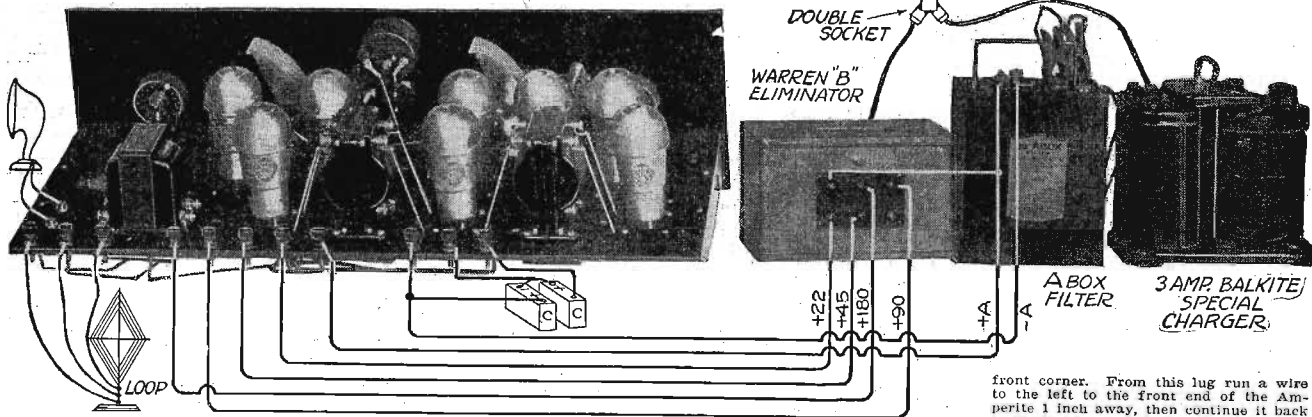


Figure 9—Completed 1927 De Luxe Beside Power Supply Devices, Showing Connections to Be Made

of socket 1, put 1-inch wire forward to the wire connected to oscillator post 2.

From front lug of the .006 mfd. fixed condenser, put in 1-inch wire to the right to the wire connected to oscillator post 4. The rear terminal of the .006 mfd. condenser and the front lug of the choke are connected together and to P lug of socket 1. Another wire is connected to No. 3 post of the oscillator and run diagonally back and to the right to the center of the three loop binding posts. Where it passes close to the negative lug of socket 1 put in a 1 1/2-inch wire to that lug. This completes the wiring of the oscillator circuits around socket 1.

Loop Tuning Connections

Of the three loop binding posts, connect that farthest right with No. 1 terminal of oscillator. From this wire, a connecting wire is put in running directly to the left (note connection over bypass condenser) and up through wiring hole p, then forward about 2 inches and left to the stator post of .0005 mfd. variable condenser for loop tuning. Now connect oscillator post 5 with G lug of socket 2, the wire running first to the left 2 inches, then straight back 2 1/4 inches.

Two wires now go from the P post of socket 2. The first goes to the left and forward, to the P post of the nearest St. James transformer on the strip. The second goes to the left and backward, to the rotor lug of the Hammarlund midget condenser.

Now connect the panel meter as follows: from the plus lug of socket 2 run a wire forward and up through wiring hole x to lower post of the switch below meter. Connect upper switch post to the plus terminal of meter. Drop a wire from the other meter terminal down through sub base hole w and solder it to wire which connects panel rheostat with the negative lugs on sockets 3, 4 and 5. Thus the meter will indicate the voltage across the intermediate tube filaments.

figure 6, also upside down. Imagine now that you can grasp the edge of the strip along which are the holes mm, kk, jj and hh, and pull it toward you, bringing strip into a vertical position. If now you were to push this vertical strip up into place on figure 7 the holes will all be correctly placed. From negative lug of socket 5 run a wire to soldering lug on rear end of the mounting screw at hole marked W nearest X. From lug on front end of this screw, run wire forward and up through sub base hole v to right terminal of potentiometer on the front panel. Where this wire bends to go upwards, solder wire to go forward to the 1/2 mfd. bypass condenser placed flat against the front panel and held in place by having a mounting lug secured under the nut of the lower bracket mounting screw. This wire connects to the upper connecting lug.

From plus terminal of socket 5 run a wire to the rear soldering lug placed on mounting screw X next to hole W. From the lug on the front end of X, carry a wire forward and up, through sub base hole t, to left post of potentiometer. Now connect together the minus posts of the first three St. James transformers and continue to wire diagonally forward and to the left, then up through wiring hole u to center terminal of potentiometer. Where this wire bends to go upwards, connect another wire which goes forward to the lower connecting lug of the 1/2 mfd. bypass condenser held against the front panel.

The minus post of the last St. James transformer (that at the left) is connected to soldering lug on front end of the transformer mounting screw just 1/2 inch above it. The soldering lug on rear end of this screw is connected by a short wire to the lug on screw X, which carries the plus circuit through to the potentiometer. Now connect rear end of the .00025 mfd. fixed condenser to G terminal of socket 6, and we can proceed to the wiring of the audio frequency circuits.

Audio Frequency Connections

From P of socket 6 run a wire forward to wiring hole b and straight up to P post on the first Ferranti. From the H. T. post of this Ferranti drop a wire

through hole mm, and we will thus have connected our intermediate system to the plus 45-volt circuit.

We now proceed to the first audio stage, which includes socket 7, the second Ferranti, the 1 mfd. condenser just to the right of socket 7, and the Gem-Jac on the panel. From the G post of the first Ferranti, that on mounting holes E, E, B and B, drop a wire through wiring hole e, then back to the G post on socket 7. From the G, B, post on that same Ferranti, drop a wire through wiring hole c, then to the right an inch and back to the center of the three C battery binding posts. From the H. T. post on the second Ferranti drop a wire through hole s of the sub base, then forward through hole hh of the transformer strip to the top lug on the right side of the vertically mounted Gem-Jac.

The top lug on the left side of the Gem-Jac connects to the soldering lug placed on the front end of the screw going through the U mounting hole nearest V. On the back of the transformer strip, the soldering lug on this U mounting screw is connected to the rear lug of the 1 mfd. bypass condenser just to right of socket 7. From this same condenser lug run a wire back about 1 1/4 inches, then to the right to the plus 90 binding post at rear edge of sub base. As with the first Ferranti, connect the grounding binding post on the lower left side of the case to the mounting screw just in front of it; then on the under side, connect this mounting screw to the front end of the Amperlite about 1/2 inch to its left, and also to the front lug of the 1 mfd. bypass condenser.

To complete this plate circuit set of connections, drop a wire from P of this second Ferranti down through wiring hole f and then forward through hole pp in the St. James transformer strip to the lower lug on the right side of the Gem-Jac. The lower lug on the left side of this jack is next connected to the lug placed on the front end of the screw in hole v nearest U on the transformer strip while, on the rear end of this mounting screw, the lug is connected by a wire going back to the P post on

front corner. From this lug run a wire to the left to the front end of the Amperlite 1 inch away, then continue it back to the front lug of the 1 mfd. bypass condenser. From the front terminal on the right side of our Thordarson output unit, drop a wire through hole m, then to the right to the front phone tip jack. The rear phone tip jack is connected to the rear terminal on right side of the output transformer by a wire running up through hole l.

We near completion of the wiring and have only a few odds and ends remaining. Put a wire through hole hh of the transformer strip to the plus terminal of the first St. James transformer and run it to the right about 4 inches then back to the plus 22 binding post. Where this wire passes close to the rear lug of the St. James choke, put in a wire connecting it to that lug. Considering the three loop binding posts, run a wire from that at the left, diagonally forward and to the left to the stator lug of the midget condenser, then continue it until just below hole n, up through that hole, forward 1 1/2 inches and to the left to the rotor terminal of the loop tuning condenser. And there you are!

Those are the permanent connections. For purposes of initial adjustments, take out the wire connecting P of socket 3 with P on the Thordarson unit and save it for re-installation later. Connect P on the socket with the unmarked post on the milliammeter. Then connect the plus post of the meter, through hole k, to P on the transformer. This puts the meter in the plate circuit of last tube, where it comes in handy for tube matching and C battery adjustment.

Connections to Power Supply, Etc.

Figure 9 shows, very clearly, the connections to power supply, loop and speaker. Personally, I like the combination of A-Box and Balkite charger very much for lighting the tubes. Speaking of tubes, those shown are exceptional. If you have not made their acquaintance, they are Concert Master, totally shielded and cushioned tubes of the 20A type, made by Continental Sales company, 179 West Washington street, Chicago. They operate at highest efficiency with about 3.3 to 4.4 volts across their filaments and increasing the filament brilliancy does not help. Because of this low oper-

(Continued on page 11)

ONLY ONE MORE SECTION OF "WHOZITS" TO APPEAR



The following artists are in above panel: Raquel Nieto, KFVB; "Aunt" Jane, WOC; Kathryn Kies Hardtke, WSOE; Irene Rich, KFVB.



The following artists are in above panel: Ford Rush, WLW; Herbert Silberstein, WOC; Glen Rowell, WLW; Joe Flood, KOA.



The following artists are in above panels: O. D. Temple, WOW; "Bud" Grey, WNAC; George D. Hay, WSM; Dr. Earle J. Shay, KPRC.



The following artists are in above panel: Lillian Watt, WSM; Marian Fisher, WOW; Nettie Mae Powell, KPRC; Gertrude Lemothe, WNAC.

The GREEN MAMBA

(Continued from page 7)

into the steady, far-seeing blue eyes of a man who had lived much in the open air. But he was too serious for one who looked upon seriousness as being in the nature of a rebuke.

She called Biff Morton and Tom Coryell to her side.

"DEAR ones," she drawled, "here is an intrepid explorer who has come from mid-Africa to see me alone."

"Good Lord!" cried Tom. "We'll be having Livingstone and Stanley next." Clandon beheld her whirled away in her sedan chair. She had not cast a second glance at him.

"How did he waft in?" Tom Coryell asked her.

"A friend of dad's," she answered. "An innocent bystander who has some crumbs of information dad wants. We shall never see him again."

The two boys were both satisfied that Alda had no further interest in this stranger. They did not guess she was wondering how soon she could drag from him the reason of his seeking her out. Her chance came after the elaborate, many-coursed dinner.

"I suppose you don't dance in Africa?" she asked.

"Why not?" he retorted. "I've spent many months on the West coast where this sort of dancing originated. Furthermore I was once at Yale and wasted more hours than I care to remember."

A few minutes later she looked at him in surprise.

"Why, you dance very well, Mr. Clandon."

"It's one of the least admirable human accomplishments," he told her. "I'm afraid I've disappointed you—you would prefer me to be a savage."

"IT'S too hot to dance again," she said. "Have you been out on the terrace? There's a wonderful view of the Sound."

When they were outside she turned on him.

"Why did you say you had come all that way to see me?"

"Because I promised a man more than a year ago that if ever I came back to New York I would see you."

She seemed unfriendliness in his voice, almost enmity. It was a new and irritating experience for Alda Jarrold.

"A man in Africa?"

"Yes. A dead man who was very dear to me. You last saw him on this very terrace. He has described it to me so many times." Clandon looked about him.

"There used to be an old sun dial with the Latin tag on it, I count only the Seven Hours." You were standing by it when you broke his heart. Don't laugh, Miss Jarrold. There are still men who can be wounded to the death by women who have the misfortune to love. He was one of them."

"How extravagantly you talk," she scoffed. "Like the dial, I count only the serene hours, and there are no unhappy ones connected with it."

"That was his tragedy," Clandon said quietly. "The recollections were not unhappy to you. Probably it amused you to know you had hurt him."

She shrugged her shoulders.

"If you choose to be mysterious, well and good, but mysterious strangers are not very interesting. I think I shall go in."

"Not yet," he said quietly. "I've come all these thousands of miles to tell you about this man."

"We can talk about it tomorrow morning," she said. "I'll take you out sailing."

CHAPTER II

CLANDON was not to escape an interview with Stephen Jarrold.

"I'll put my cards on the table," said the financier gently. "It was the phrase he used when he kept one of them up his sleeve. 'I'm assuming this will go no further?'"

"We haven't a single common friend," Clandon reminded him. "I'll give you my word to be silent to be asked."

"I'm interested in the future of cotton in British East and Central Africa, and particularly in Nyasaland and Uganda. You are the authority on that country. My reports on it have not been favorable. My informants say there is a scarcity of labor."

"They are right," Clandon agreed.

"They tell me transportation will be difficult."

"That's perfectly true."

"Maybe," said Jarrold irritably, "but I want a man who won't be content with reports like that. I want a man who will tell me how to get labor and overcome the transportation problems. It can be done. I can make you a rich man. Is there any good reason why you should prefer to remain poor?"

"Your scheme clashes with my plans,"

Clandon told him. "I'm grateful for your offer, but money is not my sole interest in life."

"In other words you want me to give this opportunity to another man." He sniffed contemptuously. "I called you a moralist before dinner. You will not think me rude if I call you a fool now?"

Clandon smiled. "Not at all. I shan't even be able to deny it."

JARROLD sat for a moment in silence. He would like to have been able to dismiss the other with a curt word. But he had reason to believe that there did not exist another man so useful to him for an especial purpose as this nonchalant Onslow Clandon. He put on an air of friendliness.

"That is entirely your own affair," he conceded, "but I should be grateful if you would give me and my friend John Bury the benefit of your experience. You will 'Gladly,' said Clandon, "but I am leaving on Monday."

"You'll stay a week," Jarrold said, smiling, "and I'll see you have a good time." Stephen Jarrold only wanted the opportunity to break down Clandon's resistance. He would show the intractable young ass what wealth had to play with.

It was midnight when Clandon left Jarrold, but the hour had no power to bring sleepiness to Jarrold's guest. In this vast and splendid mansion he beheld jazz at its apotheosis. He saw the pleasure-mad, crazy, irresponsible, selfish, yet not unattractive crowd, which in varying ages had danced its wildest measures before the fall of nations. So imperial Rome went unheeding to her doom. How, Clandon wondered, would these emblazon their shields?

A NEW excitement was preparing—the introduction of Biff's quarter-tone saxophone to an expectant world. From the outer hall Biff made his entrance on a pinto pony. He was garlanded with flowers and he bowed as conquerors do to applauding throngs. Before him, clad in a fantastic swimming suit, Alda danced barefooted. In her hand she held a landing net into which onlookers threw money lavishly not asked for what their money was demanded.

Biff raised the sacred instrument to his lips and the crowd shivered as barbaric music burst from the only saxophone of its kind in existence.

Alda paused before Clandon. The spectacle roused antagonism in him.

"Largesse," she demanded. "We who amuse you must be supported."

"That excuses me," he said coldly. "I am not amused."

"Turned you down cold," Tom Coryell whispered as she left the explorer. "Even you can't melt his brain and heart."

"Can't I?" she said, her eyes flashing. "Have I ever failed?"

Later, Clandon saw that she had changed her bizarre costume. She left her partner and came to his side.

"You seem to have a genius for disappointing me," she said. "Not before he had seen the curious lights in her eyes. 'I thought priggish young men were extinct. I haven't met a specimen for five years until you came to make merry. I don't wonder you're unpopular. All moral economists are. A moral economist has explained, 'Is a person who spends his time without enjoying it.' There was no doubting her anger. That she who had always tasted success should be publicly treated with coldness in the presence of her intimates was maddening. Tom Coryell sauntered to her side.

"Leave marble heart alone," he suggested. "He is another's and deadly afraid of you. Come on Alda. This is the epochal dance. Never before has a waltz been played in quarter-tones. Biff wants you and me to show 'em how it's done."

CHAPTER III

CLANDON, coming in to breakfast after a swim, found very few at the table. As the sounds of festivity were dominating the air when he had dropped off to sleep after three o'clock, it was not surprising. He did not think that Alda would keep her appointment. He had offended her unwittingly. He had acted the part of censor in a society which loathed criticism.

At ten, a footman informed him that she was waiting outside in her motor. Her eyes were clear. There was not a trace of fatigue on her face or any indication that she did not regard him with friendliness.

"I never can understand," he said, "how girls can keep late hours and yet look as fresh and fit as you do now."

"Enjoyment doesn't tire," she returned. "Naturally you look fatigued. You spend your waking moments in disapproving of all you see and most of what you hear. It wastes physical and psychic tissue. That explains why you stern, moralizing,

(Continued on page 23)

COULD YOU SING LIKE HER? SUCCESS AT 14



Robbye Cook was given her chance by Station WCOA, Pensacola, Fla., through the kindness of John Frenkel, director. She was only fourteen years old—rather young, Mr. Frenkel thought—but she had the mysterious something and quality in her voice that soon spread her fame via Radio to cold, cruel New York. There the Mighty Metropolitan Opera gave her an audition—and she, just past her fourteenth birthday.

SCRANTON "BIG NOISE"

(Continued from page 5)

of their treatments on others than patients, and promises to dispense with the suspended extension cord. It has been found that the noise ceased.

Must Keep Courageous

Any organization that seeks to make electricity co-operative with Radio rather than antagonistic must be made up of fans who cannot be discouraged. If trouble exists, it can be found and cured. All it takes is plenty of work. There will be lots to do when an organization is first begun, but it will gradually diminish and soon the organization will be waiting for interferences to appear.

All interferences are not so easy to eliminate. A second-class hotel in the heart of the city has an elevator of a very obsolete type, as is the motor which operates it. This was located as the source of disturbance to fans in a large radius.

The application of two 2-mfd condensers cleared it for a short time, and just as members were feeling elated, the condition of the motor caused it to override the condensers. Two more were placed on the motor, and again the trouble is beginning to appear. Choke coils will be tried next and if they fail, steps will be taken by legal processes to compel the owners, who are reticent about co-operating, to cease "disturbing the peace."

Air Still Disturbed

With the two "big noises" out of the way and many minor cases cleared up, there are still other disturbances in the air around Scranton. The officers and members of the club know this and are undaunted. They realized the size of their job when they started. The fact that they are doing some concrete good for Radio fans and reception in their city is evidenced by the phenomenal growth of their organization—from 47 in March, 1925, to 507 on January 15, 1927, less than two years, and still growing. The paid trouble shooter has just been hired.

How the Lackawanna Radio club is organized and how it operates—also suggestions for national organization along the same lines will be discussed by Mr. Elsbey in the March 1 issue of Radio Digest.

"1927 DELUXE" SUPER

(Continued from page 9)

ating voltage, seven of them and a 171 power tube can be run from the A-Box, although the A-Box is only expected to supply 1 1/2 amperes from the 2 1/2-ampere Balkite. If you use other tubes, it would be better to get the new type 3-ampere Balkite charger.

The B power unit shown is one of the most powerful known. A powerful unit is necessary so that a voltage drop will not occur when the power tube makes heavy drains of B current on loud or long sustained notes. A power tube will draw anywhere from 10 to 25 milliamperes at 150 to 180 volts, even with C battery, while seven other tubes are going to pull from 3 to 6 milliamperes each. Another point in favor of the Warren is the provision of a 22-volt tap, a feature not found on many of such power supplies. The Warren Electric Company have still further improved their B power unit and a model is now available, with variable taps, selling at \$29.75.

Adjustment of C; Matching Tubes

With seven A tubes and a power tube in place, the 2-megohm grid leak in the clips on the .0025 mfd. condenser, and all batteries, power supplies, loop and speaker connected we are ready to operate the De Luxe. With a moderately strong signal on, alter the C battery voltage to the

Opera Finds Child Prodigy at WCOA

Metropolitan Recognizes Robbye Cook, Fourteen-Year-Old Girl, Who Sings "Like a Thrush"

By H. P. Brown

WHEN Johnnie Frenkel looked down at the little fourteen-year-old girl who had volunteered to sing over the Pensacola city broadcasting station, WCOA, he had misgivings. Too young and immature, he thought; but then there is a certain charm to children's voices if they are not overdone.

So Robbye Cook was given her chance. She came, she sang, she conquered, to paraphrase a certain Latin phrase well known to school children.

"Who is that girl?" "Where did you get your opera talent?" "Where did you find your singer?" "Wonderful, have her sing more, more!" "Who is the celebrity?"

"Is she a famous star?" This was the burden of a flood of telephone calls that came to Mr. Frenkel as soon as Robbye had finished her first song over the air.

Robbye's Fame Spreads Abroad

"Oh, I am so happy. I just wondered if I really could sing. I love to and I want to be a great singer." Robbye danced and clapped her hands when she realized her adventure had been such a success. Mr. Frenkel was just about as happy as Robbye, because, he has put his whole heart and soul into that broadcasting station and has made it famous throughout the country.

Robbye's fame spread abroad as she was heard again and again over WCOA. Then, just like it happens in fairy stories, some kind prince decided she must be heard by the very highest authorities in the land. She was carried away to the magic city of New York. Never before was such a little girl given such an opportunity. There she was given one of the auditions so eagerly sought by talented persons who work years for the privilege.

Heard by the Mighty

A little timorous at first and then with surprising ease and poise she sat down to a piano in the presence of the great Federico Giulio Gatti-Casazza, general manager of the Metropolitan Opera, and Otto H. Kahn, chairman of the board of directors of the Metropolitan Opera company, and sang. At first her fingers rippled over the white, shiny keys tremulously and a little stiffly. Then her voice sounded in her own ears. Her confidence came bubbling into her throat and she sang "like a thrush," as one of the great men remarked to the other. Sweetly, softly, her voice developed and then swept into real power, with sufficient volume to fill a large auditorium.

She will be given the great opportunity which in all likelihood she would have missed had it not been for Mr. Frenkel and the broadcasting station, WCOA.

The Reader's View

And Here Is a Man With 368

To date I have 363 Ekko stamps and quite a number due. About 20 stations do not issue stamps. Those from distant points include California 10, Oregon 1, New Mexico 1, Wisconsin 14, Texas 11, Canada 16, Cuba 1, Porto Rico 1, Mexico 2. Of 44 received from Illinois 28 are from Chicago.

My location is in the heart of New York City, with the cliff dwellers, about 15 aerials on the roof, and thousands within a small area, most of them emitting squeals and yowls.

Within the Metropolitan district there are 47 stations, most of them broadcasting each night, and they form a barrage that requires considerable manipulation of the dials to get through their waves. In fact, some of the stations are so powerful they blanket about 15 degrees on the dials.

It would appear that those living remote from the great centers of broadcasting should have a collection greatly exceeding the one of mine. I have logged 435 stations altogether.—Wm. A. Stead, 815 W. 179th St., New York.

last tube, as supplied through the left C battery post, until minimum flicker of the milliammeter needle occurs. Unless an adequate B supply is connected, such as new large B batteries or a new set of supply unit, complete elimination of flicker will be impossible. As long as there is flicker, there is distortion, even though unnoticeable to the average ear. Four and one-half volts of C is correct on the other C bias post if a full 90 volts has been applied to the plus 90 binding post.

Matching of tubes is surprisingly simple. First remove the first two intermediate tubes, those in sockets 2 and 4. Then, with the rheostat at right end of panel, adjust the filament voltage on the remaining intermediate tube to, let us say, five volts. The potentiometer at the left is very slowly turned as you keep your eye on the milliammeter on the sub base. When the tube goes into oscillation the

(Continued on page 29)

ASSEMBLE THESE PICTURES OF RADIO ARTISTS



The following artists are in above panel: Dallas Decker, WHT; Prof. Foca Di Leo, WSOE; H. D. Yocum, WJR; Deane H. Dickason, KOA.



The following artists are in above panel: Alma Wibbing Levy, KMOX; Sybil Seaman, KTHS; Margaret Stracusa, WPG; Hazel Fern Heitman, KJR.



The following artists are in above panel: Walter Neuman, KMOX; Alfred Schipsi, KTHS; Arthur Scott Brook, WPG; Glauco Meriggoli, KJR.



The following artists are in above panel: Essie Reese, WMC; O. V. Hughes, WMC; Owen Bartlett, WJR; Harry Gaut, WASH.

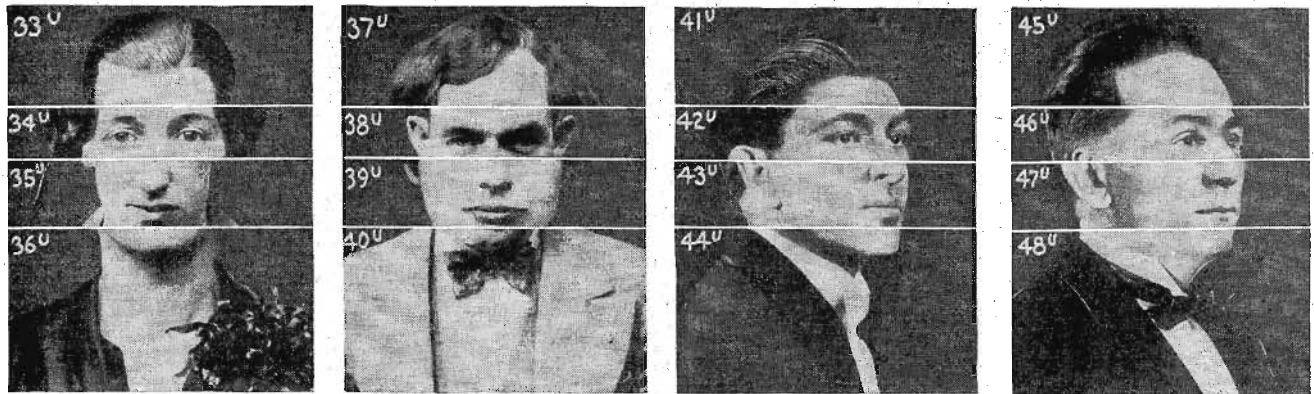
ASSEMBLE THESE PICTURES OF RADIO ARTISTS



The following artists are in above panel: Coral Goris, WASH; Grace E. Makepeace, WHK; Florence Ann Reid, WMAK; Eleanor Grace Gehring, WHK.



The following artists are in above panel: Clyde Gardner, WJAX; Kenneth Salisbury, WMAK, Chief Roaring Thunder, KVOO; Sam Galbraith, WHT.



The following artists are in above panel: Miss M. Toohy, CKY; Charles Taibi, WHB; LeRoy Montesanto, WMCA; Billy Adams, CKY.



The following artists are in above panel: John T. Schilling, WHB; Norman V. Pearce, WMCA; Douglas Haygood, WJAX; Bobbie Griffin, KVOO.

Radio Digest

Illustrated

Reg. U. S. Pat. Off. & Dom. of Canada

Published by the
RADIO DIGEST PUBLISHING CO.,
 (Incorporated)
 510 North Dearborn Street
 Chicago, Illinois
 Telephones: Superior 7323, 7324, 7325, 7326, 7327

E. C. RAYNER, Publisher

Eastern Office, Park-Lexington Building, 247 Park Ave.,
 New York. Telephones: Ashland, 8144, 8145, 8146

Member of the Audit Bureau of Circulations

241
 PUBLISHED SEMI-MONTHLY

SUBSCRIPTION RATES
 Yearly in U. S. and Possessions and Canada, \$3.00
 Foreign Postage, \$1.00 additional. Single copies, 15 cents.

Vol. XX February 15, 1927 No. 3

Compromising Radio Control

AFTER five years of untiring effort on the part of the Radio industry and other interested persons, a compromise Radio Act is on the threshold of reality. As we go to press, the house has passed the measure without roll call. The senate had scheduled its hearing and the President's signature was expected without difficulty, although the measure provided a commission, a feature Mr. Coolidge had warned was to his distaste.

Before this publication reaches your hands, the measure may have passed the senate, received the President's signature, and become a law.

Before discussing the bill, let us remember the old saying, "When doctors disagree, call the undertaker." Perhaps the "Radio Act of 1927," as it has been dubbed, may not satisfy everyone. It probably will satisfy no one in all its clauses and sections. It is a compromise. But, rather than call the undertaker for the Radio industry, it is far better to accept the compromise measure.

This publication has had thousands upon thousands of letters from unhappy broadcast listeners, unable to separate the stations, incapable of hearing their favorite broadcasters on account of the general congested condition of the ether, and generally disheartened and disgusted with Radio. Does this help the growth of the industry? Not much!

The commission empowered by the 1927 Radio Act will have much to do to untangle the terrible Gordian knot into which the broadcasting wave lengths have been tied by lack of control legislation. Obstacles of many sorts now exist, but unforeseen efforts to hinder the work of this commission, to compel it to do favors for certain interests, will be noticed immediately once the act becomes a law.

Regardless of what happens, the commission or whatever body or individual finally is destined to regulate Radio, cannot do worse than duplicate the present chaotic condition of the air. Matters could not be worse. Very little conscientious work will be required to improve things greatly.

Radio control in some form is sadly needed. Let it be a compromise. If the compromise law is insufficient, experience will make perfecting amendments possible. Better half a loaf than none.

What Would Washington Say?

THIRTY-FIVE broadcasting stations, located in all sections of the country, from the Atlantic to the Pacific coasts, from "54-40" to Georgia and Maine to Southern California, will carry the President's message to congress February 22 commemorating the 200th anniversary of the birthday of George Washington, the Father of our country.

We wonder what George Washington would think if he witnessed the present day magnitude of these forty-eight states, their wealth and population, the many inventions they have given the world, the numerous prosperous industries they boast. What would he say if he saw President Coolidge, speaking before the joint session of congress, and having his voice carried over telephone lines and through the air direct to the ears of 118,000,000 people residing in those forty-eight states?

Erbstein Returns to the Air

"CLAP HANDS, Here Comes Charley!" Mr. Erbstein, famous on the air under the initials of WTAS, also WCEE, has returned to the air. His return engagement is being greeted with pleasure by thousands of listeners—and wry faces by others.

"Charley," as he is known to his friends, has the not unusual proclivity of being very popular with some people and equally unpopular with others. However, in coming back on the ether he has announced a policy worthy of consideration by many broadcasters.

It is this: WTAS will not read telegrams, will not dedicate numbers, and will bar sopranos.

Okeh, professor, let's be under way. Even the soprano elimination is satisfactory, too, when unabashed so many of them persist in blasting the microphone.

RADIO INDI-GEST

Memory

The memory of my mother is like a fragrant rose
 Bending o'er me from a slender amber urn;
 Beautiful and saintly pure to look upon—
 Lingering and comforting—a nocturne.

She sits beside me in the silence of the evening
 Softly to my soul she croons a tender song;
 I turn the dials and hear the songs immortal
 To realize that life is short but LOVE lasts long.
 RHEA SHELDON

Why WAAZ'S Announcer Resigned

(One Marcella Didn't Know About)

Dear Indi: The announcer at WAAZ had formerly been candy butcher at a burlesque house. Tonight he had one or more under the belt in celebration of the new year. So when Manager Finkelstein of the station told him to put in an extra good boost for Okoko Chocolates our hero rose nobly to the occasion.

"Ladies an' Gents," he began after the first number, "It is the custom of this theater to offer for sale (hie!) to its patrons high grade candies. This year we are offering Okoko Chocolates, made by the International Candy Company of Red Bank, New Jersey, of the finest confectionery sugar, malt, milk, and covered with the finest of German milk choklit (hie!) By special arrangement with the management, we are able to give away with each and every package a valuable prize, ladies hooded sets, silk handkerchiefs, pearl handled chrome steel hunting knife, guaranteed fountain pens, silk purse, rubber hot water bottle (hie!) warranted cigarette lighter, pocket flask, silk scarf, ladies' imported hand bag, tie and garter set, 18-karat cuff links guaranteed not to rip or unravel, combination bottle opener and clothes brush, and many other articles of value."

The announcer lowered his voice to a whisper and leaned toward the mike in a confidential fashion.

"We also give away free this book entitled, "Night Life in Dixon," giving the experiences of a young woman who left her home on the farm to seek employment in the big city. It tells all about the trials and temptations of a young girl, intimate scenes of sporting life, life in the underworld, and many other interesting chapters too numerous to mention. With the book goes free a set of six art photographs from Paris, folks, the police has warned me not to show them in public, but they will please any gentleman, your money cheerfully refunded if not satisfied. Those desiring to purchase will find a young man in the aisle who will be more than pleased to wait upon you—"

And at this point Annager Finkelstein pulled the switch. There's a new announcer at WAAZ.

THE THIRD TROMBONE PLAYER

NuRseRiE rImes

No. 3 or maBie iT is No. 4

LITtl JAcK HoRNER—SAt In A CoRNER,
 TuNin Hiz SouPeR-HeTT.
 He SED with a FEMLE as HEE TwISTED (Hee DILE,
 THAT pLAIID heLL wITH mY NeIghBoR I BRTT.
 Old King Tutt.
 Hiz-zelt.

Little Alfie's Essay on Radio

I DON'T know why they call wireless wireless. Just for fun I spose. Becos there's lots of wire in it. You have to have a long pole called an aeryal, but that isn't what father called it when he fell off it white he was fixin' it up.

You can either have a cristle set or a valve set. You can get Amerlea with a valve set. But father says you can keep it. He doesn't want it. You can listen to wireless programs if your set works, unless you have an uncle in the house who understands wireless, and then he plays with it all the time so you don't hear anything.

The first thing they tell you is the whether report and all about dipressions moving over Ireland. But father says there's been dipressions over Ireland ever since he can remember. They always tell you it's goin' to rane tomorrow, so why bother to tell you? Then you have a lecture on the silkworm and its habits and a classical concert and hints on killing slugs on cabbages, and the weekly wireless sermon and Jazz by the Saveloy Orphans. Sum people think that one day they will have broadcast debates in Parlyment, but father says, didn't we go into the Great War to stop FRITEFULNESS?

Father doesnt approve of wireless. He says he doesnt need it. He says Ma has broadcasted him a Bedtime Story every nite for years. Good nite everybody.

LONDON BOBBY

Well, Whattaya Gotta Say About It?

HELLO, children of the Indi-Gest column. Now for our great discussion and "Well, Whattaya Gotta Say About It." You remember, we were finding out all about what George Washington would do if he were to cross the Delaware today—and would he permit the feat to be broadcast by direct wire. Who will be the first to speak?

Kentucky Babe: "You are quite right—the Shenandoah situation is very acute. It is a matter for conjecture. Personally, though, I always thought the Latin quarter was an Italian two-bit piece."

Gortude Gallunpus: I can't see any reason for telling the world at large about a man crossing a railroad unless he expects to get hit or something. Maybe it's a gin party and they're trying to beat the D. & L. engine to the crossing.

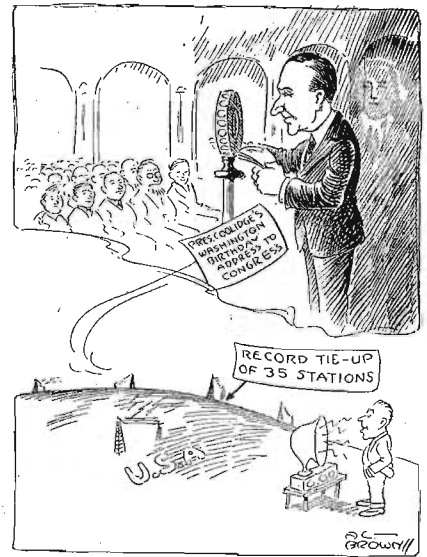
Tinkertube: No, don't broadcast it. Too much interference now.

Box Car George: He was no relation of mine, but if he was crossing the Delaware today it certainly should be put on the air. Then if any of the ice cakes smashed in any of the boats they could send an SOS and the Hessians would be right there to help them.

Little Drum: Yes, this could be put on the chain. And when the Blue Line met the Red Line we'd get a national heterodyne.

INDI

"Silent" Cal!



Condensed BY DIELECTRIC

Four years ago we heard grand opera broadcast for the first time in history, after considerable space had been used in these columns in advocacy of it. I don't mean to imply any credit is due for what was set forth here; merely to recall the long struggle which preceded the broadcasting of music of this class. That initial performance was given by the Chicago Civic Opera Company. Later, a company in New York came on the air for a few performances, as did the Chicago company when visiting Boston and other cities. Neither of the two major opera companies (one of which has never tolerated its performances to be broadcast) were heard again until these Links: the Blue and Red, came into existence. With more than twenty stations over the country included in these "links," an advertiser secured the rights to a single-act-performance originating on the stage of the Chicago company. However much thousands of listeners might wish to hear an opera in its entirety, and there are reasons why they may not, there is deep gratitude felt for the sponsor of this feature on so many programs. The choice of the Garden scene from the opera Faust was a happy one.

The broadcasting through Station WEBB, Chicago, of organ recitals from the Piccadilly theatre (which has become a regular feature) adds one more possibility for lovers of this instrument. This organ, by the way, is a superior one and will be so recognized by listeners of the cognoscente class and others. Perhaps the greatest impressions are those produced by various effects in combination of stops, which on this instrument seem unlimited; yet no disappointment will be felt with the work of the organist in interpreting his selections.

A portion of an organ recital was heard from Station WOC, Davenport, Ia., which indicated a program of more or less classical nature. That familiar composition by Dvorak, the New World Symphony, often suffers curtailment of all its parts save the large movement, which no one will deny is melodious and pleasing and may be, after all, of sufficient length for an ordinary program number. Yet the organist cannot escape from censure for having allowed the tempo to lag unduly—a not altogether unusual error. Other numbers were sufficiently pleasing to deserve only commendation.

Station WIOD, Miami Beach, Fla., appears to sense the taste for dance music among its visiting vacationists, for that type of entertainment abounds. No comment on the orchestra is needed. It is on a par with others giving the same class of music. The announcements are brief and satisfactory—all that any announcements should be. What else can be said for entertainment from the "wonderful isle of dreams." Well, you fill it in and send to the station.

Once again Radio listeners had the good fortune to hear Mme. Kurenko, a coloratura singer without a superior in this country today, assisted by Mr. Stefano, whose solo harp numbers emphasized the adaptability of this ancient instrument to broadcasting. Then we heard that eminent pianist, Josef Hoffmann, in a program replete with the choicest works of Chopin and numbering among them the exquisite nocturne in D flat, of considerable harmonic interest, which was included among the several encore numbers. Thank fortune, or some wealthy sponsors, we have no lack of such broadcasting!

AN EVENING AT HOME WITH THE LISTENER IN IN EASTERN TIME

Table listing radio stations by call letters, location, and broadcast schedule (M-Fri) in Eastern Time.

STATIONS IN ORDER OF WAVE LENGTHS

Table listing radio stations in order of wave lengths, with columns for Meters, Call, and Station Name.

WHAD FOUNDER HAS UNEXPECTED DEATH

MILWAUKEE, Wis.—The Rev. John R. Kremer, S. J., founder of the Marquette University—Milwaukee Journal broadcasting station WHAD—died January 18, in the Marquette University hospital at Milwaukee.

opened at Marquette university in the fall of 1924, more station space was provided.

The Milwaukee Journal then joined in operating the station and providing programs. WHAD has been on the air with daily programs since the combination of university and newspaper was effected.

Rev. J. E. Kremer was the corner of the physics laboratory and was operated every Wednesday night for the first three years of its existence.

New Stations and Changes

New stations licensed by the department of commerce last month include: WMBL, Lakeland, Fla., 410m-731.5kc, 10 watts; WFLA, Boca Raton, Fla., 440m-651.4kc, 1,000 watts; KFGQ, Boone, Iowa, 300m-999.4kc, 10 watts; KGEX, Muscatine, Iowa, 256m-1171kc, 100 watts; KGEZ, Kalsiplet, Mont., 358m-851.8kc, 100 watts; KGFJ, Alva, Okla., 205.4m-1460kc, 25 watts; WMBQ, Auburn, N. Y., 233m-1260kc, 200 watts; WMBM, Memphis, Tenn., 245m-1224kc, 10 watts; WEBB, Cambridge, Ohio, 234m-1281kc, 10 watts; WJFW, Ashtabula, Ohio, 229.9m-1250kc, 15 watts.

When a New Science building was



(3) LITTLE JACK LITTLE These Pictures Are 11 x 14 First Time Offered

Free Photogravures of Your Favorite Artists

- List of artists and their works, including Vincent Lopez, E. L. Tyson, and others.

Advertisement for Radio Digest featuring a coupon for a free photogravure and subscription information.

WRVA Richmond, Va. (256.3m-1170kc) 8 p. m. Headliner.
 WFAI Cincinnati, Ohio (325.5m-920kc) 7:15 p. m. music; 7:30, WEAF; 8, program; 8:30, WEAF; 9, WEAF; 10, WEAF; 10:30, studio; 11, dance orchestra.
 WSKC Bay City, Mich. (280.7m-1190kc) 9-11 p. m. musical.
 WSMR New Orleans, La. (319m-940kc) 8:30 p. m. classes.
 WTAC Worcester, Mass. (845.1m-650kc) 7 p. m. Hotel Lincoln orchestra; 8:30-10:30, Barcroft hotel orchestra; 9, program; 10, WEAF; 10:30, orchestra.
 WTAM Cleveland, Ohio (380.4m-770kc) 6 p. m. College senders; 7:15, talks; 7:30, WEAF; 8, studio recital; 8:30, WEAF; 9, program; 11, orchestra.
 WJZ Detroit, Mich. (352.7m-920kc) 6 p. m. dinner concert; 8, music; 9-11, WEAF.

Central Time Stations

CKY Winnipeg, Can. (384.4m-790kc) 9-10 p. m. Prof. Gregori Gerbovitsky, violins.
 KFAB Lincoln, Neb. (340.7m-880kc) 5:30-6:30 p. m. Hotel Lincoln orchestra; 8:30-10:30, rouset program.
 KFNF Shenandoah, Iowa (461.3m-650kc) 6 p. m. concert, Henry Field Seed company; 11, frolic.
 KMA Shenandoah, Iowa (461.3m-650kc) 9-11 p. m. Two piano concert, Fetergin Brothers.
 KMOX St. Louis, Mo. (280.2m-1070kc) 6 p. m. dinner organ recital; 7:30, quartet; 8:30, quartet; 9, soloists; 10:30, orchestra; 12-1, dance music.
 KPCC Houston, Texas (299.5m-1000kc) 7:30 p. m. Jack Willich's orchestra; 8:15, evening concert.
 KSO Clarinda, Iowa (405.2m-740kc) 6:30-8:30 p. m. KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9-10 p. m. music; 10-11, frolic.
 KVOO Bristow, Okla. (374.8m-800kc) 7-8 p. m. program; 8-9, Dorothy Heywood Reedy, artists; 12, dance orchestra.
 KYW Chicago, Ill. (535.4m-660kc) 6:30 p. m. Joska DeBarahy and his orchestra; 7:30, WEAF; 9-10:30, Edison classical; 10:30-12, music; 12-1, dance music.
 WAMD Minneapolis, Minn. (243.8m-1230kc) 7:25 p. m. reception report; 7:30, music; 10, frolic.
 WBM Chicago, Ill. (428.5m-1300kc) 8, Cook-Sanders; 9-12, artists, orchestras; 12, Nutty club.
 WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:45 p. m. Radio Pioneers' hour; 8, WEAF; 8:30, music; 9, WEAF; 9:30, music; 10:30, orchestra; 11:30, music; 12-1, dance music.
 WCFE Chicago, Ill. (481.5m-610kc) 5 p. m. talks; 7, Brewster trio; 8, variety hour; 12, orchestra.
 WCOA Pensacola, Fla. (527m-1180kc) 7 p. m. Evening program.
 WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. School of the air; 8:30, WEAF; 8:30-9, music; 9:30, WEAF; 11-11:45, Nighthawk frolic.
 WEHH Chicago, Ill. (370.2m-810kc) 7 p. m. Edgewater Beach hotel orchestra; 9-11, orchestra, artists; 12-12:30, revue.
 WEMC Warren Springs, Mich. (315.6m-850kc) 8:15 p. m. recital.
 WENR Chicago, Ill. (265.3m-1130kc) 6-7 p. m. organ; 8-10, music; 12-2, frolic.
 WGN Chicago, Ill. (302.8m-990kc) 6:10 p. m. music; 6:15, Punch and Judy; 6:35, Drayton concert ensemble; 6:50-7, Old Fashioned Almanack; 7:15, Paul Ash; 8:30, Adventures of Oney Fred Sweet; 8:40, songs; 8:45-9, Arabian Nights entertainment; 10, Sam 'n' Henry; 10:10, Music Box; 10:20, souars, Tommy Coates; 10:30-12, The Pepper Party.
 WHAD Milwaukee, Wis. (275.1m-1090kc) 6:15 p. m. orchestra; 8:30, players; 9:30-10:30, dance music; 10:30, 12:30, organ.
 WHAS Louisville, Ky. (389.5m-750kc) 7:30-9 p. m. artists.
 WHB Kansas City, Mo. (365.6m-820kc) 6-7 p. m. program; 10:30-11:30, midweek music.
 WHO Des Moines, Iowa (325m-870kc) 7-8 p. m. Little symphony; 7-8, orchestra; 8-9, guitars; 9-11, quartet.
 WHF Chicago, Ill. (399.5m-750kc) 6 p. m. Al Carney; 7:45 (238m-1260kc), orchestra, Stuart Dawson; 9:30 (399.5m-750kc), program; 10, variety program; 11, 11 and Hat.
 WIBO Chicago, Ill. (225.4m-1330kc) 6-8 p. m. dinner concert; 10-12, dance music.
 WIAZ Chicago, Ill. (329.5m-910kc) 6:30 p. m. organ; 7, dance orchestra; 7:15, bedtime story; 7:30, organ; 8, Zenth ball hour; 8:30, dance music; 9-10:30, diversified music; 10:30, frolic.
 WJDD Mooseheart, Ill. (370.2m-810kc) 8-9 p. m. child artists; 11-12, Palmer House Victrolas.
 WLAC Nashville, Tenn. (225.4m-1330kc) 7-9 p. m. studio program; 11-12, Kit Kat club.
 WLFB Chicago, Ill. (302.8m-990kc) 8-9:30 p. m. WEAF; 12-12:45, opera club orchestra.
 WLS Chicago, Ill. (344.6m-870kc) 5 p. m. Supperbell; 6:30, Klara Sherman's quartet; 7, inn orchestra; 6:55, Tony's scrap book; 7, May and June; 7:30, program; 9:15, WLS trio; 10:15-12:30, dance night.
 WMAQ Chicago, Ill. (447.5m-670kc) 6 p. m. Chicago theater organ; 8, orchestra; 8:40, Northwestern U.; 9, music.
 WMBB Chicago, Ill. (249.5m-1200kc) 7-7:30 p. m. Trioan duo; 7:30-8:30, minstrels; 8:30-11, orchestra, artists.

WOAI San Antonio, Texas (394.5m-760kc) 8:30-9:30 p. m. Delaware Punch program.
 WOC Davenport, Iowa (483.6m-620kc) 6:30-7:30 p. m. music; 9-9:30, WEAF; 9:30-10:30, music.
 WOK Chicago, Ill. (410.7m-730kc) 6:30-7:30 p. m. ensemble; 11-11, dance program.
 WOQ Kansas City, Mo. (278m-1080kc) 6:15 p. m. orchestra.
 WORD Chicago, Ill. (275.1m-1090kc) 7 p. m. North Shore line; 7:45, ten minutes of good reading; 9, WOS; 9:15, A, choral singers; 9:15, Bible lecture.
 WOS Jefferson City, Mo. (440.5m-690kc) 7:30 p. m. address; 8:05, talk; 8:20, music.
 WOJ Chicago, Ill. (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; concert; 10-2 a. m. Rainbo frolic.
 WSB Atlanta, Ga. (428.3m-700kc) 8 p. m. WJZ; 8:05, entertainers.
 WSBC Chicago, Ill. (288.3m-1040kc) 6:30-8 p. m. dinner program; 9-1, entertainers.
 WSOE Milwaukee, Wis. (245.8m-1220kc) 6:10 p. m. children's program; 7, popular program; 8, Whozit.
 WSM Nashville, Tenn. (262.8m-1080kc) 6:45 p. m. dinner concert; 7:15, studio program; 8-11, evening program.

Mountain Time Stations

KOA Denver, Colo. (322.4m-890kc) 8 p. m. Scheurman's Colorado orchestra; 8:15, studio program.

Pacific Time Stations

KFI Los Angeles, Calif. (467m-642kc) 6 p. m. Virginia ballroom orchestra; 7:30, Nick Harris; 8:9, program, California Petroleum corp.; 9:10, semi-classical hour; 10:11, Sunset instrumental quartet.
 KFVB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Forster dinner hour; 7:30, news; 8:9, features; 9-10, orchestra; 10-11, Warner Brothers frolic.

KGO Oakland, Calif. (361.2m-630kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8, farm program; 9, frolic.
 KJL Portland, Ore. (481.5m-610kc) 8-9 p. m. concert; 9-10, entertainment.
 KJL Los Angeles, Calif. (405.2m-740kc) 6:30-7:30 p. m. children's hour; 8-10, features; 10-11, dance music.
 KJR Seattle, Wash. (384.4m-780kc) 10 p. m. dance music.
 KLB Oakland, Calif. (508.2m-590kc) 6:30-7 p. m. Athens Athletic club orchestra; 9-10, program.
 KMTS Hollywood, Calif. (570.2m-810kc) 7-7:50 p. m. musical program; 7:50-8, feature; 9-10, dance; 10-12, frolic, Palais de Danse.
 KNX Hollywood, Calif. (336.5m-890kc) 7 p. m. music; 8, music; 9, program; 10, Edgewater club orchestra; 11, Hotel Ambassador.
 KPO San Francisco, Calif. (428.3m-700kc) 6:30-7 p. m. States Restaurant orchestra; 7-7:30, Rudy Seiger's Fairmont hotel concert orchestra; 8-9, Atwater Kent artists; 9:10, music; 10-11, States Restaurant orchestra; 11-12, Trianon ballroom orchestra.
 KTAB Oakland, Calif. (302.8m-990kc), 8-10 p. m. program.
 KWSC Fullman, Wash. (348.6m-660kc) 7:30 p. m. concert, talks.
 KYA San Francisco, Calif. (389.5m-750kc) 8-10 p. m. feature program; 10-11, dance music.

THURSDAY, FEBRUARY 17
Headliners

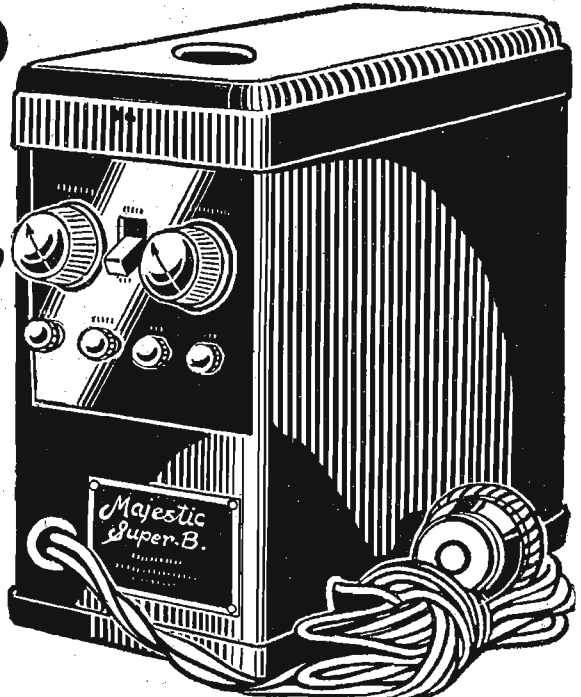
Eastern	Central	Mountain	Pacific
7:30 p. m.	8:30	8:30	8:30
WJR (516.9m-580kc)	Comedies of yesterday;	5	5
8	7	6	6
WBAL (245.8m-1220kc)	Margaret E. Kerr, so-	9	9
	brano.		
8:15	7:15	6:15	5:15
WRVA (256m-1170kc)	three hour program.	7:15	6:15
8:25	7:25	6:25	5:25
WVCA (340.7m-880kc)	Brooklyn Wanders;	8:25	7:25
8:30	7:30	6:30	5:30
CNRM (410.7m-730kc)	CNRO symphony.	8:30	7:30
WCCO (416.4m-720kc)	The Buttercup Twins.	8:30	7:30
WHAAS (297.5m-700kc)	Liberty studio concert.	8:30	7:30
WHD (620m-570kc)	Myrtle Williams, soprano;	8:30	7:30
WJZ (454.2m-660kc)	Stewart Watson, baritone.	8:30	7:30
	Type program, WBZ, KDKA,		
	KYV.		
8	7	6	5
KLPS (440.9m-680kc)	Mandolin and guitar club.	8	7
KOIL (305.9m-980kc)	Interesting people.	8	7
WVCD (344.6m-870kc)	McElroy Saxophone quintet.	8	7
WVZ (454.2m-660kc)	R. C. A. Radiotrons, WBZ,		
	KDKA, KYV.		
MLNL (384.4m-780kc)	Premier male quartet.		
WSM (282.8m-1040kc)	Daisy Sartain.		
WHIC (475.9m-630kc)	Sascha Jacobson string		
	quartet.		
8:05	8:05	7:05	6:05
KOIL (305.9m-980kc)	Strawn Sisters trio.	8:05	7:05
8:15	8:15	7:15	6:15
KYII (267.2m-1120kc)	Clever Capers, Bob and		
	Laura Collins.		

No More "B" Batteries on Your Radio

At last a practical reliable "B" battery eliminator for your radio. Does away with "B" batteries; no charging; no replacing. Always 100% efficiency in "B" current. The most revolutionary development in radio.

1-Year Guaranteed
Majestic "B" Eliminator
 Sent for only

\$1.00 down!



The Majestic is connected to your radio just like "B" batteries and attached to an ordinary electric socket. (For 1 to 12 tube radios.) Replaces "B" batteries entirely and furnishes "B" current direct from regular house lighting current. Simplifies radio receiving. More efficient than dry or wet "B" batteries. Entirely noiseless. Operates from 110 120 AC, 50-60-cycle current.

1-Year Guarantee
 Majestic Eliminator and RAYTHEON tube are both guaranteed for one year against electrical and mechanical defects. A printed guarantee enclosed with each unit.

Cabinet finished in rich black crystal enamel. Dimensions: 10 1/4 inches deep by 5 1/2 inches wide by 9 inches high. Weight: 20 pounds net; 25 pounds packed. Bakelite Panel. Complete with extension cord and attachment plug. One RAYTHEON tube with G-G-H protective packing. Packed in individual padded wire-bound wood cases.

\$5.00 a Month, If Satisfied After Trial

Only \$1.00 with the coupon brings the Majestic "B" Eliminator to your home on trial. Try it out thoroughly before you pay another penny. See how it improves reception. See how much more convenient than using batteries. Judge for yourself how it will save you money and make your radio set more enjoyable. Then, if not satisfied, send it back at our expense and we'll refund you \$1.00 plus all transportation charges. If you decide to keep the Majestic "B" Eliminator, start paying only \$5.00 a month until you have paid the total price of only \$35.00. That's the price others ask for spot cash. We give you the lowest cash price on easy monthly payments you will never feel.

STRAUS & SCHRAM, Dept. R-9412, Chicago
 Enclosed find \$1.00. Ship special advertised Majestic "B" Battery Eliminator. I am to have 30 days free trial. If I keep it, I will pay you \$5.00 monthly. If not satisfied, I am to return it within 30 days and you are to refund my money and any express charges I paid.
Majestic "B" Battery Eliminator, No. Y8789A, \$35.

Send Coupon

Don't miss this opportunity to get the 1 year guaranteed Majestic "B" Eliminator at the rock-bottom cash price on easy monthly payments. Send coupon now while this offer lasts. Order by No. Y8789A, \$1.00 with coupon; \$5.00 a month; total price \$35.00.

Name _____
 Street, R. F. D. _____
 or Box No. _____
 Shipping Point _____
 Post Office _____ State _____
 Married or Single _____ Nationality _____
 or Color _____

Air Line Radio Map, Log and Directory
 Complete New List—Just Off the Press

This Map is Up-to-Date When You Get It and Is Kept That Way monthly supplemental service for the whole season.

Order NOW for Real Radio Enjoyment—Printed in three colors. Price 50c—Size 12 x 18.

Shows all new wave lengths and power. Published since they ceased issuing any more licenses. Right up to the minute. First opportunity this season of obtaining an up-to-date map and directory. Lists stations by call letters, frequency, wave length, the UNIQUE BROADCASTING SCHEDULE. 100% shows location; difference in time; power; meters and kilowatts; special and regular stations; time heard; distance; signal strength. Whether you use outdoor aerial or loop.

At your dealer, or sent postpaid. Dealers and Jobbers Write at once.

MULTIVIDER CO., KANSAS CITY, MO.

ords; 8, program; 9-10, features; 11, Hotel Am-bascador.
KPO San Francisco, Calif. (428.3m-700kc) 6:30-7 p. m., States Restaurant orchestra; 7-7:30, Rudy Sauer's Famous Hotel concert orchestra; 8-9, program; 9-10, music; 10-11, music; 11-12, frolic.
KPSN Pasadena, Calif. (315.6m-550kc) 8:35-9 p. m., musical program.

Thursday, silent night for: **CFCA, KFAB, KFDM, KFJH, KFQA, KFVJ, KJAX, KMJ, KMOX, KOA, KOB, KSWC, KTAB, WABC, WABC, WCOA, WEOA, WELI, WFLA, WFLD, WFLM, WJAX, WLIT, WMAK, WOS, WSM, WSUI, WTAM.**

FRIDAY, FEBRUARY 18

Headliners

Eastern 4:10 p. m.	Central 3:10	Mountain 2:10	Pacific 1:10
WEAF (293.9m-1020kc) Harold Walker, pianist; Sarah Walker, soprano; Walter Furness, baritone.			
WJZ (454.2m-660kc) Children's Philharmonic talk.			
WMAQ (447.5m-670kc) Vesper choruses, U. of C.			
WJZ (454.2m-660kc) Hotel Commodore concert orchestra.			
CNRA (322.4m-1930kc) Juvenile artists.			
CFPA (473.7m-530kc) Jimmy Rogers orchestra.			
WJZ (454.2m-660kc) Mares and Rogers.			
WJZ (454.2m-660kc) Market's society orchestra.			
WJZ (454.2m-660kc) Jewish hour.			
WJZ (454.2m-660kc) Peabody college founder's day.			
WRVA (256m-1170kc) "An Evening of College Life."			
WBAF (475.9m-630kc) Song show.			
WGY (379.5m-750kc) "Revelation." WGY players.			
WJZ (454.2m-660kc) Royal her, WJZ, KDKA, KJW.			
CRT (434.5m-1690kc) Philharmonic quintet.			
KOLL (305.9m-890kc) "Fixing the Steamship." Billie and Helen.			
PWX (479.8m-720kc) Directors banquet, American Chamber of Commerce.			
WBAL (245.3m-1220kc) "When Nights are Cold." WBAS (399.8m-750kc) Louisville and Jefferson county Children's home program.			
WJZ (454.2m-660kc) Rollins program.			
WJZ (454.2m-660kc) Victor program of music. WJZ, KDKA, KJW, WBAS, WJZ, WMC.			
WJZ (454.2m-660kc) Philharmonic male quartet.			
WCOA (252m-1190kc) Orlo Reese, David Rosenblom, violinist.			
WEN (351.2m-630kc) At Piatadosi, song writer.			
WCOA (252m-1190kc) Clara Frenkel.			
WBA (475.9m-630kc) Reuben Davies musical club.			
WJAD (375m-1080kc) Classical program, Marquette university.			
WBAL (245.3m-1220kc) "An hour with Great Love Songs."			
WEMC (315.6m-950kc) Niles community program.			
WJZ (454.2m-660kc) Upton Jenkins singers.			
KOA (322.4m-1930kc) Sigma Alpha Iota chorus, musical society, Highlandettes, Dorothy Knox.			
WBAP (475.9m-630kc) concert, Fine Arts Department of Texas Woman's College.			
WCOA (252m-1190kc) La Sabana program, Justriero Boys.			
WJAF (365.6m-820kc) Combined American Legion Posts of K. C.			
WJZ (454.2m-660kc) Hotel Commodore grill orchestra.			

Eastern 10:00 p. m.	Central 9:00	Mountain 8:00	Pacific 7:00
CNRV (291.1m-1020kc) Rutley trio.			
WCOA (252m-1190kc) Gino Severi, violinist; In-ferno, tenor.			
KMOA (340.7m-880kc) Duke Vellman's Parody orchestra.			
KTHS (374.8m-800kc) The Harmony Four male quartet.			

Regular Friday Features

Eastern Time Stations

KDKA Pittsburgh, Pa. (393.1m-870kc) 6 p. m. string ensemble; 8-10, WJZ, dance program.
WABC New York, N. Y. (315.6m-890kc) 7:30-8 a. m. program.
WBAL Baltimore, Md. (246m-1220kc) 6:30-7:30 p. m. dinner orchestra; 7:30-8, quartet; 8-9, trio; John Wilburn, tenor; 9-9:30, Fitz Sisters, musical sketch; 9:30-10, string quartet; 10-11, novelty program; 11-12, Dance orchestra.
WBZ Springfield, Mass. (333.1m-870kc) 6:15 p. m. orchestra; 6:30, orchestra; 8:10, WJZ; 10, musical.
WBWR New York, N. Y. (416.4m-720kc) 8 p. m. White-tower concert trio; 8:30, Fred Iwaroschik, tenor.
WEAF Pittsburgh, Pa. (461.3m-650kc) 6 p. m. dinner music; 7:30, Sunday school lesson; 8:30, Bart McMurtry's hour; 9:30 WEAF; 10, WEAF; 10:30, orchestra.
WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Schellburg recital; 8, orchestra; 8:30, Karnival; 9-9:30, Muenchinger Baritone; 10, recital; 10:30, Myers musical archery.
WCX Detroit, Mich. (516.9m-880kc) 6-7 p. m. dinner music; 7:30, Goldie ensemble; 8:30, studio program.
WEAF Winter Park, Fla. (239.9m-1280kc) 9 p. m. popular program; 10, Jubilee singers.
WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7:30, Fairland; 8, Happiness County Boys; 8:30, to be announced; 9:30, Les Freres orchestra, WEEL, WGR, WDAF, WLIT, WCAE, WTAM, WJW, KSD, WOC, 10, Wall and Andy Persians, WJC, WJAR, WTAM, KSD, WJW, WCAE, WOC, WLIT; 10:30, orchestra; WJZ; 11, orchestra.
WEEL Boston, Mass. (348.6m-860kc) 7:30 p. m. White-tube company; 8, musical; 9, quartet; 9:30-10:30, WEAF; 10:30, orchestra.
WFL Philadelphia, Pa. (384.5m-760kc) 6:45 p. m. Adelphia dance orchestra.
WGBS New York, N. Y. (215.6m-950kc) 6:45 p. m. orchestra; 7:15, music.
WGH Clearwater, Fla. (285.3m-1130kc) 7 p. m. dinner concert; 7:45, Puley; 8:45, studio musical; 10, Fort Harrison hotel orchestra.
WGHR Detroit, Mich. (270.1m-1110kc) 6-8 p. m. dinner music; 7:30, 10:15, 11:15, WGHR entertainers; 11-12, dance program.
WGR Buffalo, N. Y. (319m-840kc) 7:15 p. m. evening music; 8:30-9:30, WEAF; 11-1, summer music.
WCS Schenectady, N. Y. (379.5m-790kc) 7:30 p. m. band; 8:30, drama; 10-10:30, WEAF; 10:30-11:30, EVERETT.
WHK Cleveland, Ohio (272.6m-1100kc) 6 p. m. orchestra; 7:30, V. Hozi; 7:40, novelties; 10:11, orchestra.
WIC Bridgeport, Conn. (232.4m-1200kc) 7 p. m. orchestra; 8, entertainers; 9, hour of music.
WIP Philadelphia, Pa. (506.2m-590kc) 6:10 p. m. hook-up; 6:45, Frank concert orchestra; 7, Uncle Wip's bedtime stories.
WJAX Jacksonville, Fla. (338.2m-870kc) 7-7:30 p. m. Carling hotel choir; 8:30, studio popular program; 9-9:30, bridge; 10-11, Casa de Bar; 11:30, WJAX.
WJR Detroit, Mich. (516.9m-880kc) 7 p. m. symphony; 7:15, dance music.
WJZ New York City, N. Y. (454.3m-660kc) 7 p. m. Emma Landies; 8:15, House orchestra; WJZ; KJW, KJKA; 8:30, Royal her, KDKA, KJW, WBZ; 9, Brunsweiger hour, KDKA, KJW, WBZ, WSB, WMC, WHAS, 10, Macy and Small; 10:30-11:30, singers.
WLIT Philadelphia, Pa. (394.5m-760kc) 8:15 p. m. concert orchestra; 8:30, WEAF; 10:30, Arcadia cafe dance orchestra.

WMAK Buffalo, N. Y. (265.5m-1130kc) 7:30 p. m. weather; 7:30, musical; 8:30-10:30, musical.
WMBF Miami Beach, Fla. (264.4m-780kc) 7 p. m. dinner concert; 8, popular program; 10, dance orchestra.
WMCA New York, N. Y. (340.7m-880kc) 6:30 p. m. Ernie Golden and his Hotel McAlpin orchestra; 7, chat; 7:15, orchestra; 9, entertainers; 12, McAlpin entertainers.
WNYC New York, N. Y. (526m-570kc) 6:30 p. m. piano selection.
WYO Philadelphia, Pa. (506.2m-590kc) 7:30 p. m. Hotel Sylvania dance orchestra; 8:30, address; 9, operatic period; 10:30, address; 10:30, dance music.
WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Bill Warley in sports; 6:30, Hotel Bretton Hall string quartet; 7:30, orchestra; 8:15, N. Y. University; 8:30, organ; 11, orchestra.
WPG Atlantic City, N. J. (299.8m-1000kc) 7:10 p. m. organ recital, Arthur Brook; 7:30, Hotel Schellburg musical; 8, orchestra; 9, Hotel Chelsea evening concert; 9:30, Hotel Ambassador concert orchestra; 10, studio program; 11:30, Silver Shipper.
WRC Washington, D. C. (468.5m-640kc) 7 p. m. orchestra; 8:30, WEAF; 9, orchestra; 10, WEAF; 10:30-11:30, dance orchestra.
WRV Richmond, Va. (256.3m-1170kc) 7 p. m. evening program.
WTAC Worcester, Mass. (545.1m-550kc) 8:30 p. m. program; 9:30 Belco entertainers; 10, WEAF.
WTAM Cleveland, Ohio (389.4m-770kc) 6 p. m. Emerson Gill's orchestra; 7, talk, Arthur Haas; 7:30, studio program; 8:30, WEAF; 9, recital; 9:30, WEAF; 10, WEAF; 10:30, Late Room orchestra.
WTC Hartford, Conn. (475.9m-630kc) 6:30 p. m. Hotel Lond Trio; 7:15, Laura C. Gaulier, organist;

8, program; 10, Emil Reimberger's Hotel Bond orchestra.
WYD Detroit, Mich. (352.7m-820kc) 6 p. m. dinner concert; 8, Michigan life; 9, WEAF; 9:30, WEAF; 10, WEAF.
Central Time Stations
KFAB Lincoln, Neb. (340.7m-880kc) 8:30-10:30 p. m. entertainment.
KPFM Beaumont, Texas (315.6m-950kc) band.
KMA Shenandoah, Iowa (461.3m-650kc) 9-11 p. m. program.
KMOX St. Louis, Mo. (340.7m-1070kc) 6:30 p. m. dinner program; 8, program; 12:11, dance music.
KOLL Council Bluffs, Iowa (305.9m-890kc) 7:30 p. m. program; 8, artists; 8:30, Dressler Brothers, Inc.; 11, frolic; 12, Lubricators.
KSO Clarinda, Iowa (405.2m-740kc) 6:30 p. m. popular program.
KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9-11 p. m. features.
KVOO Bristol, Okla. (374.8m-890kc) 7:30-8:30 p. m. Walter Schoegen, tenor; 7:30-8:30, Marie Gardner Swift; 8:30-9, Chickasaw Nightingale; 11-12, Knights of the Empty Skull; 12-1, Earl Thurston, organist.
KYW Chicago, Ill. (535.4m-580kc) 6:30 p. m. Jaska DeBarby and his orchestra; 7, WJZ; 9-10:30, classical concert; 10:30-12, carnival.
WAMD Minneapolis, Minn. (243.9m-1230kc) 7:30 p. m. music; 10, frolic.
WMTW Fort Worth, Texas (475.9m-630kc) 7:30-8:30 p. m. concert; 9:30-12, evening program.
WBBM Chicago, Ill. (226m-1300kc) 8 p. m. Condon-Sanders Night Hawks; 9-10, popular music.
WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:15 p. m. St. Paul Association; 8, popular orches-

Steinite
AERIELIMINATOR
Eliminates Outside Aerial

New principle does away with the troublesome outside antenna. Better, clearer reception, especially for summertime. Reduces static and outside noises. Improves reception of any tube or crystal set. If you don't find it improves your set wonderfully, get refund at once.

\$1 Postpaid 10-Day Free Trial
Anywhere Money-Back Guarantee

No More Outside Aerial, Once You Install It

No more corrosion from the weather. Free from nuisance of neighboring aeriels and breakdowns that stop reception. No tools needed, no extra ground or tube—takes the place of your present aerial. Nothing to get out of order. No need now to delay owning a radio, because of aerial trouble. Operate a set in any room wired for lights. Attach and turn on—uses no current. Guaranteed not to use any amount of electricity. Two big banks say we are reliable. Order today on money-back guarantee. If not delighted, dollar bill will do. **ORDER TODAY.**

STEINITE LABORATORIES,
40 Radio Bldg.,
ATCHISON, KANSAS

Attaches to light socket—uses no current. Make comparison now with your present aerial at my risk.

The New Steinite 7-Tube Radio uses no batteries of any kind—only \$125. Loud Speaker Built In. Complete with tubes \$151 with nothing to buy. Operates from light socket or battery. Write descriptive literature before buying an expensive Battery Set. Also Steinite Long Distance Crystal Set \$60—6 Tube Battery Set \$15. **WRITE TODAY.**

1927 DE LUXE SUPER

These Karas Parts Selected for the 1927 DE LUXE SUPER

.0005 Mfd. Price, \$7.00

Karas Orthometric Variable Condensers
 These precision-built condensers have the lowest losses known. They have no mechanical resistance. An engineer who tested a Karas Orthometric put charge across them on Saturday and found it still there on Monday! Straight frequency line design separates ALL adjoining wave lengths by equal divisions on the dial. Orthometrics are made from fine brass, with best quality hard rubber dielectrics. All plates are soldered at every point of contact. Core bearings are wonderfully smooth operation, and grounded frame and rotor plates eliminate bulky capacity effect. Two .0005 mfd. Orthometrics are specified in the 1927 DE LUXE Super. To set the utmost out of this receiver be sure to use these great condensers. Your dealer has them, or can get them for you, or if you are in a hurry, you can order right from this ad by mailing the coupon. Price, each, \$7.00.

Karas Micrometric Vernier Dials
 Chosen by DE LUXE designers because they knew that no other dials gave such close tuning—such liquid-like smoothness of operation—such wonderful results in bringing in hard to get stations. **THE KARAS TUNE** Micrometric dials have a 65 to 1 vernier ratio, which gives 1/1000th of an inch contact. Super owners tell us they can tune as close as the same dials with their dials. You can do the same—and get the same results. Genuine Bakelite with special non-slip, anti-bearing wear, and 2100 grit finish. Markings are gold inlay. These dials slip onto condenser shafts and there is only one set screw to tighten—no holes to drill. Micrometrics are sold by good dealers everywhere. Price, each, \$3.50. If yours is out of stock, order 2 from your DE LUXE Super by mailing the coupon below. Do this today.

SEND NO MONEY -- JUST MAIL THE COUPON

All good dealers everywhere can supply Karas Condensers and Dials. If your dealer is out of stock due to heavy demands and if you are in a hurry you can order direct from us if you wish. Just fill out and mail the coupon.

SEND NO MONEY. Simply hand the postman the price of the condensers and dials plus a few cents postage. Mail coupon today to make sure of having these Karas parts in your DE LUXE.

KARAS ELECTRIC CO.
 1072-S Association Bldg.
 CHICAGO

Name.....
 Address.....
 City..... State.....

(If cash accompanies order we will ship postpaid.)

Direct from the socket

Majestic "B" Current Supply
 delivers pure direct current—from your light socket

Majestic Standard-B
 Capacity, nine 201-A tubes, or equivalent, 46 milliamperes at 110 volts.
\$26.50
 West of Rocky Mts., \$29.00
 Raytheon Tube \$6.00 extra

Majestic Super-B
 Capacity one to twelve tubes, including the use of power tubes, 45 mls., \$29.00 at 150 volts.
 West of Rocky Mts., \$31.50
 AS ILLUSTRATED
 Raytheon Tube \$6.00 extra

Majestic Master-B
 Positive control of all output voltage taps. Fastest having highest current draw or heavy burning batteries, 60 mls. at 150 volts.
\$31.50
 West of Rocky Mts., \$34.00
 Raytheon Tube \$6.00 extra

5 Points of Superiority

1 Better Reception No hum. Superior to any source of power.
3 Dependability Maximum, unvarying power always available.

2 Economy Low first cost. Cheapest and best form of "B" Power. Costs only a fraction of a cent per hour.
4 Durability No acid or liquids. Uses Raytheon Tube; no Filament to burn out.

5 Flexibility Voltage can be accurately adjusted to meet varying conditions in every city—and on any set.

Ask for a demonstration on YOUR Set [Can be purchased on deferred payments]

GRIGSBY ~ GRUNOW ~ HINDS ~ CO. 4576 ARMITAGE AVE CHICAGO-ILL.

... program, Nash-Finch orchestra; 9, WEAJ; 9:30, program; 10:05, dance program, Nankin Gate orchestra.

WCFL Chicago, Ill. (491.5m-610kc) 7 p. m. Brevoort concert; 7:30, 8, 9, 10, 11, 12, Ruzickova solo.

WCOA Pensacola, Fla. (252m-1190kc) 7 p. m. musical.

WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. school of the air; 8-9:30, varied musical; 8:30-9, WEAJ; 9:30-10, 11, 12, Night Hawk frolic.

WBEH Chicago, Ill. (370.2m-810kc) 7 p. m. Edgewater Beach hotel orchestra; 9-10, Edgewater Beach hotel orchestra; 10-11, Edgewater Beach hotel orchestra, specialties.

WEMC Berlin Springs, Mich. (315.6m-850kc) 9 p. m. musical.

WENK Chicago, Ill. (265.3m-1190kc) 6-7 p. m. Round-bay trio; 8:40, program; 12-2, midnight frolic.

WFAA Dallas, Tex. (475.5m-630kc) 6:30-7:30 p. m. orchestra; 8, program.

WFBT Evansville, Ind. (428.1m-1270kc) 7 p. m. Ernie entertainers; 8, orchestra.

WGN Chicago, Ill. (302.5m-990kc) 6:10 p. m. Punch and Judy; 6:35, ensemble; 6:50, old-fashioned animal; 8, musical program; 9, WEAJ; 9:30, The Phantom violin; 10, Sam 'n' Henry; 10:10, The Music Box; 10:30, Bible readings; 10:30, musical.

WHAD Milwaukee, Wis. (275.1m-1090kc) 6:15 p. m. orchestra; 7, four club; 8:10-10:15, musical program.

WHAS Louisville, Ky. (309.8m-750kc) 7:30-9 p. m. concert.

WHB Kansas City, Mo. (365.6m-820kc) 7-8 p. m. occupancy orchestra; Songsters; 7:30-8 p. m. program; 8:30, program; 11-12, dance program.

WIT Chicago, Ill. (399.8m-750kc) 6 p. m. Al Carney; Eleanor Gilmore; 7:30, 8, 9, 10, 11, 12, Stuart Dawson; 9:30 (399.8m-750kc) program; 11, Al and Pat.

WJBO Chicago, Ill. (225.4m-1330kc) 6-8 p. m. evening musical; 10-11, dance program.

WJAZ Chicago, Ill. (329.8m-810kc) 7:30, organ; 7, dance orchestra; 7:15, Boy Blue; 7:30, organ; 8, high lights; 8:30, dancer; 9, diversified program; 11-12, frolic.

WJMD Mooreshead, Ill. (370.2m-810kc) 8-9 p. m. child artists; 11-12 a. m. Palmer House Victorians; Jack Nelson.

WLBB Chicago, Ill. (302.5m-990kc) 7-8 p. m. dinner concert; 11-12:30, orchestra; 7:30-8 p. m. program; 8:30, program; 11-12, dance program.

WLS Chicago, Ill. (344.6m-870kc) 7 p. m. May and June; 7:15, trio; 8, orchestra; 9:15, trio; 10:15-11:30, Show Boat.

WMAQ Chicago, Ill. (447.5m-670kc) 6 p. m. chimes; 6:30, Wite awards; 7:30, musical.

WMBB Chicago, Ill. (249.3m-1200kc) 7-8:30 p. m. old time songs; 8:35-11, frolic.

WMC Memphis, Tenn. (459.7m-600kc) 7:30 p. m. symphonies; 8:30, Cooper Cord ent. leaders; 11, frolic.

WMOI San Antonio, Tex. (394.5m-760kc) 8:30-9:30 p. m. musical program.

WOC Davenport, Iowa (483.6m-620kc) 7:30-8:30 p. m. Mountain Music; 8:30-9, WEAJ; 9:30-10, WEAJ; 9:30-10:30, lecture.

WOK Chicago, Ill. (410.7m-730kc) 6-7:30 p. m. ensemble; 11-12, dance program.

WORD Chicago, Ill. (275.1m-1090kc) 7 p. m. North Shore line; 7:45, World News digest; 9, station program.

WOW Jefferson City, Mo. (446.9m-880kc) 7:15 p. m. Radio Bible club; 8:15-9:15, musical.

WOW Omaha, Neb. (526m-570kc) 6:35 p. m. talks; 7, classical; 10, organ.

WPL Chicago, Ill. (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; 10-12 a. m. Rainbo frolic.

WRR Dallas, Tex. (245.8m-1220kc) 6 p. m. program; 8, band.

WSB Atlanta, Ga. (428.3m-700kc) 8 p. m. concert; 10:45, concert.

WSBC Chicago, Ill. (288.3m-1040kc) 6:30-8 p. m. dinner program; 9-11, entertainers.

WSOE Milwaukee, Wis. (245.8m-1220kc) 7 p. m. popular program; 8, Library review; 8:15, Whozit.

Pacific Time Stations

KFI Los Angeles, Calif. (467m-642kc) 7-8 p. m. popular program; 8-9, program; 9-10, semi-classical hour; 10-11, Beckard ballad hour.

KFWB Hollywood, Calif. (252m-1190kc) 7-10 p. m. program.

KGO Oakland, Calif. (361.2m-830kc) 6-6:55 p. m. Stanslas Hen's Little symphony; 8-9, program.

KGW Portland, Ore. (481.8m-610kc) 6-7 p. m. dinner concert; 8-8:30, KGW movie club; 8:30-10:30, dance music; 10:30-12, frolic, floor dance.

KHJ Los Angeles, Calif. (405.2m-740kc) 6:30-7:30, children's hour; 8-10, feature program.

KLX Oakland, Calif. (508.2m-590kc) 8-9:30 p. m. special program; 9:30-10:30, Athens Athletic club orchestra.

KMTR Hollywood, Calif. (370.2m-810kc) 8-9 p. m. ensemble; 9-10, dance music; 10-12, dance music.

KNX Hollywood, Calif. (336.3m-890kc) 7 p. m. feature; 8, 9, 10, features; 11, Hotel Ambassador.

KPO San Francisco, Calif. (428.3m-700kc) 6:30 p. m. State Restaurant orchestra; 8-10, orchestra; 10-11, orchestra; 11-12, dance orchestra.

KTAB Oakland, Calif. (302.5m-990kc) 8-9 p. m. orchestra; 9-10, orchestra.

KWSC Pullman, Wash. (348.6m-860kc) 7:30 p. m. concert, talks.

Eastern Central Mountain Pacific

8:30 p. m. 7:10 6:10 5:10

WJZ (333.1m-970kc) WJZ (454.2m-660kc), KDKA (309.1m-970kc) Boston symphony, PWX (399.8m-750kc) Pin to-morrow.

7:30 6:30 5:30

WHAS (309.8m-750kc) Town Club, 8:30 8:45

WGHS (315.6m-850kc) Clifford Chesley, "Philosophy of numbers," 8 7 6

KLDS (440.9m-690kc) Amy Winning, organist, NGL (305.9m-980kc) Cross-word puzzles, WBAF (475.5m-630kc) Clyde and Florence Masseguia

WLAK (225.4m-1330kc) Theron Hale, old time tunes, WTC (475.5m-630kc) Winifred Barnfield, contralto

9:15 8:15 7:15 6:15

SPKC (296.9m-1010kc) Gen. Parker, whistler, WFA (475.5m-630kc) Brass city quartet, 9:30 8:30 7:30 6:30

WFAA (475.5m-630kc) Amphion male quartet, WTC (475.5m-630kc) Alice Townsend, 9 8 7

CNRW (384.4m-1780kc) Old time songs, WDAF (465.6m-820kc) "Hale and Berry," WJLA (349.7m-890kc) Ancient Mystic order band

10:30 9:30 8:30 7:30

WDAF (365.6m-820kc) The Great Western Chorus, 11 10 9 8

PWX (399.8m-750kc) Tokio orchestra, 12 11 10 9

KJL (305.9m-980kc) Pow-Wow, Randall's Royal Fontenelle orchestra, KFD (428.3m-790kc) Maurice Gansky, tenor, 12:15 11:15 10:15 9:15

KFD (428.3m-790kc) Wilt Guenzendorf's Hotel Wightcomb Band, Rose Lynn, contralto, 1 0 11 10

WFAA (475.5m-630kc) Palace Theatre organ, 3 a. m. 2 1 10

WSBC (288.3m-1040kc) Tavern by the Road.

WAAM Newark, N. J. (263m-1140kc), 7:15 p. m. children's program; 7:45, evening musical.

WABC New York, N. Y. (315.6m-850kc) 12 mid. dance 1, vaudeville.

WBZ Springfield, Mass. (333.1m-900kc) 6 p. m. orchestra; 7:30, musical; 8:10, orchestra; 10:15, dance music.

WCA Pittsburgh, Pa. (467.5m-630kc) 6 p. m. dance orchestra; 8, WEAJ; 9, WEAJ; 10:30, orchestra.

WCA Detroit, Mich. (516.9m-580kc) 6 p. m. dinner program; Goldilocks ensemble; 6:15, Skerens time, dinner concert; 7:45, musical.

WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7, Janzen's Holbrau orchestra; 7:30, headline; 7:45, talk; 8, "Hiss and Bing," WRC, WLY, WCAE; 9, Balkeite hour, WEEL, WGR, WFL, WCAE, WWJ, WSAI, WTAM, WGN, WGV, KSD, WGO, WDAF; (regular) 10, special selections; WTAC, WGV; 10:10 dance music; WTAM, WCA, WKYC; 11-12, Vincent Lopez and his orchestra.

WEEL Boston, Mass. (348.6m-860kc) 7:55 p. m. Boston Globe; 8, musical; 9, WEAJ; 10, Cruising W/it Philadelphia, Pa. (394.5m-760kc) 6:45 p. m. Adelphia dance orchestra; 8:15, recital; 9, concert; 9:30, Starlight Players; 10, quartet; 10:30, Adelphia French Kopp orchestra.

WGBS New York, N. Y. (315.6m-850kc) 7 p. m. music.

WGBH Clearwater, Fla. (266m-1190kc) 7 p. m. music; 7:30, band; 9, band; 10, dance program.

WGB Buffalo, N. Y. (410m-800kc) 9:10 p. m. WEAJ.

WGY Schenectady, N. Y. (379.5m-790kc) 6 p. m. dinner program, Onemusic; 7:30, Shea's Buffalo hour; 8, WEAJ; 9, WEAJ; 10, WEAJ; 11, dance program.

WHK Cleveland, Ohio (272.6m-1100kc) 8 p. m. instrumental hour; 9, orchestra; 10, Happy hours; 11:12, Whozit.

WIP Philadelphia, Pa. (508.2m-890kc) 6:10 p. m. Benjamin Franklin concert orchestra; 7, Uncle Wip's bedtime stories & sports corner, Dr. Francois D'Elisen; 8:15, recital; 9:15, program; what a few of the thousands of enthusiastic SUBANTENNA users say about this new, wonder device.

WJAX Jacksonville, Fla. (335.9m-890kc) 8-9 p. m. classical program; 10-11, Ed and Mama McConnell; 11-12, orchestra.

WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Rhythm Kings, soloists; 7:30, studio program; 11:30, Merry Old Chief.

WJZ New York, N. Y. (454.2m-660kc) 7 p. m. theater orchestra; 8, to be announced; 10:30-11:30, orchestra.

SATURDAY, FEBRUARY 19

Headliners

Eastern	Central	Mountain	Pacific
4 p. m.	2	2	4
CKNC (356.9m-840kc) Eveready String quintet.			
WJR (516.9m-580kc) Rhythm Kings.	6:15	5:15	4:15
WJAD (275.1m-1090kc) Journal Petite trio.	6:30	5:30	4:30
WFAA (475.5m-630kc) Matthews Brothers quartet; Matthews Sisters quartet.	7:45	6:45	5:45
WJR (516.9m-580kc) Elmer Kyle, organist.	7:45	6:45	5:45
CKNC (356.9m-840kc) Chas. Bodley's dance orchestra; Arthur Heiler, tenor.	8:15	7:15	6:15
WLAC (225.4m-1330kc) Mrs. Daisy Fentress, contralto.	8:15	7:15	6:15
WOC (483.6m-620kc) Tony's Iowans.	8:30	7:30	6:30

Regular Saturday Features

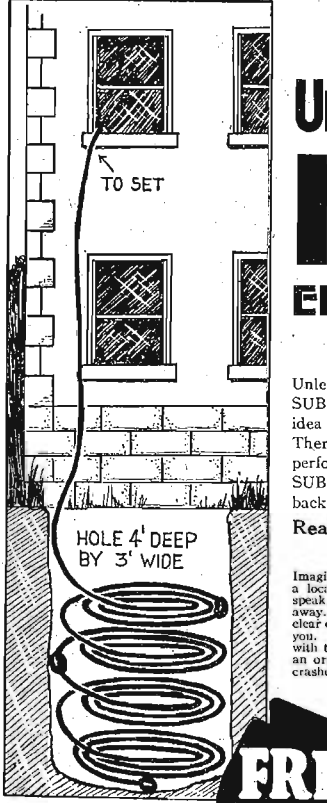
Eastern Time Stations

CKAC Montreal, Que., Can. (410.7m-730kc) 7:15 p. m. dinner concert; 10:30, Red Jockey.

CKCL Toronto, Can. (577m-840kc) 7-8 p. m. trio.

KDKA Pittsburgh, Pa. (309.1m-970kc) 6 p. m. dinner concert; Westinghouse band; 7:15, Post Home club; WJZ.

PWX Havana, Cuba (399.8m-750kc) 8:30 p. m. frolic.



AMAZING NEW
Underground Antenna System
WILLS STATIC
Eliminates All Interference—
Power Line Crackles, Etc.

Unless you have spent a radio evening with SUBANTENNA, you positively have no idea of how wonderful Radio really is. There is such an amazing difference in the performance of any set when connected to SUBANTENNA that no user would ever go back to the old style aerial again.

Real Clarity and Big Volume on DX Now Possible!

SUBANTENNA Uses Filtered Ground Waves

Instead of using noisy air waves, SUBANTENNA uses filtered ground waves. This means that STACs are light spatters, lower line crackles and other disturbing interferences are grounded and removed from the reception before it reaches your set. Read in the lower left corner of this announcement what a few of the thousands of enthusiastic SUBANTENNA users say about this new, wonder device.

Nothing Else Like It

Imagine listening to beautiful music, thinking it is from a local station, then hearing the announcer clearly speak the call letters of a station a thousand miles away. Imagine the pleasure of getting real DX crystal clear on bad nights when STATIC is raging all around you. Imagine being able to bring in distant stations with tremendous volume on the same set which with an ordinary aerial gets only "air noises" and static crashes! Because the filtering action of SUBANTENNA delivers such a clean, clear signal to your set, you can turn the power full on when listening to DX.

This means you can get bigger volume and more distance with your present set, if you use a SUBANTENNA.

SUBANTENNA is not just a wire. It is a specially constructed, specially treated alloy wire differently insulated and sheathed in a lead jacket. At the far end of SUBANTENNA and at an electrically calculated correct location near its center are "building-up" coils which play a big part in SUBANTENNA's startling performance.

Make this TEST

Install SUBANTENNA. Leave your old aerial up. Select a bad night when DX is almost impossible with the ordinary aerial. Make a comparison station for station, connecting first your aerial, then SUBANTENNA. From stations that are just a mess of jumbled noise with the old aerial, you'll get reception that parallels lost in sweetness and clarity. Send coupon at once for scientific explanation of SUBANTENNA and for particulars of GUARANTEE and FREE TRIAL OFFER. Send COUPON NOW!

FREE TRIAL OFFER!

Read PROOF that SUBANTENNA is the Greatest New Thing in Radio

"Subantenna you shipped me now working and results are good. Had WJZ, WLS, KDKA, WTAX, WBSI and others during thunderstorm." Signed, L. T. DONALDSON, M. D., Louisiana

"I am not only getting better reception but better volume through the Subantenna." Signed, HUGO M. FRIEND, Chief Justice Circuit Court, Cook County

"I am able to report that static which was a source of much annoyance before, has been entirely eliminated so far as I am able to observe. For clarity and for its contribution to selective I think the Subantenna is the best device I have ever had any experience with." Signed, REED L. PARKER, Chicago

"I am glad to report to you the wonderful reception that I am receiving without interference or static of any kind. It is, indeed, a wonderful thing for radio and my opinion is that it will revolutionize the industry." Signed, CARL DESSAUER, Kansas

"My greatest pleasure with the Subantenna, however, comes through the clarity of tone and perfect reception of the programs. Since using the Subantenna, I am unable to understand how I got any pleasure at all out of my radio, using the old aerial, with its rasping, grating noises, and constant interference." Signed, HERMAN SIESSCHER, Chicago

MAIL THIS COUPON NOW!

CLOVERLEAF MFG. CO., 2716X S. Canal St., Chicago.

Tell me all about SUBANTENNA and your FREE TRIAL OFFER.

Name.....

Address.....

Mountain Time Stations

KOA Denver, Colo. (322.4m-930kc) 8 p. m. KOA orchestra; 8:15, studio program.

KOB State College, N. M. (348.6m-860kc) orchestra.

It Doubles Radio Pleasure
New—different



Perpetual 64 page Log and Radio Encyclopedia 1 Price

To introduce our new 64 page automatic loose leaf Log and Radio Encyclopedia into more communities, for a limited time, we are selling a few of our regular \$2 edition for only \$1 and you can keep it up-to-date. It is different than anything you ever saw.

This log is truly reversible. It does not become obsolete. We publish corrected sheets as changes in calls, wave lengths (meters or kilocycles), watts, owners, addresses, etc., occur and as new data comes out. New pages inserted at a moment. Permanently accurate.

Log pages contain 435 call signs, frequencies, etc. Check full of information absolutely essential to radio enjoyment. Indexed by states by cities, etc. Dictionary style lists of frequencies, wave lengths, etc. Care of batteries, etc., etc. Beautiful flexible cover (good letter).

Dial Setting Chart FREE Shows dial settings convenient. You and your children will enjoy it. Double radio pleasure. And it's reversible. For full details only, we send you the reversible Reversible Log and Radio Information Book at half price.

Send No Money—See Coupon

Radio Printers, Dept. 8412N, Marengo, Ill.

Send 6¢ post payable, Log and Radio Encyclopedia with 1¢ postage and 1¢ for extra postage after it arrives. Money will be refunded if you do not return the log.

If 5¢ bill or check is enclosed, postal charges will be prepaid.

Name.....

Address.....

City.....State.....

Send Coupon NOW—while offer lasts.

WKRC Cincinnati, Ohio (325.9m-820kc) 10 p. m. Swiss Garden Loops; 11, popular program; 11:15, dance music.

WLIT Philadelphia, Pa. (394.5m-760kc) 7:30 p. m. concert orchestra.

WLW Cincinnati, Ohio (422.3m-710kc) 7 p. m. organ concert; Johanna Grasse; 8, Secretary Hawkins Radio club; 8:15, Ford and Glenn; 9:30, dance music; Castle Farm.

WMAK Buffalo, N. Y. (265.5m-1130kc) 6:30 p. m. Hotel Onondaga orchestra; 7:30, Shea's Buffalo theater; 9:30, musical; 10:30, dance music; 11:30, B. A. C. orchestra.

WMBF Miami Beach, Fla. (384.4m-780kc) 7 p. m. dinner concert; 8, concert; 10, dance.

WMCA New York, N. Y. (340.7m-810kc) 11 p. m. Ernie Golden and his Hotel McAlpina orchestra; 12, Melodin entertainers.

WNYC New York, N. Y. (522m-570kc) 7 p. m. piano selections; 8:15, quartet.

WOO Philadelphia, Pa. (508.2m-590kc) 7:30 p. m. Hotel Sylvania dance orchestra.

WOW Newark, N. J. (405.2m-740kc) 6:15 p. m. Jacques Jacobs' Hotel Sylvania ensemble; 6:45, Bill Wesley in sports; 7, ensemble; 7:30, orchestra; 8:15, orchestra; 9, Washington Heights musical club; 10:30, novelty program; 11, orchestra.

WPG Atlantic City, N. J. (289.8m-1000kc) 7:10 p. m. organ recital; Arthur Brock; 7:30, Hotel Morton dinner music; 8:30, dinner music; 9:30, "Little Journey to the Homes of Great Musicians, Alice Sachs, pianist; 9, Hotel Chelsea concert; 10, studio program; 10:30, dance music; 11:30, Gateway Casino.

WRC Washington, D. C. (468.5m-640kc) 7 p. m. dinner music; 8, WEAF; 9, WEAF; 10, dance music; 11, orchestra.

WSAI Cincinnati, Ohio (325.9m-820kc) 7:45 p. m. news; 8, sextet; 9, WEAF; 12, dance music.

WSKC Bay City, Mich. (360.7m-1130kc) 11:2 a. m. studio program.

WTAC Worcester, Mass. (545.1m-550kc) 8 p. m. program; 9, Hancock Hotel orchestra; 10, WEAF.

WTAM Cleveland, Ohio (389.4m-770kc) 6:15 p. m. fluid Cleveland orchestra; 7:15, studio program; 9, WEAF; 10, E. Jones Merry-makers.

WTIC Hartford, Conn. (475.9m-820kc) 9 p. m. Hub restaurant; 9, program; 10, orchestra.

WJZ Detroit, Mich. (352.7m-820kc) 9 p. m. WEAF.

Central Time Stations

CKY Wianpan, Can. (384.4m-780kc) 9:30-10:30 p. m. Herbert Sadler, organist.

KFAB Lincoln, Neb. (340.7m-860kc) 8:30-10:30, variety program.

KFH Wichita, Kan. (268m-1120kc) 7:30 p. m. artists' recital.

KLDS Independence (440.9m-680kc) 7 p. m. musicals; 8, studio program.

KPNE Shenandoah, Iowa (461.3m-650kc) 7 p. m. music; 11, old-time music.

KMA Shenandoah, Ia. (461.3m-650kc) 9-11 p. m. Greenlee Brothers.

KMOX St. Louis, Mo. (280.2m-1070kc) 6:30 p. m. soloist; 7, Little Red Schoolhouse; 8, soloists; 9, Melody Twins; 9:30, soloists; 10, program; 12-1, dance music.

KOIL Council Bluffs, Ia. (308.9m-880kc) 6 p. m. orchestra; 7:30, program; 11, Pop-Vow.

KPRC Houston, Tex. (289.2m-1000kc) 7:30 p. m. Billie class; 8, concert; 11, frolic.

KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9 p. m. dance frolic; 10-11, specialties.

KVOD Bristol, Okla. (374.8m-800kc) 6-7 p. m. S. S. lesson; 7-8, Gleason; 8-9, orchestra; 12, Southern entertainers.

KYW Chicago, Ill. (535.4m-600kc) 6 p. m. bedtime story; 6:30, orchestra; 7, Hearst square; 8-10:30, classical concert; 10:30-12, Congress carnival.

WAMD Minneapolis, Minn. (243.5m-1290kc) 7:10 p. m. movie club.

WEAF Fort Worth, Tex. (475.9m-830kc) 8-8:30 p. m. music; 9:30-11, orchestra.

WBBM Chicago, Ill. (228m-1300kc) 8 p. m. Coon-Sanders' Night Hawks; 9, orchestra, artists; 10, Joe Cabin days; 11-12, theater song; 12, Nutty club.

WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:15 p. m. Wesley Barlow's Nicollet hotel orchestra; 8, WEAF; 9, program; 10:05, Curtis hotel orchestra.

WCFL Chicago, Ill. (491.5m-610kc) 7 p. m. Brevoort trio; 8, Vandeville hour; 12, Rendez-vous cafe.

WDAF Kansas City, Mo. (385.5m-820kc) 6:7 p. m. school of the air; 8-9, WEAF; 9-10, around the town; 11-12, radio frolic.

WEBB Chicago, Ill. (370.2m-810kc) 7 p. m. Edgewater Beach hotel orchestra; 11-2 a. m., orchestra.

WENR Chicago, Ill. (265.3m-1130kc) 6:7 p. m. organ; 8-10, trio; 12-2, Last Minute club.

WAAA Dallas, Tex. (475.9m-820kc) 6:35-7 p. m. Drake concert ensemble; 8-9, WEAF; 9, Grand opera period; 10, Sam n' Henry; 10:10, The Music Box; 10:20-1, songs.

WHAD Milwaukee, Wis. (275.1m-1090kc) 6:15 p. m. orchestra and vocal selections, Wisconsin hotel; 7, children's hour.

WHAS Louisville, Ky. (388.8m-750kc) 7:30-9 p. m. studio.

WHT Chicago, Ill. (389.8m-750kc) 6 p. m. Ai Carney, organist; 7-9, (238m-1260kc), Stuart Dawson; 9:30 (339.8m-720kc), Irene and Albert; 11, Par and Al.

WIBO Chicago, Ill. (225.4m-1330kc) 6:30 p. m. ensemble.

WJAZ Chicago, Ill. (329.5m-910kc) 6:30 p. m. organ; 8, musical high lights; 8:30, dance music; 9, diversified music; 9:30, talk on care of the hair; 9:40, dinner music.

WJJD Mooseheart, Ill. (370.2m-810kc) 8 p. m. Victorians.

WLAC Nashville, Tenn. (225.4m-1330kc) 7-8 p. m. contralto; 8-9, old time tunes.

WLBB Chicago, Ill. (302.8m-890kc) 7-8 p. m. dinner concert; 11-12:30, organ, orchestras.

WLS Chicago, Ill. (344.8m-870kc) 6:40 p. m. College Inn orchestra; 7:1, frolic.

WMAQ Chicago, Ill. (447.5m-670kc) 6 p. m. Chicago theater organ; 6:30, orchestra; 8, phonologue; 8:30, Chicago theater revue; 9:30, songs.

WMBB Chicago, Ill. (349.5m-830kc) 7:30-8 p. m. Trioan ensemble; artists; 8:30-11, Trioan orchestra; 12, ensemble.

WMO Memphis, Tenn. (489.7m-600kc) 7:30 p. m. dance music; 8:30, entertainment.

WOC Davenport, Iowa (483.6m-620kc) 7-8 p. m. musicals; 8-9, WEAF.

WOK Chicago, Ill. (410.7m-730kc) 6:7-30 p. m. Tip Top Inn ensemble; 11-1, dance program.

WOQ Kansas City, Mo. (275m-1090kc) 6:15 p. m. orchestra; 10, service.

WORD Chicago, Ill. (275.1m-1090kc) 7 p. m. Webster hotel concert program; 9, studio program.

WOW Omaha, Neb. (445.5m-670kc) 6 p. m. literary hour; 9, program; 10, Tracy Brown's Oklahoma; 10:30, program; 11, Rainbo Gardens frolic.

WRR Dallas, Tex. (245.5m-1220kc) 8-9 p. m. musical.

WSB Atlanta, Ga. (428.3m-700kc) 8 p. m. Atlanta Atwater Kent hour; 10-45, Arcadians.

WSBC Chicago, Ill. (288.3m-1040kc) 6:30-8 p. m. dinner program; 9-1, entertainers.

WSM Nashville, Tenn. (282.8m-1060kc) 6:45 p. m. dinner concert; 8, studio concert.

WSMB New Orleans, La. (319m-840kc) 8:30 p. m. popular program.

WSOE Milwaukee, Wis. (245.5m-1220kc) 8 p. m. Wheat, artists.

Mountain Time Stations

KOA Denver, Colo. (322.4m-900kc) 10:30 p. m. Schuerman's Colorado orchestra.

Pacific Time Stations

KFI Los Angeles, Calif. (467m-642kc) 7-8 p. m. trio; 8-9, program; 9-10, classical program; 10-11, Packard Radio club; 11-2 a. m. KFI midnight frolic.

KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 8-9, program; 10, Mona Motor Oil Company; 11-10, headlines; 10-11, Varus Brothers frolic.

KGO Oakland, Calif. (326.2m-830kc) 8:15 p. m. program; 9:15-1 a. m. Whitcomb band; Frank Gibney, soloist.

KOPW Portland, Ore. (491.5m-610kc) 6-7 p. m. dinner music; 9-10, quartet; 10-12, dance music.

KHJ Los Angeles, Calif. (405.2m-740kc) 6:30-7:30 p. m. children's hour; 8-10, varied program.

KMTR Hollywood, Calif. (370.2m-810kc) 8-9 p. m. concert orchestra; 9-10, studio program; 10-12, dance music.

KNX Hollywood, Calif. (336.9m-890kc) 7:30 p. m. features; 10, Hotel Ambassador; 11, Saturday night frolic.

KPO San Francisco, Calif. (428.3m-700kc) 6:30 p. m. Street Restaurant orchestra; 8-11, dance music.

KPSN Pasadena, Calif. (315.6m-950kc) 8-9 p. m. Star-News instrumental ensemble.

Saturday, silent night for: CFC, KFDM, KFDY, KFOU, KIX, KOB, KSWC, KTAB, KUOA, KWWG, WBAI, WCAL, WCAU, WCBG, WCOA, WCOY, WGB, WEMC, WGBF, WGGP, WGHF, WCHP, WGR, WHA, WHAD, WHB, WHN, WHO, WICC, WJAR, WLWL, WDAI, WDS, WRVA, WTTG, WWJ.

SUNDAY, FEBRUARY 20

Church Services

Eastern	Central	Mountain	Pacific
10 a. m.	8	8	8
WIR (516.9m-590kc) First Baptist church, Pontiac	10	9	8
WEAS (399.8m-770kc) Broadway Christian church, 12 n.	11	10	9
KUTS (574.9m-800kc) First Presbyterian church, WDAI (475.9m-630kc) services, First Presbyterian church.	12	11	10
7:15 p. m.	6:15	5:15	4:15
WCX (516.9m-590kc) Central M. E. church.			

SYD LIFE LONG BATTERY

UNCONDITIONAL 2-YEAR GUARANTEE

Taken from Laboratory News Notes which appeared in The Chicago Daily News—"The Syd Storage 'B' Battery submitted to The Chicago Daily News Radio Laboratory for a test was found satisfactory."

100 VOLTS With a Complete Charger. **\$15.50**

145 VOLTS With a Complete Charger. **\$21.50**

Manufactured and Sold by
SYD STORAGE "B" BATTERY CO.
Dept. S, 1452 1/2 South Washburn Ave., Chicago
Opposite Coliseum Chicago Calumet 4911
Open till 8 P. M. Sunday Till 2 P. M.
Mail Orders Filled

PREMAX COLLAPSIBLE TUBULAR STEEL RADIO MAST

HERE is the mast you have been looking for, at a price you'll be willing to pay. Collapsible and adjustable from 3'0" to 6'6". Base fits flat or pitched roof, also walls and chimneys. Pulley permanently fixed to take up slack in aerial. All wires attached before extending mast—no standing erect on a slippery roof.

\$3.50 a pair

\$2.00 for single mast with pulley

High grade tubular steel, Park-erized Rust Proof. Attractive in appearance and built to stand the strain. Quickly installed by anyone. Furnished complete with 100' galvanized guy wire, 6 guy anchors and instruction sheet. Send us your name and address today, and state whether you want one mast or a pair. Send no money. We ship C. O. D. You pay postman price listed above, plus a few cents postage. Satisfaction guaranteed. Send today.

Premax Products
NIAGARA METAL STAMPING CORPORATION
Dept. RD 2
Niagara Falls, N. Y.

Howard Radio

Model Eight Console

Seven Tubes

May be Electrically Operated

No Outside Wires

A radio receiver capable of amazing results—guaranteed reception of distant broadcasts, when powerful locals are on the air. And such reception! Tone quality that you never believed possible. Hear this marvelous new receiver—the 7 tube Howard—before you decide on any radio instrument.

NEUTRODYNE

Howard Radio Company
469 East Ohio St. Chicago, Ill.

A & B Battery \$2 Charger ONLY

SATISFACTION GUARANTEED

THIS wonderful charger—the sensation of the entire radio industry—charges any type of storage A or B battery, using only a few cents worth of ordinary house current. Works perfectly on either alternating or direct current.

Cannot possibly injure your battery, and will last for years. Many radio fans find it a tremendous success as a trickle charger. Complete and simple directions enclosed with every charger, so that anyone can operate it. There are absolutely no expensive "extras" to buy.

Why pay \$10.00 to \$15.00 for a charger when you can get this splendid GUARANTEED R. B. Charger by simply signing the coupon below and mailing it to us with two dollars (bills, money order, check or stamps) plus 10c in stamps or coin to pay mailing costs. The charger will be sent post-paid. If, for any reason, you should not be perfectly satisfied, return the charger within five days and we will refund your money.

PROOF!

"I received your charger and have used same, and am very much pleased with it. It certainly does charge up a battery in quick time."
S. S. Jeffries, St. Louis

"The charger I received from you is giving entire satisfaction."
C. H. Sheffield, New York

"I have seen no charger that I prize as highly as I do this one, and I don't see how it can be put out at such a low price. I am having great success with it."
D. Larsen, Fairview, Utah

"The charger certainly does do the work."
D. S. Cassel, Philadelphia

R. B. SPECIALTY CO.
Dept. G-10, 318 Sycamore Street
Cincinnati, Ohio

Mail the coupon at once—TODAY

Enclosed is two dollars, plus 10c for postage. Send me one R. B. Charger with full instructions. It is understood that if I am not satisfied with the charger, I may return it within five days and you will refund my money.

Name _____
Address _____
Town _____ State _____

BASKETBALL GAMES

Table listing basketball games with columns for Eastern, Central, Mountain, Pacific, and dates from Tuesday, February 15 to Friday, February 25.

11. Reliable battery hour; 11-12. Capital theater... KFAB Lincoln, Nebr. (340.7m-800kc) 5:30-6:30 p. m. Hotel Lincoln orchestra; 8:30-10:30 musical.

Advertisement for World Battery Company featuring 'B' Batteries. Text includes 'Silent B Power with World Radio Storage B Battery' and 'Lasts Indefinitely - Pays for Itself'.

orchestra; 8:30-9:30. Sears-Roebuck Agricultural Foundation program... WGBF Evansville, Ind. (236m-1270kc) 7 p. m. radio-graph; 7:30, children's program; 7:40, Gospel trio;

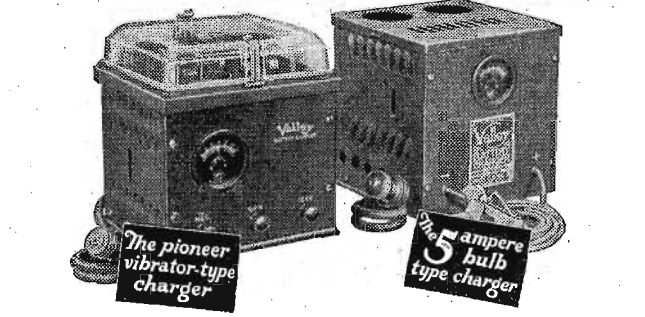
Mountain Time Stations KOA Denver, Colo. (322.4m-930kc) 7 p. m. Scheuerman's Colorado orchestra; 8:15, studio program. KOB State College, N. M. (345.6m-860kc), 7:30 p. m. State College orchestra.

Applaud Your Favorites Hear What YOU Like

Advertisement for Personal Applause Cards. Features a 'Thank You' card image and text: 'Personal Applause Cards 1/2 Price and FREE LOG EXTRA'. Includes a 'MAIL COUPON TODAY' form.

WRESTLING, FEBRUARY 19 Eastern Central Mountain Pacific 8:30 p. m. 7:30 6:30 5:30 WOI (270.1m-110kc) Kansas-Ames.

WORLD BATTERY COMPANY 1219 So. Wabash Ave. Dept. 76 Chicago, Ill. 4554 Maiden St., Dept. RD, Chicago, Ill.



Use either one for a dependable source of "A" battery current

YOU can get the famous Valley Battery Charger in both vibrator and bulb types. Use either one for a dependable source of A battery current.

with finest radio receiver. Complete with cord and plug, and leads and clips. The Twin Bulb Type: The twin bulb design of this Valley Charger overcomes the only objection to the bulb type charger, i. e., the slow charging rate.

RADIO DIVISION VALLEY ELECTRIC CO., ST. LOUIS, MO. District Offices: Boston, Chicago, Cleveland, Indianapolis, Kansas City, Minneapolis, New York, Philadelphia, San Francisco

Advertisement for 'GET DISTANCE' featuring an 'AMAZING INVENTION FOR ANY RADIO'. Includes a 'MAIL COUPON TODAY' form and contact information for HAZLETON LABORATORIES.

Advertisement for Centralab Short Wave Selector. Features a large image of the device and text: 'Something New! CENTRALAB Short Wave SELECTOR. AT last here it is—the invention that a million set owners have waited for!'.

EDUCATIONAL FEATURES

Table with columns for days of the week (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday) and radio stations (Eastern, Central, Mountain, Pacific) listing programs and times.

KPO San Francisco, Calif. (428.3m-700kc) 6:30-7 p. m. States Restaurant orchestra; 7:30 Rudy Sager's Fairmont hotel concert orchestra; 8:9 music; 9:10 studio program; 10:11 Manhattan cafe orchestra; 11:22 variety hour.
KWSC Pullman, Wash. (348.5m-860kc) 7:30 p. m. students concert.
Monday, silent night for: CECA, CKAC, CKCL, KFDM, KFDY, KGO, KHJ, XLDS, KPNS, KYW, WBBM, WGBD, WCFL, WENR, WBLI, WENR, WFL, WGBF, WGBS, WGES, WGN, WGY, WHAS, WHT, WIBO, WIP, WJAZ, WJLD, WLBS, WLS, WMAQ, WMBB, WOAI, WOC, WOD, WORD, WQJ, WSAI.

TUESDAY, FEBRUARY 22
Headliners
Eastern 12:30 Central 11:30 Mountain 10:30 Pacific 9:30
WELI (491.5m-610kc) WTZ (454.3m-628kc)
WEEI (348.5m-606kc) WJAB (483.6m-620kc)
WFAJ (545.1m-558kc) WFSH (329.7m-628kc)
WVIC (475.9m-630kc) WGVY (372.5m-790kc)
WGR (319m-940kc) WBBZ (333.1m-802kc)
WLT (324.5m-700kc) WIKC (468.3m-608kc)
KDKA (309.1m-970kc) WCAR (461.3m-650kc)
WTAM (339.4m-770kc) WVCJ (352.7m-822kc)
WSA (355.3m-828kc) WOC (302.3m-920kc)
KYW (535.4m-560kc) WGC (483.6m-620kc)
WCCO (416.9m-720kc) WDAF (365.6m-820kc)

Eastern 8:30 Central 7:30 Mountain 6:30 Pacific 5:30
WHLAS (399.8m-720kc) WSM (282.8m-1060kc)
WSR (424.3m-700kc) WMC (449.7m-660kc)
RDB (415.5m-620kc) WJAB (483.6m-620kc)
RGO (361.2m-830kc) KFI (467m-642kc) KCVW (491.5m-610kc) KUMD (315.9m-980kc) KPDA (454.3m-690kc) KJED (694.3m-700kc), address by Pres. Coolidge, commemorating Washington's 200th birthday.
7:30 6:30 5:30 4:30
CNRA (322.4m-1250kc) Sydney Mines personnel.
WFAA (415.5m-620kc) Job and Job's.
8:30 7:30 6:30 5:30
WBY (374m-822kc) "Colors in Music," by Violet Black; White; Red; Grey; Yellow; Purple; Blue; Red, White and Blue.

Eastern 8:15 Central 7:15 Mountain 6:15 Pacific 5:15
WEAO (293.9m-1020kc) Ann Charles, violin.
WSPD (288.3m-1040kc) Sanger Travogue, "Avalonstone National Park."
8:30 7:30 6:30 5:30
KLSB (440.9m-690kc) Lecture.
PWN (329.8m-750kc) Marian Gilbert, Washington's birthday.
WGBS (315.6m-950kc) special concert, Washington's birthday.
Alfred G. Robyn, tubular concerto on two pianos.
WHLAS (399.8m-720kc) Eddie Rosson's orchestra.
KOLL (305.9m-930kc) National airs.
WDBD (344.6m-870kc) studio ensemble.

HERE IT IS!
Marvelous Townsend
B'ELIMINATOR \$4.95
(Complete)
\$1.00 Down Balance C.O.D.
Image of the Townsend B'Eliminator device.

Direct from Factory at lowest price on record
Here is great news! For half the price of a set of "B" batteries you can now enjoy greatly improved reception and be done forever with the nuisance of recharging and renewing unreliable "B" batteries. We make every part that goes in the Townsend "B" Eliminator in our own factory. That's the reason we can give it to you at such a remarkably low price—give you a high quality instrument backed by a real guarantee. Users report splendid results. A few "B" Eliminator at the lowest price on record. Our 10 days Free Trial proves it.
MONEY BACK if not amazed and delighted
You alone are the judge. We could not afford to make this guarantee if we were not sure of the Townsend "B" Eliminator's splendid performance. Just plug into your electric light socket and in a moment you will realize what good receipt it means. Delivers up to 100 volts on any set up to six tubes, on direct or alternating current—any cycle. Gives full wave rectification. Full tone, clarity and volume—uninterrupted by sereches of fading batteries.
Rush Order Today
Simply fill out the coupon and slip it into an envelope with only \$1.00. Get it into the mail at once. Your "B" Eliminator will be sent you promptly by return mail. Deposit \$3.95 with the postman. Pay out the Eliminator's "B" Eliminator in our own factory. Thrilled by improvement in operation, return it to us and purchase price will be refunded in full. You don't need to put up with battery nuisance another day when it is possible to own a "B" Eliminator at this startlingly low price. Send for it today.
TOWNSEND LABORATORIES
713 Townsend Street, Dept. 17 CHICAGO, ILL.
Name _____
Address _____
City _____ State _____

Steinite NOISE ELIMINATOR
IMPROVES RADIO RECEPTION
BETTER TONE—STOPS DISTORTION
New Steinite Invention guarantees to stop the noises within your set. Nearly all annoyance you lay to static comes from noises created within the set, or from stations interfering. Steinite Noise Eliminators delight you with the new performance of your radio. Tone quality is improved beyond your expectation, or we will refund immediately every cent of your money. Hundreds of thousands of users have cut out undesirable stations with the Steinite Interference Eliminator and will welcome this new Steinite invention. Let this new improvement cause you to marvel at the performance of your set—make the simple test at once at our risk.
Eliminates Noises Within the Set
\$1.00 For Set of 5 Postpaid Gives Longer Life To Tubes
With 4 Cabinet Supports
Stops mechanical vibration; prevents microphone feedback gives extra added life to the tubes—no other tubes the price because of this saving alone. Slip them over the tubes and tune in your favorite station and detect immediately the improvement they make. They will give the true tone and sweetest 10-Day Free Trial you appreciate in musical instruments and voice. We welcome this simple test at our risk and guarantee that performance of your set will convince you. Money-Back Guaranteed you. Fit any tubes—no tools of any kind needed.
Send Orders Today for set of 5 Steinite Noise Eliminators with 4 cabinet supports (dollar bill will do). If you only need two or three Noise Eliminators, price is 25 cents each. Two Big Atchison Banks guarantee our reliability. Rush your order. We guarantee prompt shipment.
ORDER TODAY
The New Steinite 7-Tube Radio uses no batteries of any kind—only \$1.00, Load Resistor Built In. Complete with tubes \$1.50—nothing to buy. Operates from light socket in an hour. Write for descriptive literature before buying an expensive Battery Set. Steinite Co., Dept. 6, 7-16 Battery Set, 845 S. Broadway, Chicago, Ill. Steinite Interference Eliminator \$1; Crystals 50 cents each, 3 for \$1.
STEINITE LABORATORIES, 360 Radio Bldg., ATCHISON, KANSAS

OPERATE YOUR RADIO FROM LIGHT SOCKET for 63¢
Only \$1 Down
AMAZING INVENTION ELIMINATES "A" BATTERY TROUBLES
Why take your battery out to be charged or bother with chargers when for a small sum you can convert your set into an electrically operated radio? By connecting with your present A battery as an accumulator your A battery current can be drawn right from the light socket. You can secure more volume, get distance easily, and never have to worry about your battery going "dead." Electrically-operated radios are the latest improvement, and are recommended by the leading radio authorities.
OPERATES 1 TO 15-TUBE SETS
Has separate binding posts so that it is equally effective for large and small radios. Completely equipped with cord, plug, and ready to connect to your present set. Battery must be used for accumulator (your present 6-volt battery is all right). Just make a few simple connections and in two minutes you can forget about your A current supply. No changes need be made in your set.
FULLY GUARANTEED
Your Money Back If Not Satisfied
The laboratory has expended years of research to make this pleasure possible for you. The high cost of electric operation is now wiped away and everyone can now enjoy the superior results of this up-to-date invention. You will be delighted with the volume and distinctness of your radio programs.
MONARCH MFG. CO., Dept. RD.
4554 Maiden St., Chicago, Ill.
Send at once your A Battery Device. Enclosed find \$1.00. 3-gauge plus postman balance amounting to 53¢, plus postage.
Name _____
Address _____
City _____ State _____

Eastern WEAF (491.4m-610kc) Central WCCO (416.4m-720kc) Mountain WTIC (475.9m-630kc) Pacific WFLW (384.4m-780kc)

WCCO (416.4m-720kc) **WJW** (352.7m-850kc) **WTAM** (389.4m-770kc) **KSD** (545.1m-550kc) **WTAC** (435.1m-550kc) **WVC** (468.3m-640kc) **WGAE** (461.2m-650kc) **WGN** (302.3m-920kc) **WVAL** (325.9m-920kc) **WHAS** (379.3m-750kc) **WSPR** (428.3m-700kc) **WGM** (379.5m-790kc) **Eveready** hour, Radio Canteen, Spanish cellist, Barbara Maurer, soloist, Castor and Pollux (Rameau), 10



Pablo Casals

Voi Che Sapeite, from "The Marriage of Figaro" (Mozart). **Adagio** movement from Haydn's Concerto. **The Little Star** (Massouky). **Chanson Espagnol** (Ravel). **Goyescas** (Granados). **Spanish Dance** (Granados). **Nazamba** (Poulet). **The Swan** (Saint-Saens).

WTIC (475.9m-630kc) **Travelers** symphonic ensemble. **WFLW** (384.4m-780kc) **Elements** of Architecture. **KOIL** (305.9m-980kc) **Poet's** corner. **KPRC** (299.9m-1010kc) **Sweetheart** of the air. **WHR** (365.6m-800kc) **Lola** Wald Gaston, impersonator.

KOIL (305.9m-980kc) **Mr. Solve** Your Troubles. **WCX** (516.9m-580kc) **The Red Apple** Club. **WHN** (361.2m-830kc) **Wright and Wrong**, harmony singers. **WLAC** (225.4m-1330kc) **Mrs. T. L. Herbert**, pianist.

WGBS (315.6m-950kc) **Wm. Chosynsky's** violin memory contest. **PWX** (399.8m-750kc) **Jockey** club. **WHAR** (475.9m-630kc) **Elfred Hand's** Truth society.

KTHS (374.8m-800kc) **Spiro Mendel**, violinist. **WFAA** (475.9m-630kc) **Elsie and Leslie**.

WEDNESDAY, FEBRUARY 23

Eastern 8 p. m. WCCO (416.4m-720kc) Central WJW (352.7m-850kc) Mountain WTAM (389.4m-770kc) Pacific WFLW (384.4m-780kc)

WCCO (416.4m-720kc) **WJW** (352.7m-850kc) **WTAM** (389.4m-770kc) **KSD** (545.1m-550kc) **WTAC** (435.1m-550kc) **WVC** (468.3m-640kc) **WGAE** (461.2m-650kc) **WGN** (302.3m-920kc) **WVAL** (325.9m-920kc) **WHAS** (379.3m-750kc) **WSPR** (428.3m-700kc) **WGM** (379.5m-790kc) **Eveready** hour, Radio Canteen, Spanish cellist, Barbara Maurer, soloist, Castor and Pollux (Rameau), 10

Central WCCO (416.4m-720kc) Mountain WTAM (389.4m-770kc) Pacific WFLW (384.4m-780kc)

WCCO (416.4m-720kc) **WJW** (352.7m-850kc) **WTAM** (389.4m-770kc) **KSD** (545.1m-550kc) **WTAC** (435.1m-550kc) **WVC** (468.3m-640kc) **WGAE** (461.2m-650kc) **WGN** (302.3m-920kc) **WVAL** (325.9m-920kc) **WHAS** (379.3m-750kc) **WSPR** (428.3m-700kc) **WGM** (379.5m-790kc) **Eveready** hour, Radio Canteen, Spanish cellist, Barbara Maurer, soloist, Castor and Pollux (Rameau), 10

WFLW (384.4m-780kc) **Heermann** trio. **WDLW** (384.4m-780kc) **Chemistry** of the kitchen. **WSM** Nashville (282.8m-1060kc) **Whitefield** Morell, pianist. **WHR** (365.6m-800kc) **Laurel**.

WJW (352.7m-850kc) **Mildred Hunt**, songs. **WVLA** (491.5m-610kc) **WCAE** (461.3m-650kc) **WRC** (428.3m-700kc) **WGY** (379.5m-790kc) **Perichole**.

WFLW (384.4m-780kc) **Ford and Glenn**. **CNRW** (384.4m-780kc) **Orpheum** Theatre orchestra. **KTHS** (374.8m-800kc) **Leona Latone**.

THURSDAY, FEBRUARY 24

Eastern 8 p. m. WFAA (475.9m-630kc) Central WJW (352.7m-850kc) Mountain WTAM (389.4m-770kc) Pacific WFLW (384.4m-780kc)

WFAA (475.9m-630kc) **Baker Hotel** orchestra. **WJW** (352.7m-850kc) **College** of 1927. **WTAM** (389.4m-770kc) **Sammy Selikowitz**, child pianist. **WFLW** (384.4m-780kc) **Pest** Revolutionary hymns. **WHAS** (379.3m-750kc) **Cy**, restaurant's orchestra.

WFLW (384.4m-780kc) **Irish** music. **WTIC** (475.9m-630kc) **Capitol** Theatre. **WEAO** (293.9m-1020kc) **Robt. Kerrington**, tenor. **WGBS** (315.6m-950kc) **Philip Frank**, child violinist.

WCDD (344.6m-870kc) **program** of Indian music. **WMAQ** (447.5m-670kc) **Chicago** symphony. **KOIL** (305.9m-980kc) **Grace Poole** Steinlers, contralto. **KOIL** (305.9m-980kc) **"Old Time Music** Period."

WFAA (475.9m-630kc) **Wednesday Morning** choral club. **WTAC** (435.1m-1070kc) **Sally West** and Her Crew. **WOAI** (394.5m-760kc) **Excerpts** from "Aida." **WHB** (365.6m-800kc) **Night** of the Sweeney Myrsolane; Sam Martin, Donna Taylor, Harry Wilson

WHN (361.2m-830kc) **"Cookie,"** the California songbird.

Eastern 8:30 p. m. WSM Nashville (282.8m-1060kc) Central WJW (352.7m-850kc) Mountain WTAM (389.4m-770kc) Pacific WFLW (384.4m-780kc)

WSM Nashville (282.8m-1060kc) **Mrs. T. L. Herbert**, pianist. **WJW** (352.7m-850kc) **Mrs. Eva Thompson Jones**, contralto. **WTAM** (389.4m-770kc) **Hawaiian** hour, Bob Whad. **WFLW** (384.4m-780kc) **K. of P.** orchestra. **KPRC** (299.9m-1010kc) **"Tex"** Lyane, whistler.

FRIDAY, FEBRUARY 25

Eastern 7:30 p. m. KOIL (305.9m-980kc) Central WJW (352.7m-850kc) Mountain WTAM (389.4m-770kc) Pacific WFLW (384.4m-780kc)

KOIL (305.9m-980kc) **Millard** community band. **CNRA** (322.4m-1030kc) **Ladies'** double quartet. **WTAM** (389.4m-770kc) **Samis** band. **WVLA** (491.5m-610kc) **Yale** Glee clubs. **KPH** (267.7m-1220kc) **Singing** Serenaders, Jimmie White and Howard Fordham. **KOIL** (305.9m-980kc) **"At the Tailor's,"** Billie and Helen. **WVLA** (491.5m-610kc) **"Take a Chance,"** comedy. **WHAS** (379.3m-750kc) **Operatic** ensemble.

CNRA (322.4m-1030kc) **The Radio Raiders**. **WTIC** (475.9m-630kc) **"At the Tailor's,"** Billie and Helen. **WVLA** (491.5m-610kc) **City of Evergreen** program. **WTIC** (475.9m-630kc) **Friendly** Fuller hour. **KOIL** (305.9m-980kc) **"The Old Folks** at Home.

Eastern 8:30 p. m. KPRC (299.9m-1010kc) Central WJW (352.7m-850kc) Mountain WTAM (389.4m-770kc) Pacific WFLW (384.4m-780kc)

KPRC (299.9m-1010kc) **State College** salon orchestra. **WTAM** (389.4m-770kc) **Marquette U.** program. **WHN** (361.2m-830kc) **Instrumental** 's. Ed. Wise trio. **WVLA** (256m-1170kc) **Minstrel** show. **KTHS** (374.8m-800kc) **Characteristic** nationalities. **KOA** (322.4m-1030kc) **musical** comedy, "It Won't Be Long Now."

SATURDAY, FEBRUARY 26

Eastern 8:30 p. m. CKNC (356.9m-840kc) Central WJW (352.7m-850kc) Mountain WTAM (389.4m-770kc) Pacific WFLW (384.4m-780kc)

CKNC (356.9m-840kc) **Eveready** string quintet. **WVLA** (491.5m-610kc) **Vanderbilt** dance orchestra. **CKNC** (356.9m-840kc) **A and B** Battery Boys; **Night** Wilson, baritone. **PWX** (399.8m-750kc) **organ** recital. **KLPS** (440.9m-680kc) **Marybelle** Enhank, organist. **KOIL** (305.9m-980kc) **Nora** Figgum and her juvenile double violin trio. **WFAA** (475.9m-630kc) **Herrold** DeGrosse, baritone. **WTIC** (475.9m-630kc) **A Trip** to Hawaii. **PWX** (399.8m-750kc) **Carnival** ball.

The Radio Listener's Red-Book

Listen to Entertainments From Stations Never Before Received

Many wonderful programs are within reach of your set every evening if you know where to locate them on your dial. Users of the RED-BOOK are increasing the pleasure and satisfaction of their sets, by eliminating guess-work methods of "hit or miss" tuning.

THE RADIO LISTENER'S RED-BOOK tells you in few, easily understood words how you can quickly locate on your dial any station you set will reach.

All stations in the United States, Canada, Mexico and Cuba listed three separate ways with a copyrighted method of ready-reference cross indexing.

Call-letters, location, wave-length (meters) frequency (kilocycles) and strength (watts) of each station are shown. Contains large broadcasting station map in two colors showing time zones, direction and distances, and a two-page "Radio Doctor," giving trouble information and remedies.

A GUIDE TO BETTER RADIO RECEPTION

A THOROUGHLY RELIABLE, SIMPLE, COMPLETE AND UP-TO-DATE DIRECTORY AND LOG

If your dealer can't supply you, your copy will be mailed postpaid on receipt of.....

Each 25c

Over 50% of our dealers are recording at least once a month, some of them more frequently. 50 or less 40% discount (15c each) 100 or more, 44% discount (14c each) Special Quantity Prices

THE WAYNE ANDREWS CO. 202 Central Ft. Wayne, Ind. formerly Andrews Radio Director

More than an ordinary log

TELEVOCAL QUALITY TUBES

Dependable and a Technical Triumph



A RADIO TUBE that is non-microphonic — won't short. Sold in matched units; tested, balanced and plainly marked detector, radio frequency or audio frequency.

Ask your dealer for this new and better radio tube that costs no more. If he can't supply you with Televocals, send us his name and address on attached coupon.

DEALERS AND JOBBERS — WRITE US

TelevoCAL Corp'n. 67A FIFTH AVE. — NEW YORK

Dealer's Name..... State..... City..... Your Name.....

WORLD'S FINEST LOUD SPEAKER

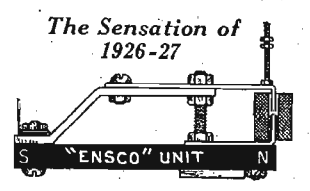
Genuine "ENSCO" 3 FOOT CONE KIT ONLY \$10

The Sensation of 1926-27

Complete parts furnished in kit form. We guarantee this speaker the equal of any manufactured cone speaker at any price.

With this THREE FOOT CONE SPEAKER you hear all the tones. It brings out the true depth and beauty of orchestral and instrumental music. Can be operated softly or full volume for dancing without trace of distortion.

Kit includes famous "ENSCO" cone unit, the only direct-drive, distortionless unit for large cones; Alhambra Fontex for big cones, with brass apexes, blueprints showing five types of cone and roll speaker construction. All necessary instructions.



Buy this wonderful speaker under our absolute guarantee. Your money back if you are not convinced that it is the finest reproducing medium obtainable at any price. It works on any set, with ordinary tubes or with power output.

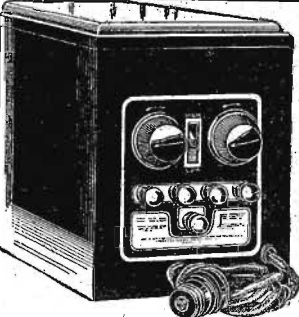
Send No Money! Write your name directed below, and complete kit will be forwarded to you. Just pay postman \$10.00 upon delivery.

Name..... Address.....

Engineers' Service Co. 25 Church St. (Desk D) New York City. Western District Office and Studio 911 Steger Building, Chicago, Ill.

BELIMINATOR \$22.95

COMPLETE WITH RAYTHEON TUBE



Positively the Greatest Value in "B" Eliminators

While the regular market price of Raytheon is around \$50.00, our factory-to-you price is only \$22.95. At this price, everyone can afford to own a Raytheon and forever discard his B batteries. A "B" eliminator enables you to draw your B current from the light socket. There is more uniform and constant power, no more battery replacements, more volume, improved tone quality, positive regulation of voltage, and absolutely NO HUM. By stopping battery replacement, Raytheon pays for itself.

Capacity 50 Millamps, 200 Volts Adequate for 1 to 15 Tubes

Delivers Smooth, Steady "B" Current—No Hum

The materials used in making the Raytheon are the finest unit parts, laboratory matched; the case with its rich, genuine Brewster Green Duco finish; the metal fittings of polished nickel; the genuine RAYTHEON tube. Comes completely wired and ready to use from 60-cycle, 110-volt alternating current. The filter-system with its extra capacity, 1000-volt test condensers, and massive, oversize 40-Henry chokes smooth out every ripple and hum from the alternating current. There is nothing to deteriorate, wear out, or replace. Raytheon is good for a lifetime of service and fully guaranteed. Capacity, 50 millamps up to 200 volts for 15-tube sets or less.

Belmont Scientific Laboratories, 1303 Wilson Ave., Dept. RD. Chicago, Ill.

Send money order for \$22.95, west of the Rockies, add 10%, direct to factory NOW, and shipment will be made at once, or order C. O. D., if you wish, and pay charges on delivery. Write today—NOW—while this offer is in force.

Belmont Scientific Laboratories 1303 Wilson Ave., Dept. RD. Chicago, Ill.

Ship at once, post paid, \$22.95 (check enclosed). West of the Rockies, add 10%. Ship at once, C. O. D., for \$22.95, plus slight express charges.

Name..... Address..... City..... State.....

**SUNDAY, FEBRUARY 27
Church Services**

Eastern	Central	Mountain	Pacific
KTIS (374.8m-800kc)	Central Methodist church	10	10
KXN (336.9m-800kc)	First Presbyterian church	11	11
WHAS (397.8m-750kc)	St. Pauline Catholic church	12	12
7:30			
WGY (379.5m-790kc)	First Church of Christ, Scientist	5:30	4:30
8:15			
KXN (336.9m-800kc)	Wilshire All-Souls church	6:15	5:15
8:30			
KPRC (296.9m-1010kc)	South Main Baptist church	6:30	5:30
9			
WFAA (475.9m-630kc)	First Church of Christ, Scientist	7	6
10			
KXN (336.9m-800kc)	First Presbyterian church	7	7
11			
WJAC (225.4m-1330kc)	Johnson Street Church of Christ	8	7

Headliners

4:15	3:15	2:15	1:15
WJAC (225.4m-1330kc)	Milwaukee Turnverein	10	10
5			
WTIC (475.9m-630kc)	Newberry Memorial organ	3	2
6			
KMA (461.3m-650kc)	St. Mary's choir	4	3
7			
KOIL (395.9m-980kc)	Princess of the Air, Capt. Kidd and their gang	5	5
8:30			
KOIL (395.9m-980kc)	Dean Nordlin's orchestra	6:30	5:30
9:15			
WFAA (475.9m-630kc)	WFL (394.5m-760kc)	7:15	6:15
9:30			
WDEF (258.5m-820kc)	WGR (319m-940kc)	8	8
9:45			
WDEF (258.5m-820kc)	WGR (319m-940kc)	9	9
10			
WDEF (258.5m-820kc)	WGR (319m-940kc)	10	10
11			
WDEF (258.5m-820kc)	WGR (319m-940kc)	11	11
12			
WDEF (258.5m-820kc)	WGR (319m-940kc)	12	12

**MONDAY, FEBRUARY 28
Headliners**

8 P. M.	Central	Mountain	Pacific
W.D.P. (379.5m-790kc)	R. P. I. glee club	8	8
8:30			
WJAC (225.4m-1330kc)	Brewecca college of music	9	9
9			
KEL (267.7m-1120kc)	High lights from the "Hikado"	10	10
9:30			
CKNC (356.9m-840kc)	Toronto Conservatory instrumental trio: Arthur Right, baritone, W.D.A. (225.4m-1330kc) Chamber of Commerce, Marjanna	11	11
10			
WHAZ (379.5m-790kc)	address, Dr. Ray Palmer baker	12	12
11			
WTIC (475.9m-630kc)	New Departure Band	1	1
12			
WHAZ (379.5m-790kc)	R. P. I. students symphony	2	2

**Bradleyleak
THE PERFECT GRID LEAK**

Provides a noiseless range of grid leak resistance from 1/4 to 10 megohms. Assures most effective grid leak resistance value for all tubes. Small grid condenser (0.00025) is separate. Metal parts nickel plated. One hole mounting.

Allen-Bradley Co.
Electric Controlling Apparatus
290 Greenfield Avenue Milwaukee, Wis.

Eastern	Central	Mountain	Pacific
8:30 P. M.	7:30	6:30	5:30
WJAC (225.4m-1330kc)	Moments with the old masters	10	10
9			
WEN (361.2m-830kc)	Bustanoby's Ed. Wise trio	11	11
9:30			
WRVA (256m-1170kc)	Four Deuces	12	12
10			
WFAA (475.9m-630kc)	WCAE (461.3m-650kc)	7	7
10:30			
WDEF (258.5m-820kc)	WRC (468.5m-640kc)	8	8
11			
WDEF (258.5m-820kc)	WRC (468.5m-640kc)	9	9
12			
WDEF (258.5m-820kc)	WRC (468.5m-640kc)	10	10
1			
WDEF (258.5m-820kc)	WRC (468.5m-640kc)	11	11
2			
WDEF (258.5m-820kc)	WRC (468.5m-640kc)	12	12

"THE GREEN MAMBA"

(Continued from page 11)
puritanic people fortunately die in middle age."
Clandon laughed. Never before had he been termed moralist or puritan. Yale had known him as a care-free athlete not less guilty of youthful follies than the other men of his year.
Outside the stone harbor Stephen Jarrod had built to shelter his smaller craft, the three hundred foot steam yacht "Alda" rode at anchor. Tom Corryell's lesser but very fast motor yacht was there too. Clandon sighed as he saw them, steam, gasoline-driven, or sailing yachts, playthings of the wealthy. All his life Clandon had craved a stout boat with which to roam the seven seas.
"I've a desire," he said, when the cutter Alda was handling skillfully was standing out to sea, "to see Shark's Bay."
"If all your ambitions were as easy as that you'd be lucky."

HALF an hour later they landed at Shark's Bay. Clandon's attitude puzzled the girl. She was so used

to open adoration that this negative manner of his was strange.
"I haven't the slightest idea," she said honestly, "why you have brought me here." She lighted a cigarette. He was the kind of man, she felt, who thought smoking most unfeminine. "It shows my confidence in you, doesn't it, that I take the risk? There is a sullen gleam in your eyes which may be madness for all I know, and I have no weapons. This way they get their banishes the hatpin." She was sitting on the yellow sands almost at his feet.
"The man I spoke to you about last night," he said slowly, "He was a cousin of mine, my only close relative in fact. Although I was only five years older than he I seemed more like a father. He was an impractical idealist who worshipped beauty. I'm afraid I wasn't always very sympathetic with him. To an romantic man like me, one who wanted facts about life, there was always a suspicion of pose. I was wrong. Beauty was his life." Clandon paused a moment, "and his death."
"How could that be?" Alda demanded. "He fell desperately in love with a lovely girl who was clever enough to conceal the fact that he merely amused her. It was the first real passion of his life, and when he found out she had been playing with him he had not the strength to put her out of his heart. He wandered in far parts of the earth. He drank to forget her, and found there was no forgetting. When I found him in Africa he was wrecked. He had been as handsome as the young Apollo—in his coffin he looked like an old man."
Alda demanded, "I have seen it on the screen and stage innumerable times and every other novel has that for its theme. Really, Mr. Clandon, you disappoint me."
Clandon looked down at her. His face was sombre.
"He said the girl had no heart. He was right."
(Continued on page 29)

STOP!
Don't
Burn Out Tubes
Discharge Batteries
Incur Fire Hazards

Use a
Belden
Fused Radio
Battery Cord

MAKE a neat job of wiring the batteries to your set by using this handy battery cord, and get the tremendous advantage of fuse protection for your batteries and tubes. Crossed wires can start no fires or ruin batteries if you use a Belden Fused Radio Battery Cord. Every set needs this protection—don't run the risk. It is cheap insurance.

Fuses are enclosed in a neat bakelite two-piece cover.

ASK your nearest radio dealer to show you a Belden Fused Radio Battery Cord. Get one, today!

Is your aerial corroded and inefficient, or new and bright? A Belden Aerial is always smooth and bright. It can't corrode because baked enamel protects each wire. A Belden Aerial is as good as new even after years of service.

Install a Belden Aerial today and be assured of permanent aerial efficiency.

Belden Manufacturing Co.
2310A S. Western Ave., Chicago, Ill.

STOPS
RADIO INTERFERENCE
ON YOUR SET. SIMPLE AND EASY TO OPERATE

NO TOOLS REQUIRED TO INSTALL. SIMPLY ATTACH YOUR AERIAL LEAD IN TO ONE OF THE LEADS ON THE LIMITATOR AND RUN THE REMAINING LEAD TO YOUR ANT. POST ON YOUR SET.

This is a new interference eliminator that limits the interfering stations from spreading all over your tuning dials. It keeps them separated from interfering with each other, helps to bring out some stations stronger. Built with the new type low-loss cyclone coil, neatly and substantially constructed, nothing flimsy. Don't confuse with anything you have ever used. Wonderful for broad tuning sets. Works on any aerial except a loop. Try the

"KING LIMITATOR"
BEST EVER OFFERED FOR ONLY ONE DOLLAR
MONEY BACK IF NOT SATISFIED WITH RESULTS.

ARLINGTON RADIO MFG. CO.
BOX 42 FIRESTONE PK. STA. AKRON, OHIO

PIN YOUR DOLLAR TO THIS AD.
Name _____
Address _____
Post Your Name with Address

TO ANT. POST ON SET

Postpaid

ORDER ONCE

MAKE OF SET?

Laugh This One Off—
For \$8.95 Complete

A Dor-Ann "B" Battery Eliminator with an output of 100 milliamperes and a condensing capacity of 180 microfarads. Will operate any radio set, from 1 to 20 tubes on A.C. or D.C. current.
Neat, sealed and ready for use. It weighs 6 lbs. Measure, 3 1/2 x 8 1/2 by 7 inches. Beautifully designed in maroon and gold container. Approved and passed by rigid laboratory tests. Equal to any "B" eliminator, regardless of price.

MONEY BACK GUARANTEE
You are fully protected. To prove our claims for the Dor-Ann "B" Eliminator we will allow you to make a full months test. If at the end of the month you are not satisfied we will refund you your money.
Shipment made direct on receipt of \$8.95 or C. O. D. if preferred. Use coupon at right.

DOR-ANN MFG. CO., 208 N. Sheldon St. Chicago, Ill.

Dor-Ann Manufacturing Co.
208 N. Sheldon St., Chicago, Ill.
[] Send at once, payment enclosed.
[] Send C. O. D.

Name _____
Address _____
City _____ State _____

"1927 DELUXE" SUPER

(Continued from page 11)

meter needle will give quite a sharp "kick-over." With a soft pencil mark on the front panel the position of the potentiometer indicating arrow at that moment. Now do this with all tubes (placing them in socket 5) except the power tube. The three tubes that "kick off" most closely together are to be used for intermediate amplifiers in sockets 3, 4 and 5. That which has the latest "kick off" point, which required the potentiometer to be turned farthest around, is used as the second detector in socket 6. That with the earliest "kick off" is to be the oscillator in socket 1. The two with average oscillation, not used as intermediates, will then be the first detector in socket 2 and the first audio amplifier in socket 7.

Adjusting Midget; Dials

The midget condenser is first set with its rotor plates half way meshed with the stators. With a very low wave length station tuned in, try using one of the condenser a little at a time, until you are

(Continued on page 30)

THE GREEN MAMBA

(Continued from page 28)

"You forget," she said, "that you are taking up this bright morning in telling me about a man I never met."

"Did you ever hear of Dick Onslow?" he demanded.

"DICK ONSLOW," she repeated, "—Dick Onslow. I'm almost sure I have, although it must be years ago that he was here. Wasn't he a tall, poetic looking boy who used to say the most extravagant things?"

"I see you do know him. He was my cousin. Do you want the girl's name?"

She sprang, indignant, to her feet.

"Now I see what you mean," she cried.

"Why, I barely remember him, and you talk as though I were responsible for his death."

Clandon looked at her in amazement. There was no sort of contrition in her manner. It was as though she held herself blameless. Vividly he recalled that scene when his cousin told him about Alda and how she had told him she would wait for him and love none else.

"You are accountable," he said quietly, "for my cousin's broken life and unnecessary death."

"I deny it," she cried. "I have told you I hardly remember him. He was one of a dozen others that season with whom I motored and rode and danced. I don't think I recall their names either. You say men of his type have great simplicity; that is a kind way of putting it. They are nearly always immeasurably con-celcted. Dick was. One reason was because he was too good looking and clever. He imagined every girl adored him. You are the last man to understand. How was I to know he took it so seriously?"

"Took what seriously?"

"A few weeks shared with lots of other men."

"DID YOU tell the other men you loved them?"

"I tell no man I love him—it would be too utterly silly."

"Yet you told Dick that and he believed you."

"You put me in a very awkward position," she said. "I can't say what I should like to because he is dead and you were so fond of him. But I ask you, is it fair to blame the girl if a poetic boy like Dick falls in love with her, fails to make good, and finally drinks himself to death? For one moment, think of my side of it."

There was such an air of candor and frankness about her that Clandon could find no words of reproach.

"I wish I could believe you," he said.

"Why shouldn't you?" she flung back. "You are condemning me unfairly. You know your cousin was the type that only feels his own sufferings acutely. I like strength and men who have conquered things."

Again Specified

For Perfect Filament Control 4 AMPERITES are specified in the 1927 DELUXE SUPER described in this issue

Radiall Company Dept. R. D. 10, 50 Franklin Street, New York City

At All Dealers

AMPERITE

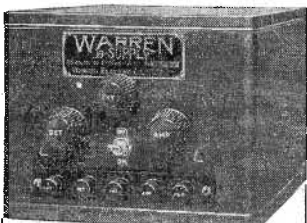
The "SELF-ADJUSTING" Rheostat

"I see," he said ironically, "such men as Tom Coryell who lives to wreck the cars of poorer men, or a saxophonist who plays savage airs on a blatant trumpet. I see you have a high purpose in life."

The girl's face flushed.

"You are the one man I thought would not try to wound me purposely," she said, her voice agitated. "I know you'll always blame me, but think sometimes of my life and the chance I've had to meet real men like you. You will never forget poor Dick out there in his lonely grave; it wouldn't be right that you should, but after all he is dead, and the dead find peace." She placed her right hand for a moment on his arm. "Isn't something owed to the living? Perhaps I am not as happy as you think. Won't you stay for a week and try to find the real Alda Jarrold?"

An Iron man and a maid of Damascus steel! Is she baiting him or does she really care? Can he resist her charms or will he conquer? All this will be answered in a very thrilling manner in the finale of *The Green Mamba*, which will appear in *Radio Digest*, March 1.



Warren "B" Supply

With variable voltage controls (any voltage you need) for detector, intermediate or amplifier, plus a tap for power tubes. Adaptable to all sets. Will deliver

- 200 Volts at 20 Mills
- 180 Volts at 30 Mills
- 150 Volts at 50 Mills

Ample power for any set. Delivers unsurpassed tone quality. No tubes to burn out; no acids. Costs less than \$1.00 per year to operate. Will not blow out tubes on short circuit. Free from hum. Wonderfully well made of finest materials. Finished in old gold. Only 5 1/4 x 7 x 9 inches. Biggest value ever offered. See one, hear one, compare it with only the best of others costing much more. Shipped complete, ready to plug into light socket and turn on. 110-volt, 60-cycle, A.C. Approved by leading radio laboratories. Buy an eliminator that is built for the future as well as the present. If your dealer does not have Warren "B" Supply send only \$29.75; we will ship prepaid or C. O. D. express collect. Fully guaranteed. Order now.

Warren Electric Co.
Dept. R. D. Peoria, Ill.

DEALERS—Design and appearance sell it fast; performance keeps it sold. Write for proposition.

FROST-RADIO

Parts for the 1927 DE LUXE Superheterodyne



No. 606 Push-Pull Switch. An all metal single-hole mounting switch with Bakelite handle and highest quality brass frame, nickel plated all over. Nickel silver contact springs are sturdy and will never break. The neatest, handiest, little switch ever designed for radio use. Order from your dealer for your 1927 DE LUXE Super. List 30c

No. 951 Gem-Jac. Projects only 1 inch back of panel. The smallest radio jack made. Electric brass frame, nickel plated all over. Nickel silver contact springs; sterling silver contacts. Finest insulation money can buy. Double element type used in the DE LUXE. Mounts on 1/4 or 1/2 inch panel. Thumb fits 1/2 or 3/4 inch hole. List 50c

HERBERT H. FROST, Inc.
160 North La Salle Street
New York CHICAGO Los Angeles
Herbert H. Frost, Inc.
160 N. La Salle St., Chicago.
Please send me some of your interesting literature about Frost-Radio parts and accessories, and list of parts you make for the 1927 DE LUXE Super.
Name.....
Address.....
City.....State.....

The Heart of



The St. James TWO-FORTY Super Parts



PAT. PEND. THE ST. JAMES INTERMEDIATE TRANSFORMER

Chosen for the 1927 DeLux Super because they represent the greatest advances in units of this type now made. An outstanding point of superiority is that no coils larger than one inch in diameter are used. These offer very small external fields to cause troublesome coupling effects and are more immune to static, local power noises and nearby transmitting stations.

In the new Two-Forty model:

- (1) Resistance factor in windings has been decreased, permitting greater stability and higher amplification per stage.
- (2) Filter stage, with its filter condenser, has been eliminated so that no complicated adjustments are necessary.
- (3) Greater efficiency has been built into the windings and the elements are more ruggedly mounted.
- (4) Two hundred and forty kilocycle operation, which means less oscillator repeats and these occurring so they are not troublesome in tuning.
- (5) A completely coordinated functioning from the loop to the speaker.

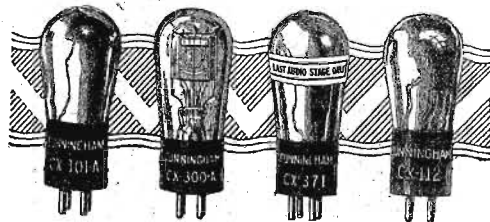
If Your Dealer Cannot Supply You We Will Ship Prepaid

If your local dealer cannot supply you immediately, we will ship prepaid. 4 St. James transformers, 1 St. James oscillator, and 1 St. James choke coil on receipt of \$36.50. Around these parts you can build the finest receiver known to the Radio art at this time.

The St. James Laboratories, Inc.

845 Washington Blvd., CHICAGO

Cunningham RADIO TUBES



The Tubes That Fill Millions of Sockets

Every radio receiver requires one tube as a detector, one tube to feed adequate undistorted power to the loud speaker and may have one to six or more stages of intermediate radio or preliminary audio frequency amplification. If your receiver is designed for 5-volt tubes, the right combination includes a special detector, CX-300A, a power output tube, CX-371 or CX-112, and CX-301A in all other sockets.

Consult your radio dealer. He will tell you the right combination of Cunningham Radio Tubes for your receiver.

CX-300A, CX-371, CX-112, CX-301A and eleven other types in the orange and blue carton

E. T. CUNNINGHAM, Inc.

NEW YORK

CHICAGO

SAN FRANCISCO

(Continued from page 29)
 using all possible without a whistle. Do this also with a high wave length station. The idea is to find a final setting of this unit, such that good regeneration and sensitivity will be had throughout the range

CLASSIFIED ADVERTISEMENTS

BOOKS

"Howdy Judge," George Dewey Hay's famous book of one hundred laughs, based on happenings in the Memphis Police Court. Admirers of Mr. Hay, formerly of WMC and WLS, now of WSM, will admire the character sketches penned by this champion humorist. \$1.25 through Radio Digest BOOK DEPT., 510 N. Dearborn St., Chicago.

DOGS

Beautiful registered bull pups, \$15. Bulldogs, 501 Rockwood, Dallas, Texas.

HELP WANTED

Earn \$25 weekly, spare time, writing for newspapers, magazines, experience unnecessary. Details FREE. Press Syndicate, 1269, St. Louis, Mo.

MAPS

New Radio Maps. We are now able to supply our readers with new radio maps. Showing location of stations, list of all stations by call letters. Come folded in cover, but may be used for pasting on cardboard. Size 28x34". Send 25 cents stamps or coin to Shopping Service, Radio Digest, 510 N. Dearborn St., Chicago, Ill.

PATENT ATTORNEYS

PATENT ATTORNEYS
 PATENTS. Booklet free. Highest references. Best results. WATSON E. COLEMAN, Patent Lawyer, 724 South St., Washington, D. C.

RADIO

NEW RADIO WITHOUT BATTERIES.
 Why waste several hundred dollars when you can get all the radio you want on a Lambert costing only \$2.95 postpaid. Big stations 600 miles away come in loud. Needs no tubes or batteries. 250,000 homes already have them. Order direct from this adv. Crystal Radio Company, Wichita, Kan.

For those who are unable to obtain radio parts or accessories from your local store, the Radio Digest Shopping Service offers its services. Send in your wants. For quick service include list price of merchandise wanted. Shopping Service, Radio Digest, 510 N. Dearborn St., Chicago.

We have an over-supply of the famous Pultone loud speakers which we are disposing of at only \$4.95 C. O. D., or postpaid if cash accompanies the order. Bronstein's Pharmacy, 4600 Lincoln Ave., Chicago.

Change your phonograph into a loud speaker with the Pultone Unit for only \$2 C. O. D., or postpaid if cash accompanies order. Bronstein's Pharmacy, 4600 Lincoln Ave., Chicago.

STANDARD RADIOS AT RIDICULOUS PRICES. In original cartons. Factory guarantees. No "GYPS." Get our list. The Reiko Co., Morrison, Okla.

"SOCK-ANTENNA" Aerial Wizard inductive aerial plugs in light socket, guaranteed, your separation of stations, reduces static and interference to minimum, increases volume, adds clarity, price \$5.00. Sold on ten day trial, circular on request. Edmush's Radio Supply, Elwood, Indiana.

The new and improved Proof of Reception Cards are the most practical and convenient proof of reception of those distant stations. Contains spaces for complete reception record, dial settings, call letters, stamps and signature of announcer. Handy size, 3x5 inches. 150 for \$1 or send 25 cents (stamps or coin) for sample package. Radio, 2917 Hollywood Ave., Chicago.

RADIO—WANTED

Wanted—Portable radio with or without loud speaker. A. J. Lamberson, Hazleton, Pennsylvania.

SALESMEN WANTED

A PAYING POSITION OPEN to representative of character. Take orders shoes-hoisting direct to wearer. Good income. Permanent. Write now. Grant's Shoe Mfg. Co., 2-707, C St., Boston, Mass.

Salesmen Wanted—Nationally advertised, universally used product. Sales to Stores, Garages, Factories, Schools, Homes, Farmers, Auto Owners. Used by everybody. Big demand, ready sale. Big commissions. Complete sales training given. Credit extended to customers. Sample can be easily carried. Concern ready very high—established many years. Opportunities for lifetime jobs at big pay and bonuses. Territory Managers. Dept. 54, Post Office Box 953, Dayton, Ohio.

of 200 to 550 meters without the first detector going into oscillation at any point. If, at first, your Karas dials do not seem to function properly and the condensers stick while the brass disk under the dial revolves, then your condenser bearings are too stiff. This can be remedied by loosening the set screw at the rear end of each variable condenser shaft and very cautiously loosening the nut at the rear end of shaft. Then tighten the set screw again. It is not hard to find an adjustment where the tension is just sufficient to keep the rotor plates from falling over, yet the vernier part of the dial will function to turn these plates.

The two dial readings will be found to follow one another closely—not varying more than five or ten degrees. The hetero-

\$1.50 WE HAVE IT, FANS! \$1.50
 Nu-Life radio tube renewer works from batteries of your set. No city lighting current used. Two Models, Model 201-A renews UV201-A, X-201-A, C301-A, CX301-A and similar tubes. Model 199 for renewing UV199, C299 and similar tubes. State type of tubes used. Guaranteed or your money back. Sent postpaid on receipt of \$1.50 or C. O. D. plus postage.

W. E. LARIVÉE & CO.
 4135 Brush St. Detroit, Mich.

FREE! Wonderful DISTANCE CHART (between all leading cities) with a prompt subscription order for KELLER'S RADIO CALL BOOK and LOG (combined). Official Authentic. Completely revised every 2 months. All Broadcasting stations of U. S. and Canada listed 3 ways. Log spaces with each station. Foreign stations. Handicraft best. \$1.00 year (6 issues) Money back if dissatisfied. Agents wanted! Sample copy 25c. (coin) W. A. KELLER CO., Publishers, St. Paul, Minn.

DON'T BE A DUB!

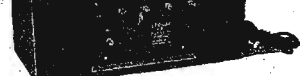
The expert tuner knows what he is doing. The dub just turns the dials. RADEX Tuning Charts tell you your dial numbers for any wave length. They tell the wave length your set is tuned to for any combination of the dials. They identify stations received when you can't catch the call letters.

For any dial or any set.

SEND 25c, coin or U. S. stamps.
 RADEX PRESS, P. O. Box 143-CK
 Cleveland, Ohio

SEE JAY POWER UNIT

Here to Stay



A combination alkaline element battery and trickle charger all in one. Price, shipped dry with solution, \$16.00. Tube extra, \$1.00. 100-volt with chemical charger, \$12.00. 140-volt, \$17.00.

Write for complete 32 page booklet and Send No Money. Pay Expressman.
SEE JAY BATTERY COMPANY
 919 Brook Avenue New York City

New Device Locates Any Radio Station

Amazing Results Secured by Simple Invention of Kansas City Expert

An amazingly simple device that will enable you to determine instantly the proper dial setting to reach any broadcasting station has been perfected by a Kansas City radio expert. With it all you need is the wave length, given in all broadcasting programs, to tune in exactly on any station that you select. This new device eliminates all logging, keeping bothersome charts or tables, and shows you how to locate many stations you have never found. Simply send your name and address with one dollar to the Radio Specialty Co., 540 Dwight Bldg., Kansas City, Missouri, and this device will be sent you postpaid. If after using it for five days you are not convinced it is the greatest value ever offered, return it and your money will be refunded.

6 Volt STORAGE RADIO "A" BATTERY

Most amazing battery value ever offered—genuine World-volt Radio "A" Battery with 50 ampere capacity for only \$5.00 C. O. D. Send No Money

Solid Rubber Case
 An assurance against acid and leakage. Order shipped same day—subject to your examination on arrival. Extra offer: 5% discount for cash or full with order. ACT TODAY!
WORLD BATTERY COMPANY
 1219 S. Wabash Ave. Dept. 148 Chicago, Ill.

dyne or oscillator dial will be found to have "two spots" per station up to 50 on the loop dial; with loop dial settings from 50 to 100, the oscillator is "one spot" per station.

Use the potentiometer to keep the intermediate tubes just below the "kick off" point. The potentiometer may be used as a volume control, but the center, lower knob better controls volume to the desired amount.

American Radio Now—50% DISCOUNT RADIO!
BIG NEW 1927 CATALOG-FREE

Dealers, Agents, Set Builders—get our big 1927 Catalog—225 nationally advertised lines. Lowest prices in America. Largest, most complete stock. Radio's latest developments. It's FREE—send for your copy now. AMERICAN AUTO & RADIO MFG. CO., Inc., 1248 McCee Street, Kansas City, Mo.

Yale GROUND HOG
DOUBLES POWER AND DISTANCE

Marvelous newly-invented ground gives 100% improved reception. Doubles power and distance. Stops leakage. Reduces static. Stops jangling even in midsummer. Results never equaled. Users say, Satisfaction guaranteed. Proven absolutely essential to clear, powerful distance reception. Draws and holds moisture indefinitely. Highly sensitive to radio energy. Those who act at once, regular \$5.00 size for only \$2.00. Send name today and pay \$2.00 plus. Full description of Ground Hog and amazing benefits. Low priced battery offer requested—write today. Yale Specialty Supply Co., 125 W. 4th St., Kansas City, Mo.

FIVE TUBE RADIO \$25.00

AGENTS WANTED BIG COMMISSION

Demonstrating agent wanted; every county. Exclusive to right man. Get what public wants—five tube, big distance, loud speaker radio with single dial control. Price within reach of all. \$25.00 retail; liberal discount to agents. Sell in spare time—no selling or radio experience necessary. Territory going fast. 100 page Radio Book FREE. Write today—don't delay. C. I. FISCHER, 122 W. Austin Ave., Chicago

Bradlexstat

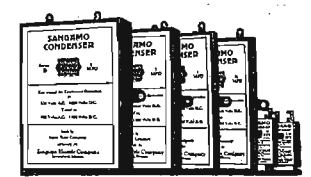
PERFECT FILAMENT CONTROL

Provides complete noiseless filament control for all radio tubes without change of connections. Metal parts are nickel plated. One hole mounting. Self contained switch opens battery circuit when desired.

Allen-Bradley Co.
 Electric Controlling Apparatus
 290 Greenfield Avenue Milwaukee, Wis.

B' BATTERY ELIMINATOR

Only \$1.25
 MONEY-BACK GUARANTEE
 No more worry with "B" Batteries! Hook up a Roll-O-Battery Eliminator and forget battery troubles forever. This wonderful new invention means better reception, sharper tuning, gives you more real pleasure from your set. Completely Equipped—No Extra's to Buy. Operates perfectly on direct or alternating current, giving up to 30 volts current, and using the full wave of the power supply. Simple directions enclosed—anyone can plug it in to any kind of set up to six tubes. Constant voltage gives set more power. Costs no more than set of good "B" Batteries. Solidly built in beautifully finished metal case, with genuine Bakelite top. Don't blame your set because run down "B" Batteries won't let it work right. Order your Eliminator NOW. Write name and address on piece of paper, pin a dollar bill to it, and mail it TODAY. Pay postman balance (\$4.95 plus a few cents postage) when he delivers your Eliminator. Use it ten days. If not more than satisfied, return it and get your money back. THE ROLL-O BATTERY CO., Dept. Z 8. 36 & Sycamore, Cincinnati, O.



SANGAMO

now offers a full range of sizes in Wound Condensers

"They won't break down"

"GIVE us higher capacity condensers as good as Sangamo Mica Condensers," asked the radio set builders. We have done so. Sangamo Wound Condensers are now on the market. They have high insulation resistance and exceptionally good power-factor (or low energy loss).

Internal air and ozone bubbles (the cause of breakdowns) are prevented by special winding processes that keep the aluminum foil and insulation under unvarying tension.

"The only condenser that stands up in eliminator service," is the comment of testing laboratories. For sturdy Sangamo Wound Condensers will stand continuous duty at their service voltage.

SERIES A	
Guaranteed for continuous duty at 250 volts A. C.	400 volts D. C.
1/10 mfd... 80c	1 mfd.... \$1.25
1/4 mfd... 80c	2 mfd.... 2.00
1/2 mfd... 90c	4 mfd.... 3.00

SERIES B	
Guaranteed for continuous duty at 500 volts A. C.	1000 volts D. C.
1/10 mfd... \$1.25	1 mfd.... \$1.95
1/4 mfd... 1.40	2 mfd.... 2.50
1/2 mfd... 1.60	4 mfd.... 4.00

CONDENSER BLOCKS

SERIES A
 12 mfd. tapped 8-2-2 mfd.. \$ 9.50
 14 mfd. tapped 8-2-2-1-1 mfd.. 11.00

Also special sizes to order in quantity.

VARION Eliminator Group
 One 14 mfd. Block tapped 4B-4-2-1-1-1... }
 Two 1/10 mfd. series B... } \$12.00
 tapped 1/10, 1/10,



Sangamo Electric Company
 Springfield, Illinois

6332-1
 RADIO DIVISION, 50 Church Street, New York
 SALES OFFICES—PRINCIPAL CITIES



Free Catalog of home furnishings sent with or without order. See coupon.

\$1.00 down brings this Radio Cabinet \$9.90

Free Trial Yes, only \$1.00 with coupon brings this stupendous cut price bargain to your home on 30 days' trial. A handsome radio cabinet with ample room inside for all batteries, charger and eliminators. All unsightly accessories out of sight in a splendid piece of furniture. Made of beautifully grained, seasoned hard wood, in handsome Walnut Finish. Will not warp. Highly polished outside surfaces: front panel in popular two-tone effect, ornamented with Galleon Ship in full colors giving hand painted effect. Rich gold border countersunk on front panel, will not wear off. Neatly turned legs and beaded edges. Strongly built; all joints reinforced. Top 30 3/4 in. by 16 1/4 in., ample for any radio and loud speaker. Height 30 3/4 in.

\$1.00 a Month After 30 days' trial, if not satisfied, send it back at our expense and we'll refund your \$1.00 plus all transportation charges you paid. Or keep it and pay only \$1.00 a month till you've paid our smashed cut price for this sale—only \$9.90. Our credit price beats cash prices anywhere. Order by No. B9859A. Shpg. wgt. about 60 lbs.

Send Coupon NOW!

Straus & Schram Dept. R8412 Chicago

Straus & Schram, Dept. R8412 Chicago

Enclosed find \$1. Ship Walnut Finish Radio Cabinet. I am to have 30 days free trial. If I keep the cabinet I will pay you \$1.00 monthly. If not satisfied, I am to return the cabinet at your expense and you are to refund my money and any freight or express charges I paid. **Radio Cabinet, No. B9859A, \$9.90**

Name -----

Street, R.F.D. or Box No. -----

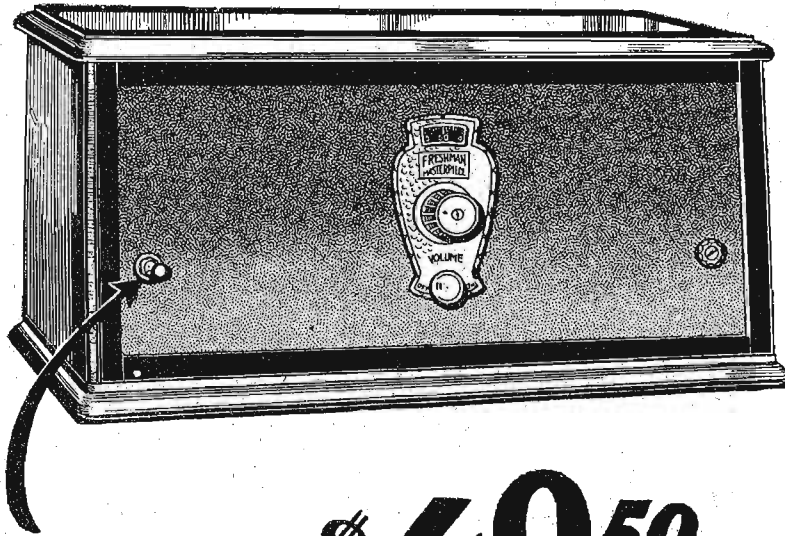
Shipping Point -----

Post Office ----- State -----

Married or Single ----- Nationality or Color -----

If you want ONLY our free catalog of home furnishings mark X here

a NEW radio that "gets" everything! Six tubes ~ One control



MERELY turn the dial from point to point and station after station comes in separately, clearly and distinctly. The one dial is the only tuning device on this new Freshman Radio. Its amazing power allows stations from a great

Distance

to be tuned in right through the locals. Its superior construction and efficiency separate the different wave-lengths and tune out the undesired stations with startling

Selectivity

allowing you to listen to exactly the station that you desire without bother or interference and with fine

Tone Quality

which is the result of scientifically constructed audio transformers perfectly designed and co-ordinated to match this powerful radio.

Distance

Distant stations often broadcast on exactly the same wavelength as locals. This new Freshman set is so powerful that it brings in stations from all over the country. Sometimes it is desirable to cut out the distant station broadcasting on the same wavelength as the local to which you are listening; if so, just pull out the distance switch indicated above.

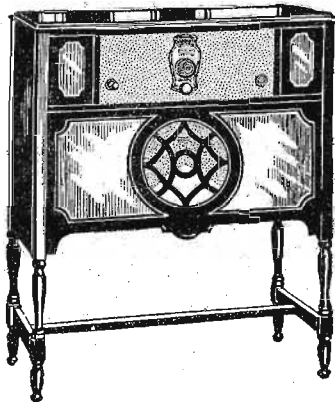
\$49.50

Six tubes ~ One Control FRESHMAN MASTERPIECE

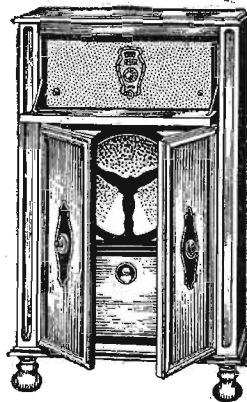
**Hear it
To-day**

At any Authorized
FRESHMAN
Dealers Store

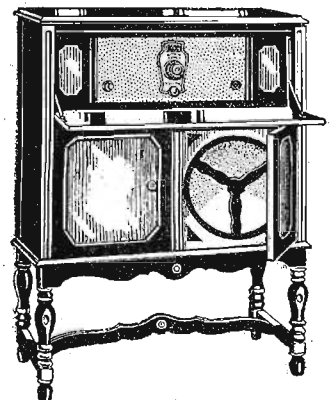
**Operate it
Yourself**



Panelled in genuine mahogany. Built-in cone speaker. Spacious battery compartment **\$79.50**



A distinctively beautiful radio panelled in genuine mahogany. Large built-in cone speaker **\$99.50**



This massive console is panelled in genuine mahogany. 12-inch cone speaker **\$109.50**

CHAS. FRESHMAN Co., INC., 240-248 W. 40th St., New York City
2626 W. Washington Blvd., Chicago

WORLD'S GREATEST RADIO