Readers Give Views on Interference

# Radio Disest



Directions for Building the 1927 DeLuxe Super, the Set That Heard the Philippines; New B-T Power-Six; Uncle John and KHJ's Radioland; Directory of Stations, Part II

# **UNCANNY DEVICE CAN** SEE THROUGH DARK

NEW INVENTION BY BAIRD SCOTCH RADIO WIZARD

Has Tremendous War and Peace Appli-Can Locate Airplanes in cations-Night Attacks

LONDON, England.—A remarkable invention by which it is possible to obtain sight of an object by means of light rays invisible to unaided human sight, was demonstrated in London recently. From the fact that, by the light rays employed, a person in entire darkness may be watched by an unseen observer, it will be seen that there are vast possibilities for the application of the invention in times of war or peace. war or peace.
Among the claims made for this in-

visible ray are that it will:

1. Enable approaching enemy aircraft to be detected and observed without the disclosure of the whereabouts of the ob-server, by the customary tell-tale beam of the ordinary searchlight.

2. Reveal at night the presence above water of a submarine.

3. Disclose secret movements of troops

at night.
4. Warn ships in time of fog of impending collision with icebergs or other ves-

### Baird Inventor Again

This further great stage in the practical application of television has been reached by John L. Baird, the young Scotch inventor, who holds the only license granted by the British postmaster-general for research work in television by Radio, and who early in 1926 successfully demon-strated his claims before a gathering of members of the Royal Institution, the leading scientific body in Europe. Hitherto it has been necessary to focus

an intensely brilliant ray of light on the object to be transmitted, and in the case of an individual the intensity of the light is so great as to be bothersome. Obviously, before the commercial application of television could become possible, it would be necessary to diminish the enormous brilliancy of the light. Along this line Mr. Baird and Captain O. G. Hutchinson, his associate, have been working for the past six months.

So successful have been their experiments that they have now evolved a ray of light completely invisible to the eye, which through the Baird televisor projects onto the screen the image of the person or the object which it is desired to transmit. This ray penetrates to a much greater degree than the ordinary light rays, but being infra red, is outside the visible spectrum. The ray itself is not new, but its application to television will have far-reaching results

# have far-reaching results. Experiences of Observer

In a demonstration of the ray in which two independent persons took part the re-sults were wholly successful. One of the participants narrates his experience

of the televisor. The windows were heavily curtained, and above the screen of of the televisor. were arranged a number of ordinary elec-tric lights Before the light filter was placed in position the intensity of light was almost blinding, but when the filter was brought into use it had the effect of was brought into use it had the effect of cutting out everything that was visible from the rays, and the room was plunged in total darkness. I groped my way to the screen and sat in front of it. My colleague, in an adjoining room, sat before the receiver and watched. Almost immediately, he told me afterwards, my head and shoulders were brought into focus.

"Involuntarily I opened my mouth, and from afar I heard my colleague shouting to me to close it. I put my tongue out, imagining that the darkness protected me, and was told not to be rude. It was un-canny in the extreme. I stumbled out of the room into the light, and my colleague described to me in detail everything I had done. Then we reversed the process, and I became the watcher.

"We had been enabled to see in total darkness."

# Light There But Eye Can't See

Mr. Baird explained that what happens is that after the light has been switched on the filter which has been superimposed cuts off all visible rays, but in no way ininvisible to the human eye. spectrum These invisible rays are picked up and are transmitted through space to the sensitive cell of the televisor, which pro-

jects the image upon which the rays have been directed onto a screen.

The uses to which this power of seeing in darkness may be put are manifold, and the value of such a power in modern warfare can easily be imagined. Take, for example, an attack from the air. It is comparatively easy for a squadron of airplanes to approach under cover of dark-

With the invisible ray of the televisor attacking airplanes could be watched

# KNOW COVER GIRL? CHANCE TO WIN \$5

HO is she? What do you know about her? Where did you hear her over the air?

Does she play, sing or tell stories? Answer these questions and afford such other interesting information as you may glean, and if it is the best letter received, you will be awarded a check for \$5. Just one lead to guide you—the lady's name is Ida May Chadwick. Now sit down and write us a letter of 100 words. Send it to Cover Girl Editor of Radio Digest, 510 N. Dearborn St., Chicago, before February 1. Identical prizes will be awarded in the event of tie.

without the watch being so immediately manifest. They could be followed by searchlights emitting not light, but invisible rays, they would be allowed to come within range and then brought down by the ground guns.

### Peace-Time Uses; Penetrates Fog

Peace-Time Uses; Penetrates Fog
The same thing could be applied to submarine warfare. The use of the invisible
ray would force a submarine to remain
under water even during the hours of
darkness, for if it came to the surface to
attack it would immediately come within
the view of the televisor. Darkness, the
great cloak for military operations, will
no longer give any security.
The invisible ray has its peace-time uses
as well as its destructive purposes. It can
penetrate to a much greater extent than

penetrate to a much greater extent than an ordinary ray of light, and this power of penetration would be of the greatest service to ships in fogs and in avoiding collisions with icebergs. Tests of the ray have already been made by the British Army, Navy, and Air Force.

# Crosley Controls DeForest

NEW YORK.—Powel Crosley, Jr., owner the Crosley Radio Corporation in Cincinnati and holding control of the American Radio and Research Corporation of Medford Hillside, Mass., was on January 4 elected to presidency of the DeForest Radio Corporation, of New York, of which he has obtained control for the next five

Mr. Crosley is also owner of Superstation WLW, at Cincinnati.

# Congress Will Do Own Sweet Way Signs Point

Radio Control Law May Not Even Be Passed

WASHINGTON, D. C .- Are listeners to get some relief from Congress or are they not?

That is the question. Indications are at That is the question. Indications are at the time of this writing that Congressmen are being besieged to such an extent by various interests that they do not know who to believe and in such a situation they generally "go their own sweet way." If Radio legislation is enacted at the present session of Congress and it is not what it should be, the public has only itself to

Every branch and phase of the Radio industry is represented at the National Capitol these days except the fan. However, he is being heard from to some extent through correspondence with his Congressman.

Since the holidays, progress in Radio legislative efforts has been what may be described best by the single word—

# Nelson at WPCH

TEW YORK. - Ted Nelson, formerly associate managing director of Sta-tion WMCA, of the McAlpin Hotel,

has joined the studio staff of Park Central hotel as associate managing director of American Bond and Mortgage Station WPCH. The addition of Nelson's name to this or-ganization rounds out the prestige of the station to one

of the first rank, according to the New York Radio chat. Associated with Nelson are such old timers as Lewis Reid and Norman Brokenshire, both formerly of WJZ; and Walter Neff, formerly of WAHG. Ted Nelson is a graduate of Columbia and a former newspaper man. He is known to millions of listeners.

# WSB, WHAS Join Red Chain

NEW YORK.—Announcement is made of the addition of Stations WSB, Atlanta, and WHAS, Louisville, Ky., to the WEAF or Red Network.

# CONTENTS

Radio Digest, Illustrated, Volume XX, Number 1, published Chicago, Illinois, January 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"
Woman's Program Index
Radioland at KHJ Kiddies' Haven; Other Features. 5
1927 DeLuxe: the Finest Super, Part I, by M. W. Thompson
"Goody Goody Girl" (Continued); The Latest in Radio Accessories 8
Bremer-Tully's New Power-Six, Part I, by George R. Ives
Fifth Section of Whozit Pictures
Directory of Radiophone Broadcasting Stations, Part II, Alphabetical List of Calls and Data11
Editorials; Indi-Gest; Condensed by Dielectric
An Evening at Home with the Listener In (Eastern Time); Stations by Wave Lengths
Advance Programs for the Larger Stations, January 15-31
How to Fix Your Set for Results, Conclusion, by Milo Gurney

# Looking Ahead

At Last We Are Going to Have Wyndham Martyn's Green Mamba, a most fascinating story of love and gold by this famous author. The old alliance between Eve and the snake has a setting in Green Mamba that is ultra modern a vivid cross-section of life in a Long Island millionaire's paradise and the wilds of barbarous Africa.

Only Three More Sections of Whozit to Come, so hurry and prepare to send your solved sets of Whozits in to win part of the \$26,000 in prizes.

We Told You the Philippine Super Was Coming. And here it is, on page seven this issue. Then, on page nine there is a more modest set for the home builder. Making either? More details next issue.

Special articles about broadcasting stations and artists, with photographs, and NON-RADIO fiction 5,000, 10,000 and 30,000 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

YOU WANT IT!

BE SURE OF YOUR REGULAR COPY BY SUBSCRIBING NOW

# SEND IN THE BLANK TODAY

ublisher	Radio	Digest.	
16 N. De	arborn	St	
		6	

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

# SHORT WAVES

By Marcella

Quin Ryan; Carl Menzer; Bobby Griffin; Pattison Coates; "Ivories" Lee Sims; Doug Richardson; Graham McNamee and Phillips Carlin, WEAF Twins; Val McLaughlin Busy with Her Own; Everett Mitchell New Voice at WENR.

OW many of your nice new New Year's resolutions have you broken?

Here is a query about that ace of football announcers, Quin Ryan of WGN, Chicago. Mr. and Mrs. P. J. Halm, Rock Island, Ill., want to know all about him—"Is he married? We hope so. If he is, how many children—he should have several he entertains them so well. A sheik? Don't tell us that he is. Red hair? We think so. Irish? Must be. Is he as human, every day and old shoeish as he sounds?" day and old shoeish as he sounds?"

And the Halms want to know whether Quin is so generally admired by the feminine listeners as Lester Palmer of WOW.

I knew Quin way back
when and I think he is a

regular fellow, not spoiled by the fame that has come to him through this very popular broadcasting station. He dresses neatly, chooses the right kind of a tie,



has dark wavy hair, deep blue eyes, is courteous and a gentleman at all times. He is not married and so far as I can learn is fancy free. He stands five foot nine inches and puts his whole nve foot nine inches and puts his whole soul into his work as the feature director and announcer of WGN. Oh, and to be sure, he belongs to the cult of column conductors and his Irish wit is evident in the Loud Speaker of the Sunday Tribune. Girls, he DOES have one—you know, one of those nifty little lip winkers dubbed a mustache. a mustache.

A bashful college boy, Edna, just a modest young fellow who presides at the WSUI microphone, naturally a student at the State University of Iowa and his name is Carl Menzer. The picture



you see here is taken from a snapshot I begged of him for your delectation. I don't be-lieve all the things we hear and see about this college deviltry, do you? Could you, now, just looking at this manly

countenance? Eyes, hair, state of matrimony, hobbies? Tush! Tush! Edna, he simply doesn't tell in his letter. He says, "Go ahead, Miss Marcella, say anything you like. I trust you."

M. I. M., West Branch, Ia. and T. W. W. of Eyote, Minn. It just had to be. Bobby was bound to rise. So when it happened

that they had two crack-erjack announcers at WHO, Des Moines, Ia., and Bobby was the assistant announcer Station KVOO of Bristow, Okla., beckoned and Bobby Griffin came over to be installed as chief an



nouncer. Bobby is 26,
unmarried and a real war hero. He has a
winning Radio voice which reflects the
genuine sincerity of his nature. He made
a fine showing in winning an honorable
mention certificate in the last Radio
Digest Gold Cup award for America's
most popular announcer.

\* \*

Ruth and Jane, you are right in your supposition about Mr. Pattison Coates at WGN. Same man. And he is such a big handsome fellow. He is younger than you would suppose from hearing him over the air. How old do you think? Nope. He's only twenty-two. He has dark hair, blue eyes, and the most be-ootiful teeth. He does the Great Lover feature and his love songs are simply divine. And Oh. my songs are simply divine. And Oh, my dears, he is NOT married. How unusual!

Bob and Bobby, Sparland, Ill. The only sure thing about Lee Sims, recently of WBBM and KYW, is that he is not attached to any special broadcasting sta-tion. Last night I heard him over WGES but tonight he is apt to be at some other Chicago station. His one fixed association is with Garland's Music studio where he teaches his masterful modulations to ambitious ivory ticklers.

May of Tacoma. It appears that you are decidedly impressed with the ethereal attractions of Doug Richardson at KJR. I would be glad to go into details concerning this particular favorite but it was only a few weeks ago that we responded to many other inquiries with just about everything that could be told. He has gray-blue eyes and hair that sometimes looks a dark brown and again could be taken for red. But here is what you want to know, May, he has a wife and a little tractions of Doug Richardson at KJR.

(Continued on page 4)

# PEOPLE VOICE STRONG OPINIONS

# SHENANDOAH DEBATE BRINGS HAIL OF LETTERS FROM FANS

Interference Problem Gets Real Airing-Many New Lines of Thought Are Brought to Light—What Listeners Say

If you want to start something, criticize a broadcasting station! Immediately that station will have numerous cham-

that station will have numerous champions who will expostulate, fill your mail with letters of threatening nature, and say nasty things about you.

In the past several issues, "The Reader's View" column of this publication, a column devoted purely to letters from readers and listeners, has contained several rather warm complaints against certain stations. Immediately the war started.

The issues became magnified, Radio Di-

The issues became magnified, Radio Digest was called a 'tool of the trusts' and many other things not nice to print, and the criticised stations felt deeply chag-

many other things not mee to pink, and the criticised stations felt deeply chagrined to think that anyone should criticize them, even going to the extreme of believing that Radio Digest was behind it all. The letters resulting from the interference issue are meaty and interesting. Some suggest good ideas. Many excerpts from them are being published below for that reason. However—

None of them carry the stamp of the editorial policies of Radio Digest. Remember that they are readers' views or opinions, and not the Digest's.

Radio Digest's Policy

To prove that this publication is not sidestepping, the Radio Digest policy regarding wave lengths and interference is quoted herewith:

"It is the right of every listener to re-

quoted herewith:
"It is the right of every listener to re-

"It is the right of every listener to receive the program he desires, without interference from other stations, regardless how humble and meager the Radio receiver installation he possesses may be.
"It is the right of every station to broadcast what it pleases, as long as it is neither indecent nor immoral, for the listener has the option of tuning out what displeases him."

The two sentences above cover a multi-

displeases him."

The two sentences above cover a multitude of ground. Think them over. Then read on and learn what various listeners have to say about interference and stations that interfere:

What Are the Public's Rights?

"There is urgent need for immediate federal laws and strict government super-

# ME SNEEZE? NO IT'S MOSCOW ON THE AIR

EW YORK.—Allo! Allo! Toot rahdee-to-tellay-grain-ayah tue-seeatsche tschay-tueresta pee-atdee-satee-mee-trov, toe-var-eescht-tschee, soos-

Radio fans should not be alarmed if they hear these strange sounds issue forth from their loud speaker some evening. It is merely the opening statement of the announcer at RDW Moscow, a new 12,000-watt station.

# HEARD ON FIRST OF VICTOR SERIES



Rosa Ponselle, above, dramatic soprano of the Metropolitan Opera Company; Mischa Elman, right, famous violinist; and Alfred Cortot, left, pianist of note, who were heard in concert with John McCormack, beloved Irish tenor, on the occasion of the first Victor Hour of the season, broadcast on the evening of January 1 from a large chain of stations, including members of both the Red and Blue Networks. Not only was this the first Victor concert of the season, but it was a "first" for the artists pictured herewith—the first time any of them had appeared before a Radio microphone. McCormack was heard in the two previous Victor New Year's programs, in 1925 and 1926. Since the New Year's broadcast, the remaining concerts in the Victor series are being heard on alternate Friday evenings from 9 to 10 o'clock, Eastern Standard Time, through the Blue link of the National Broadcasting Co.

heterodyning and blanketing, and that this right of the public existed long prior to any rights accruing to broadcasters."—
E. O. M., Galesburg, Kans.
"There are still a few stations that stick out above the general dog fight, but they are getting scarcer. WEAF is almost submerged at times, WTAM is being interfered with, WBAL is also almost a total loss when the other stations get going right, and WBZ is another good station that is wiped off the map at times. A lot of other good stations are gradually being of other good stations are gradually being lost in the 'Symphony of Discord'."—J. S. R., Stratford, Ont.

FILE CONTRACTOR OF THE STATE OF

vision in Radio. It may be true that the 'air is free,' but if the air is free to the broadcasters, it should be equally free to the public have a vested right to have the air kept clear from pollution of interference, heterodyning and blanketing, and that this right of the public existed long prior to any rights accruing to broadcasters."—

For and Against Small Town Stations

"There is a great deal of interference chiefly from stations on the air at the same time on the same wave length. The greatest curse is the super-power stations.

They smother smaller stations on adjactory rights accruing to broadcasters."—

A. F., New Orleans, La.

"KWKH refused to be silent on the night of the big Natl. Broadcasting Co. program. When numerous people phoned because they are good is insufficient."—

A. F., New Orleans, La.

"KWKH refused to be silent on the night of the big Natl. Broadcasting Co. program. When numerous people phoned because they are good is insufficient." cent wave lengths. Why should they be allowed to spoil the pleasure of millions of fans to satisfy their selfish ends?"—G. C. H., Kewanna, Ind.

"My opinion of this interference business is that the small towns should not be on the air, as they can't possibly supply the best talent, and if you are close to them, you can't tune them out."—W. P. L., Kenton, O.

Against WSMB; Slap for KWKH
"When WSMB with all its power comes
on the air, it blankets the dials from 250

to 390 meters, thereby depriving many from enjoying such fine programs as

program. When numerous people phoned that they desired to hear Will Rogers, who was on the N. B. C. program, KWKH derided the 'nabobs' who 'thought they owned the air' and then drowned out the living Will Rogers with a 'canned edition' (phonograph record) of himself."—C. K. B., Shreveport, La.

Riding Chicago and WEAF Chain

"Chicago with its forty or more stations completely blocks out Canada, Cuba and Mexico, and does not accomplish any good

other stations whose programs we would like to hear? WEAF programs are for the most part good; some are poor, but because they are good is insufficient reason for crowding other stations off the air."—W. R. P., Heron Lake, Minn.

The Shenandoah Discussion Many readers of Radio Digest have no doubt followed the letters from readers, in "The Reader's View" column, criticising the two Shenandoah stations, KMA and KFNF.

The letters drew much fire. Indignant readers, feeling that Radio Digest was in (Continued on page 28)



\$26,000 AWAITS FANS WHO PAY CLOSE ATTENTION

Pasting Artists' Faces Back Together Correctly Proves Favorite Winter Pastime—Fifth Game Starts

(Whozits on 10, 12 and 13)
Are you keeping up with Whozit, the \$26,000 prize national game?
Prediction by Radio Digest that Whozit would prove the most popular and fasci-nating Radio diversion of the year has already been verified by the thousands of letters received through the twenty-four broadcasting stations in the Whozit chain and by the Whozit editor of the Radio

Digest.

The rules are not being repeated in detail in the current issue, but may be had by obtaining back numbers.

How Whoziteers Play Games

By obtaining back numbers.

How Whoziteers Play Games

In the main, for those who have not followed the game it may be stated that in each issue of Radio Digest will be found forty-eight Whozit pictures. These pictures represent two artists from the twenty-four participating stations.

Listeners who wish to play the game turn to the Whozit pages during the broadcast hour of the nearest Whozit station. They are told to look for the names under a certain panel. Then the characteristics of the artist are described, and it should be stated that the Whozit picture is a composite of four different faces. From the description the listener picks out the segments of the pictures that belong to each individual, assembles them, notes five facts about the individual and then holds the picture until the last of the eight games have been played.

Although this is the fifth game of the series, it is not too late for those who have not taken part heretofore to begin the game now.

# Whozit Schedule

The schedule for the game of Whozit at the twenty-four participating stations re-mains the same for January 15-31 as was published last issue, with the following changes:

Changes: WPG (299.8), January 17 and 24, 8:30 p. m. Eastern time; January 21 and 28, 9

p. m. Eastern time. Station WOOD, temporarily off the air, is back again with Whozit daily at 11 p. m. Eastern time.

# **CHICAGO SUPER-HET** HEARS PHILIPPINES

### MARVIN THOMPSON TELLS HOW TO BUILD REPLICA

Original 1927 DeLuxe Super Proves Self in Severe Test Through Chicago Station Barrage.

CHICAGO.-Imagine tuning in the Philchicago.—Imagine tuning in the initiation is pine Islands, KZUY at Baguio using but 500 watts, when you are listening in the midst of the Chicago barrage at its worst. It can't be done? Oh yes, it can—and was.

On Thursday evening, December 2, at 10:45 p. m., Gus Nelson was listening in on his super-heterodyne at 1514 W. 77th on his super-heterodyne at 1914 w. 17th St., Chicago. He heard faint signals which careful tuning strengthened to full loud speaker volume. Despite considerable atmospherics and the fact that about thirty local broadcasters were doing their best to obtain an audience by means of high power, broad waves, etc., Mr. Nelson tuned in KZUY. He was using only a loop aerial.

As witness to the reception, F. E. Andrews, builder of the set Mr. Nelson was using, listened in amazement.

The Baguio station was telling about its reed pipe organ, 200 years old; then the organ was played. The reception was verified by cablegram.

Describes Super in Radio Digest
Marvin W. Thompson, Radio engineer,
author and former technical editor of
Radio Digest, heard of the feat of Mr.
Nelson's super-het. Because of his penchant for supers, Mr. Thompson decided
to tell listeners how to build a superheterodyne just like the one that heard
KZIIY.

After some simple changes and improvements, the laboratory model was evolved. It is described by Mr. Thompson in this issue of Radio Digest on page 7 as the 1927 DeLuxe Super. In all respects it has been made a DeLuxe receiver.

In speaking of the 1927 DeLuxe Super, the designer, Mr. Thompson, said:

"While a replica of this receiver heard the Philippines through Chicago interference, that does not insure every copy, built from the instructions I will give in Radio Digest, will repeat this performance. But careful workmanship, adherence to directions, and skill in tuning should yield results, the like of which can be had with very few sets now in the posbe had with very few sets now in the possession of fans."

Mr. Thompson, in his well-known

method of presentation, will give very detailed instructions for the construction of the 1927 DeLuxe Super. The first article of his series appears on page 7 of this number.

SHORT WAVES By Marcella

(Continued from page 2)

junior just starting out life as a chip off the old block.

A "West-of-the-Mississippi" inquirer wants to know about "Graham McNamee being elected to different clubs as hon-



orary member orary memoer . . . Inside information about him and his twin Phil Carlin." About the best I can do is to give you the thumb nails on these two leaders of the "chain gang." Mr. McNamee is

37 years old, of medium height. He has a wife and they have the darlingest little—re-ceiving set! No, that's all, my dear. He was brought up in Minneapolis, Min-ne-

Phillips Carlin is an Easterner and he must rate with a high intelligence quota as he graduated from New York University with a Phi Beta.
Kappa enrollment. He distinguished himself on

the university debating team and won the highest awards. Don't get excited, girls, as I have stated before, Phillips is also married. Last June I announced to the world

that the Carlins were without children and the very next week the stork must have read this column for straightaway he brought them a dear baby girl. And they named her Virginia Claire. Now, Stork, if you are reading this watch your

Val McLaughlin, famous story lady of WOW and more recently of WLS, is the idol of many thousands of little folks but just at present she is devoting her exclusive attention to JUST ONE. And that one is a little daughter of her own, born last Thanksgiving day.

Everett Mitchell is the new voice at WENR, Chicago, and he is making many new friends for the station. His deep bari-



tone voice and chatty announcements have brought out several inquiries. Mr. Mitchell is about thirty years old, brown hair and brown eyes. He has been sing-

ing since the days of the boy's choir and has been heard at a number of Radio stations. Been married six years to a very charming example of a gentleman's preference. He has been identified

# Notes for Women

The first of four talks on social hygiene was delivered Tuesday afternoon, January from WGY, by Dr. Carro C. Croff of the

4, from WGY, by Dr. Carro C. Croff of the division of social hygiene of the New York State Department of Health.

Her lectures, which stress the need of giving children sex instruction in the home, the desirability of the single standard of living, results of sex ignorance, and our personal and community responsibilities as the community responsibilities as the community responsibilities. and our personal and community respon-sibilities, have won the approval of parent teachers' organizations. The remaining two talks will be delivered on January 18 and 25 during the afternoon period gener-ally assigned to women's programs.

Mrs. Julian Heath, president of the New York Housewives League, Inc., and Home Economist of WJZ, New York, will hence-Economist of WJZ, New York, will hence-forth devote her Monday afternoon talks to the use of "Mustard, the Subtle Sea-soner" in the preparation of food. This series of talks is sponsored by Charles Gulden. Her discourses on the remaining days of the week will be devoted as in the past to the preparation of the meals for the following day and home economics. the following day and home economics, the menus being laid out with an eye to economy in accordance with the current prices at the local foodstuffs market.

The work of the entire year of the Dennison Basket Weaving Course was reviewed in a broadcast from WIZ Mondey.

viewed in a broadcast from WJZ Monday afternoon, December 27.

The Chinese mystery, Chow Mein, was discussed recently by Betty Crocker from the more than a dozen stations giving her feature. Chinese cookery, as it is today, was originated in the year 3000 B. C. by the emperor Hay Se. Miss Crocker made the emperor Hay Se. Miss Crocker made mention of the interesting facts that there are no Chinese cook books, and that the cooking is usually done by men. A Chinese boy must serve a long apprenticeship in chopping, paring, watching and tasting, before he can become a master of the kitchen the kitchen.

An interesting change in the 2LO, London, England, New Year programs is a revival in a modified form of the women's feature. It does not, as did the original, drag on for an hour, but every Monday women listeners hear a collection of hints devoted entirely to the interest of the devoted entirely to the interests of the housewife, broadcast for about fifteen minutes. The transmission is made at 5 p. m., just when most Englishwomen have finished their afternoon tea.

with the insurance business for some time. No, they haven't any.

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.

# The Readers' View

Beating Mr. Klein with Ekko Stamps How many Ekko stamps have I? I think that I can go Mr. Klein one better.

I have at this time 225 verified reception stamps, including California, two from Mexico, three from Cuba, 12 from Canada, one from Buenos Aires, one from San Juan, Porto Rico, 20 from the city of Chicago, and 14 from New York City. I have one from WREC, Coldwater, Miss., a 10-watt station. I have logged an even 400 stations up to the present time, including three in Europe.—Frank H. Shepherd, Burlington, W. Va.

Does He Beat Mr. Shepherd?

I have collected 229 Ekko stamps from 39 States in the Union. They are distrib-uted as follows: 18 from California, one from Arizona, 30 from Illinois, one from Oklahoma, four from Washington, one from Wyoming, 15 from Canada, one from Cuba, two from Mexico, one from Argen-

tina, one from Hawaii, seven from Texas, and 46 from New York.

How is that for a record in only five months? And I am not finished yet.—
Stanley Ferris, 43 W. 132nd St., New York.

Here's an Ekko Collection of 271

I have a collection of 271 proof of reception or Ekko stamps, and still trying for more. Included in my collection are KFI, KHJ, KNX and KGO of California; 6KW, 7SR and PWX of Cuba; WKAQ, Porto Rico; CZE, Mexico City. Out of 10 CNR stations I have heard seven, including CNRV, Vancouver, and CNRC, Cal-

The total number of stations I have heard and had written verification from amounts to 397. My written verifications were started June 28, 1922, when I put in

my first set. Ekko only allows the issue of stamps from March 1, 1924.

I use the same set I started with, a three-tube regenerative (detector and two audio).—Wallace B. Symmer, 63 Essex St., Beverly, Mass.

# Imposter of Jack Little Is Sent to Prison for 2 Years

DAVENPORT, Ia.-Word received here by Little Jack Little states that Jose Padilla has been sentenced to two years in prison from Valeria, Mont. Padilla is alleged to have been the individual who fraudulently imposed himself on a number of western broadcastism extensions. ber of western broadcasting stations as Little Jack Little, famous Radio artist and composer. Particulars of the arrest and prosecution of Padilla were not men-

and prosecution of Fadilia were not mentioned.

From Davenport the real Jack Little goes to the Nicollett Hotel, Minneapolis, and from there to the Hotel Fontenelle, Omaha, Nebr.

# WOMAN'S PROGRAM INDEX (Daily Unless Indicated)

# Household Economics, Women's Hour, Etc.

	Ohio market	-	
Eastern	Central	Mountain	
9:30 a.m. WWJ (352.2	8:30 7m-850kc), T	7:30 onight's dinner	6:30
WMCA (340	.7m-880kc), 1	enu, Tues, Thu Homemakers' c	lub, Tues.
10:13	9:15	8:15 Homemakers	7.15
Tues, Fri. 10:30	9:30		
KV00 (374	8m-800kc). 1	8:30 Mothers' hour.	7:30
10.40 (545	9:40	8:40	7:40
WFI (394. Wed, Fri	5m-760kc).	Betty Crocke	r, Mon,
	0.45	8:45	7:45
Fri: WEI	1m-970kc), B	etty Crocker, M 60kc), Mon, V Mon, Wed,	Ion, Wed,
WTAM (	389.4m-770kc)	Mon, Wed,	Fri.
10:55	9:55	R.55	rogram.
KSAC (340.	7m-880kc), E	lousewives' hal	f hour.
WICC (2851	n-1050kc), P	olly Porter. omemakers' ho	
Inurs. Pr	Gar en en		
WSB (428.3	m-700kc), H	omemakers ho	ur. 8:10
WEAO (293,	9m-1020kc),	Homemakers' h	our.
11:15 WCAE (461	10:15 .3m-650kc).	9:15 Women at hom	8:15 ie.
11:35	10:35	9 - 35	8:45
11:45	m-560kc), T 10:45	9:45	8:45
WCCO (491 Betty Cro	.4m-720kc), cker, Mon,	WDAF (365.6: Wed. Fri.	m-820kc),
			Wed.
WEBH (370	.2m-810kc),	Prudence Pennome economics.	у.
12:15 n.m.	m-6/0kc), Ho	ome economics.	9-15
KMOX (28	30.2m-1070kc)	10:15 Cooking,	household
hints. 12:30	11:30	10:30	9:30
KMTR (370 Tues Thu	0.2m-810kc),	Sylvia the bli	ind cook,
WGN (302.8	m-990kc), H	ome manageme	nt period.
12:40 WTAG (545	11:40 .1m-550kc). l	10:40 Lydia Flanders,	9:40 Fri.
12:45 WNYC (526	11:45 im-570ke), R	10:45	9:45
12:55	11:55	10:55	9:55
1	12	Housewives' ha	10 nour.
KFI (467m-	642kc), Bett	y Crocker, M	on, Wed,
KGW (491.	m-610kc), H	ousehold helps. Ladies' hour, l	
1:30	12:30	11:30	Mon. 10:30
		Iousehold e	conomics.
Daily ex 3	12:45	11:45	10:45
KPO (428.3) Fri.	m-700kc), Be	tty Crocker, M	on, Wed,
10200-003 <b>0</b>	2.2		

Eastern	Central	Mountain 12:05 udence Penny.	Pacific
2:05 p.m.	1:05	12:05	11:05
KJR (384.4m	780kc), Pr	udence Penny,	0
2:10	1:10	ily menu, ex	Sat. 11:10
KGO (361.2m	-830kc). Pr	udence Penny.	11:10
2:15	1:10	12:15	11:15
KOIL (305.9r	n-980kc), S		- W-1
WJZ (454.3m	1-660kc), L	ennison craft 12:25	Mon.
WIZ (454 3m	-660kg) SI	opping service	11:25 e, Mon.
2:30	1:30	12:30	11:30
KFNF (461.3	m-650kc),	12:30 Women's hour opping news,	· maraa
KJR (348.4m-	780kc), Sh	opping news.	
WCCO MEA	n 7201ro) 3	Township have	Wed, Fri.
WHR (365 6n	1-820kc) I	Vomen's hour, adies' hour, N	Wed, Fri.
Fri.	1 OLOMO, L	adics nour, n	ion, weu,
WSOE (246m	-1220kc), C	ooking chats.	Mon.
WIP (508.2m	-590kc), M	arket hints f	or house-
Wives, men	us, Mon, I	ues, Fri.	
3:15	2.15	ooking chats, larket hints in ues, Fri. our daily menu	19.15
WHO (526m-	570kc). Re	1:15 ccipes, househ	old hints.
rues.			
3:30	2:30	1:30	12:30
3:45	2:45	Tousekeeper's	12:45
KFNF (461.31	n-650kc). L	adies' hour, M	Ion. Tues.
Thurs, Fri.		waren en met met gr	esad Turkens
WID (500 a	3 F001> 34	2	1
WIVES THE	3)	arket hints f	
WOC (483.6m	-620kc), A	unt Jane. ome economics	
WQJ (447.5m	-670kc), Ho	me economics	å.
4:30	3:30	2:30 Housewives' WEEI, WLI	1:30
WEAR (280,2	m-10/0kc),	Housewives'	hour.
Dennisonera	ft Tues	WEEL, WLI	I, WRC,
WLS (344.6m	-870kc), Ho	usewives' hou	r.
29	4	- 3	7
KOA (322,4)	n-930kc),	Housewives'	matinee,
WOS (440.9m	-680ke) M	on Thurs	
5.15	A - 15	2.15	2:15
KYW (535.4n	1-560kc). M	leat talk, John	a Cutting.
Mon.			Y
WMAQ (447	.5m-670kc),	Mothers in	council,
Wed.	5.30	4.20	3:30
KOA (322.4n	1-930kc). (	Question box,	culinary
hints, Tues	, Thurs, F	4:30 Question box, ri, ooking school,	
WLW (422.3n	n-710kc), C	ooking school,	Wed.
	h	lints for hou	a
Wed.	i-count), I	rints for Hou	seacepers,
8:30	7:30	6:30	5:30
KUOA (299.8	m-1000kc).	Helpful hints.	
KOR (348 6m	8:30 860kg) II.	7:30 ousekeepers' c	6:30
2000 (070,0111	-cooke, H	Jusenecpeis C	uan mon.

# "Aunt Sammy" Central Mountain Pacific 7 Hospital 10 a.m., 10

Eastern 11 a. m.	Central 10	Mountain 9	Pacific
WEAO (29)	3.9m-1020kc).		8
WOS (440.	9m-680kc).		
12 n.	11	10	9
WAMD (24	3.8m-1230kc).		
WRVA (25	6m-1170kc) V	Ved.	
1 p.m.	12	_ 11	10
KWWG (2)	7.6m-1080kc)	, Mon, Wed,	
EDO (420.2	12:10	11:10	10:10
KPO (428,3	12:15		200
KEOA MEA	.3m-660kc).	11:15	10:15
1:30	12:30	11:30	10.00
	.2m-1070kc).	11:30	10:30
1:45	12:45	11:45	10:45
WDAF (365	.6m-820kc).	11.50	10.43
2	1	12	11
KOIL (305.	9m-980kc).		
3.	2	1	12
KMA (461.)	3m-650kc); K	SL (299.8m-10	
3:30	2:30	1:30	12:30
WHK (272.	om-950kc),		_
WOC (483.6	5m 6201ra)	2 ·	1
6	JIII-OZOKCJ.	4	•
XFXF (249)	9m-1200kc).	Tues, Thurs,	Trei 3
WDBO (239	.9m-1250kc).	raco, raurs,	E 11.
8:30	7:30	6:30	5:30
KFDY (299.	8m-1000kc),	Wed. Thurs.	2.00

# Women's Clubs

Eastern	Central	Mountain	Pacific
11 a.m.	10	9	R
WOI (270m Wed.	1-1110kc), Fe	ederated Wom	en's club,
11:30	10:30	9.30	8:30
WNAC (43)	0.1m-697kc),	Women's club	4 A
12 n.	11	10	9
WHT (399,	8m-750kc). V	Women's club.	
4 p. m.	3	2	1
WGN (302.	8m-990kc), V	Voman's club.	
4:05	3:05	2:05	1:05
WCCO (41 of Women	6.4m-720kc),	Minnesota	Federation
		3:15	2:15
WMAQ (44 Women's	47.5m-670kc),	Illinois Fed	eration of
6	5	A	2
KNX (336.	9m-890kc),	L. A. Dist.	Federation

# Fashions and Sewing

Eastern	Central	Mountai	
12:30 p. m.	11:30	10:30	9:30
WQJ (447.5t		yle talk.	
1:35	12:35	11:35	
KPO (428.3)	m-700kc), F	ashion crit	tic, Fri.
2	1	_12	11
WGBS (31	5.6m-950kc),	Excella	dressmaking
lessons.	n an ara		9
2:20	1:20	12:20	11:20
WJZ (454.21	n-660kc), W	ed, Fashio	
WOS (440.9	- C001 \ T	3	2
WUS (440.9)	m-680kc), F	ancy work,	9

Eastern	Central		tain	Pacific
6:45 p. m	. 5:45	4:4	5	3:45
KOA (322. Thurs, Fr	4m-930kc), i.	Fashion	review.	Tues
7:55	6.55	5:5	5	4:55
WPG (299.8	m-1000kc).	Fashion :	flashes.	Tues
8:45	7:45	6.4		5:45
WCCO (416	.4m-720kc)	. Jeanne (	irav.	D
10:40	9:40	8-46		7:40
KHJ (405.2 ton, Fri,	m-740kc),	Fashions,	Paggy	Hamil

# Health and Beauty

	Charlestoning	Deliver of the last of the las	
Eastern	Central	Mountain 8:45 Tues.	Pacific
WTAM (38	39.4m-770kc).	Tues	7:45
- 11	10	9	8
		9 ood health an ealth talks. 10:45 Marjorie	d training.
12:45 p. n	1. 11:45	10:45	9:45
WOR (405	.2m-740kc),	Beauty, Lill	ian Buhl,
1:15	12:15	11:15	10:15
		11:15 Diet ques	
5	4	. 3	2
8:30	7:30	6:30 8:40	5:30
WEAU (29)	3.9m-1020kc).		
10:40	9:40	8:40	7:40
АПЈ (405.2	m-/40kc), D	r. Phillip M.	Lovell,
10:45	9:45	8:45	7 - 45
KNX (336.9 Tues.	9m-890kc), D	r. Robert T.	Williams,

# Child Care; Training

Eastern Central Mountain Pacific 10:55 a.m. 9:55 8:55 7:55 KSAC (340,7m-880kc), Wed, Jan. 19, children's Fleming. Child training, Bernice 11 MOI (270.1m-1110kc), "Some New Methods of Child Training," Dr. Lovissa Wagoner, Fri. 5:15 KOA (322.4m-930kc), "Diet and Health." KNX (336.9m-890kc), Dr. Wayne B. Burr, Wed. 8 KUOA (299.8m-1000kc), Jan. 17, "Sweets for the Children," Emily Hays.

# Interior Decorating

Eastern Central Mountain Pacific 5:15 p.m. 5:15 3:15 2:15 KOA (322.4m-930kc), Interior decoration, Turs, Thurs, Fri. WBBM (226m-1330kc), "Redecorating, the Old House," Leone Grandland, Mon. "Decorat-ing the New House," Charlotte Voge, Thurs,

# IT'S CHILDREN'S HOUR IN RADIOLAND



# Children's Hour at KHJ So Good That Even Grownups Delight in Hearing It

"Uncle John" Daggett, With Able Help of Queen Titania and Sandman, Becomes So Popular That Little Tots Dwelling Many Miles Distant Journey to KHJ Studios

By Elsa Brocker Harvey
HILDREN'S hours, like children's books, ever hold a charm for many grownups. This is undoubtedly one reason why children's hour at KHJ, Los Angeles Times, the oldest broadcasting station in the city has become such a popular feature of the evening's entertainment in Radioland.
Uncle John, who is known all over the

1

country for his genial announcing tocountry for his genial announcing together with the Sandman and little Queen Titania have brought many a youngster from a good many miles distant to the visitors' room at KHJ for a glimpse of the elusive fairy who has helped to turn the bedtime hour for the wee ones throughout the city into one of so much pleasure. So popular have the stories become in which (Continued on page 29)

FRANK TILTON, BLIND PIANIST, TOGETHER WITH HARMONY FOUR, FAVORITES AT KPRC



adjust to the limitations of Radio transmission. But the crooners and the lullabye ladies have always proved satisfactory. Blended feminine voices also have seemed

to melt into the microphone satis-factory. There should be more female quartets like The Harmony Four. These Lone Star maidens are Miss Vivian Soby, Miss Violet Elder, Miss Florence Wood and Miss Eileen Ponton, in the usual pic-ture order.

and Miss Eileen Ponton, in the usual pic-ture order.

Alfred P. Daniel, the KPRC director-announcer, is alert for feat res and the Houston Post-Dispatch listeners never

# City Council Would Bar Stations

MINNEAPOLIS .- A movement has been started in the City Council of Minneapolis

# WILL ROGERS, BEWARE! FOR TIMELY TOPICS AT KYW MAKE SORDID NEWS ITEMS JOYOUS

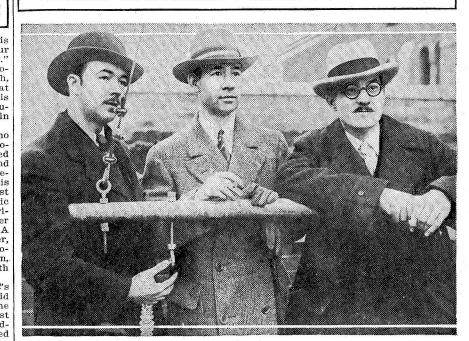


OOK at this amiable couple and be-

get a slant at the papers through pink

DOK at this amiable couple and behold the KYW Follies!
Pardon! Wrong again—it is not the Follies—just Timely Topics.
But that is only another way of saying the same thing because Timely Topics only brings the doings of a Mauve Decade or a year, up to date by presenting a review of the doings of a day or a week. And of course these two Follians are not broadcasting news from a pulpit. They see how it happens from the funny side of life. One may tune in KYW any Saturday night at 11 or 11:30 o'clock and

# THREE KNICKERBOCKER MIKETEERS



PRESENTING, ladies and gentlemen of the Radio audience, three well-known miketeers of the Knickerbocker main.

bocker main.

However, we have to our port side the gentleman in the sheet-iron kelley in the act of seizing the belaying pin for such sinister purposes as we know not, Mr. Norman Brokenshire, erstwhile announcer at WJZ, then at WRC, later back to WJZ and more recently associated with the Arrow Amusement company.

In the center the sewere set gentlemen

the Arrow Amusement company.

In the center, the square set gentleman in gray with the striped hat band, the well-aimed eigarette in his right hand, two gloves on the left, is none other than Mr. Walter Neff, former pilot of WAHG, now called WABC. Note the sturdy stick ready for instant use to repulse any belligerent intent that may be in the mind of Mr Brokenshire as the latter reaches for the weapon so frequently used aboard ships for murderous assault.

To port, confident and reposeful although there is a grim and purposeful set to the jaw, we have Mr. J. Lewis Reid, whose name for some time became vividly associated with the call letters, WFBH. All up and down the American Atlantic and far inland, these three mike-teers have touched at every port and countryside. Their voices are known to ture order.

Alfred P. Daniel, the KPRC directorannouncer, is alert for features and the Houston Post-Dispatch listeners never complain about the entertainment from this Texas station. Another happy find

# Is Child Prodigy



Some day you are all going to hear and see a lot of the little girl shown in this picture, shaking her finger at a microphone. Her name is Phyllis Kono, four years old, whose mother is a descendant of the Emerald Isle, and whose father came from the Island of Japan. The Konos all live very happily in Atlantic City, where Daddy Kono is a successful merchant.

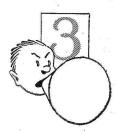
Phyllis, who first opened her eyes on this earth only a little over four years ago, (Continued on page 29)



Single drum control enables you to get stations in the dark. Drum turns under slightest pressure of finger. The stations are a slight turn of the drum apart. Station letters can be written on drum to be returned to at will.
Nothing in radio equals the
convenience of single drum



"Acuminators" (an exclusive Crosley feature) so sharpen tuning that weak distant sta-tions which are entirely missed because of the limitations of ordinary one dial control sets are easily picked up and satisfactorily brought in on the loud speaker. Stronger stations come in without adjusting Acumina-



The "Crescendon" (an exclusive Crosley feature) enables you to increase volume of distant signals to room filling proportions. Not necessary to strain the ears to catch stations miles away, a turn of the crescendon instantly swells reception. This device makes much far away broad-casting equal in volume of casting equal in volume of local nearby stations.



All metal shielding from the steel chassis on which radio elements are mounted increases reception efficiency greatly. Such shielding prevents interstage, external coupling and improves stability of circuit, as well as simplifies manufacturing costs.



Power tube adaptability marks the Crosley "5-50", the "5-75" and the RFL sets. This feature typical for Crosley receiving for fies Crosley provision for the best radio reception at moderate cost. Enables vou to increase volume weak signals.



At left is the 6-tube R. F. L.-90, Crosley's non-oscillating perfectly balanced tuned radio frequency set. True cascade amplification achieved through use of Wheatstone bridge in each stage of amplification, Musicone built in. 40 inches high \$90.



Sketch at left is the 5-50 table model featured in this advertisement encased in a beautiful twotoned mahogany console with super-musicone built in. Stands 40 inches high. Ample space for all bat-teries and accessories. \$75 without accessories.

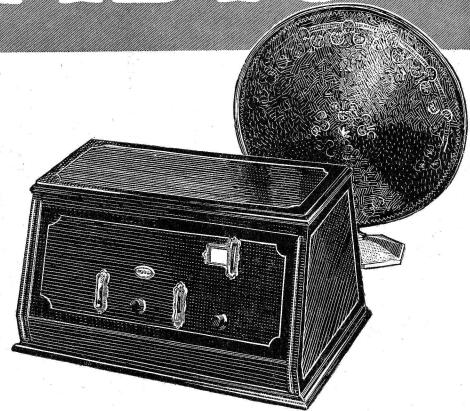


The Musicone, pictured at left, is a welcome radio accessory to many homes. Hide unsightly wires and batteries within its ample depth. Crosley Musicone skillfully concealed. Mahogany finish. Makes a console set of your present table model.

The secret of the popularity of this biggest selling loud speaker on the market lies in its actuating unit. This and NOT the cone shape 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.







# 5 advanced features mark this amazing SINGLE DRUM CONTROL SET

an incomparable radio value at

It's wonderful. A radio that delivers entertainment and pleasure as you would expect it from the most costly apparatus. One finger operates it. Station selector—the drum dial—pro-It's wonderful. vides space for station letters to be written where they can be returned to at will. The exquisite finish and fittings of cabinet are in line with far more expensive radios. This set is a definite tribute to Powel Crosley, Jr.'s ability in manufacturing standardization and mass production. It's difficult to estimate what the price of this 5-50 would be if they were made in small quantities instead of by the thousands daily.

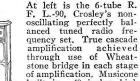
Write Dept. 49 for Descriptive Literature

The Crosley Radio Corporation Powel Crosley, Jr., President

CINCINNATI, OHIO

Crosley sets are licensed under Armstrong U. S. Patent No. 1,113,149, or under patent applications of Radio Frequency Laboratories, Inc., and other patents issued and pending.

Prices slightly higher west of the Rocky Mountains.



# 1927 De Luxe: the Finest Super

ART I: Build This "Rolls Royce" Set and Tune in the Philippines Through Local Chicago Interference, as One Listener Has Done.

# By MARVIN W. THOMPSON

thought should result in the greatest possible range, selectivity and natural reproduction. Since a Radio set must also be an attractive piece of furniture, the appearance was to be pleasing to the eye and controls symmetrically arranged. The builder, I believe, will be interested in the reasons for my choosing certain units in preference to others, so we will take this up first, and also touch on the why of the layout of parts.

layout of parts.

There are many makes of super-hetero-There are many makes of super-heterodyne units on the market and having what might be called a "super complex," I've built just about all of them. They're all good. Using any of them in a carefully built assembly one can outdo a tuned R. F. outfit. However, St. James have incorporated in their parts some features that make them seem preferable in this deluxe outfit.

St. James Units Ideal
Of outstanding importance, from my
viewpoint, is the small size of the coils.
Intermediate coils can be reduced in
diameter without loss in efficiency, something that cannot be done with tuned R. F. metric dials.

HIS receiver is the culmination of it, it doesn't have to be mounted behind HIS receiver is the culmination of it, it doesn't have to be mounted behind a long-felt desire on my part to assemble into one outfit all the panel, nor do you have to wreck the semble into one outfit all the parts which, from experience, I ht should result in the greatest postrange, selectivity and natural rection. Since a Radio set must also attractive piece of furniture, the rance was to be pleasing to the eye ontrols symmetrically arranged. The fingers forward, then when one pulls on the fingers back.

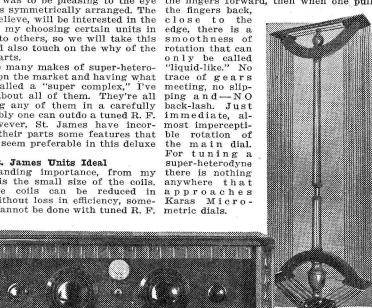


Figure 1—Completed 1927 DeLuxe Super in Cabinet and Attached to Loop

coupling arrangements. St. James have brought the diameter down to one inch, a feature which results in less pick-up of stray currents on the intermediate wave length and less interaction between the fields of these units on strong signals. This makes for easier control and greater stability.

Another point for which the experienced Another point for which the experienced builder looks, is the amplification factor and tests show that of the St. James transformer to be very high. Matching of transformers is also very important and, being right here in Chicago, I hapen to know that Mr. St. James does this work himself rather than entrust this operation to a subordinate. Last, but certainly not least, is the 240-kilocycle feature which is good because there will be tarmy not least, is the 240-knocycle leature, which is good because there will be less oscillator repeats and there is comparatively little Radio activity on the wave length of 1,250 meters, the length corresponding to the 240-kilocycle fre-

Karas the Incomparable

Personally I always feel, when holding a Karas condenser, that I have in my hand a beautiful piece of mechanism. The care in design and construction is apparent even to the inexperienced builder. The plates are not only inserted in slots in the supporting here but one construction the plates are not only inserted in slots in the supporting bars but are carefully and individually soldered there. The rotor shaft is large in diameter for ruggedness and revolves at each end in perfectly machined, adjustable bearings.

chined, adjustable bearings.

When inspecting one, note the distance at both front and back between the active plates and the end plates. These end plates have gone far in design from the old Bakelite disks of 1920. They are of heavy brass, skeletonized, and thicker than one ordinarily finds. Then there is the well-anchored pig-tail, and, of course, the straight frequency line tuning. There the straight frequency line tuning. There may be other makes that approximate true S F L tuning but I have seen none that, with the proper coils, will give as true a line when stations are plotted by frequency on graph paper. Most of the short wave experimenters seem to prefer Karas condensers in their work and the that can accurately measure the very small losses in these units. Probably, in many cases, the Karas could be used to measure the losses in the laboratory's "standard." laboratory condenser has not been found

The average set builder may not be as familiar with Karas dials as with this make of condenser and transformer. The dial is a comparatively new item in the line. No! It hasn't any electric lights in

Ferranti-from Dear Old England With typical English brevity, the makers of the Ferranti audio transformers specified say on their folder only notes are considerably different from that "Type A. F. 3 has been designed to those to efficiently handle very high notes, improve loud speaker results and the and any transformer is a compromise to

4 St. James Intermediate Trans-

8629 @ .70
International Resistance Co., Perry Bldg., Phila-

delphia:

1 Durham Metallized Resistor,
2 megohms @ \$0.75

Hammarlund Mfg. Co., 424 W. 33rd St., New
York City:
1 Hammarlund Jr. Midget Con-

135 1 Jewell Milliameter, 0-25, type @ 7.00 Formica Insulation Co., Cincinnati, Ohio:

1 Formica Panel, Walnut, 7"x

1 Formica Panel, Black, 9¾"w 44.80 23½"x3/16" @ 4.60 The Radiall Co., 50 Franklin St., New York

type 1A

1 Amperite Filament Resistor,

(@ 1.10

3 Amperite Filament Resistors,

Chicago:
1 Jewell Voltmeter, 0-8, type

1 Formica Panel, 24"x3/16"

worth their price.

Requirements for handling low musical

LIST OF PARTS St. James Laboratories, 845 Washington Blvd., Sangamo Electric Co., 50 Church St., New York City:
4 Sangamo Bypass Condensers,
1 mfd. @
2 Sangamo Bypass Condensers,
@ formers @ \$7.50

1 St. James Oscillector Coil @ 5.00

1 St. James Choke Coil @ 1.50

Karas Electric Co., 19 S. LaSalle St., Chicago:

2 Karas Orthometric Condensers,

of the Ferranti audio transformers is

.5 mfd. 1 Sangamo Fixed Condenser, .006 mfd. @ mile. (2) .85

1 Sangamo Fixed Condenser,
.00025 mfd. (2) .40
1 Sangamo Pair Grid Clips (2) .10

Herbert H. Frost, Inc., 160 N. LaSalle St.,
Chicago:

Chicago: 1 Frost Bakelite Rheostat, 6 Benjamin Electric Mfg. Co., 120 S. Sangamon St., Chicago:

8 Benjamin Baseless Sockets, type 9044 @ \$0.50

1 Benjamin Pair Brackets, type 8629

ohm, type 800

I Frost Bakelite Rheostat, 20
ohm, type 820

I Frost Bakelite Potentiometer,
400 ohm, type 824

I Frost Gem-Jac, Double Circuit,
type 951 @ \$0.75

type 951

1 Frost Super-Variable Resistance, 500,000 ohm, type 895 @

1 Frost Pair Cord Tip Jacks, type 253 @

1 Hammarlund Jr. Midget Con-denser, MC-5, 16 mmfd. @ \$1.80 type 608 @ .30 Jewell Electrical Inst. Co., 1640 Walnut St., Miscellaneous from Any Radio or Hardware Store: 3 doz. 1/2-inch round head brass

machine screves, 6/32.

doz. ½-inch flat head brass machine screves, 6/32.

doz. had brass nuts, 6/32.

doz. soldering lugs.

1 doz. lengths Celatsite bus bar, any 11 Binding Posts, Preferably "Eby," with These

Markings: 3 marked Loop, 1 marked plus A minus B, 1 marked minus A plus C, 2 marked minus C, 1 marked plus 22, 1 marked plus 45, 1 marked plus 90, and 1 marked plus 180.

(The Radio Digest Shopping Service will purchase all or any of the above specified parts, at the prices listed, for builders of the 1927 DeLuxe Super who may be located in isolated communities or unable to obtain the parts from local dealers. Address: Shopping Service, Radio Digest, 510 N. Dearborn St., Chicago, and enclose express or postal money order covering total cost of parts ordered.)

@ \$4.20

HE writer of this article, and the two which follow, is not so well-known to Radio Digest readers as his many previous articles have appeared under several noms de plume. In Radio circles, however, he has friends with practically every well-known maker of parts and sets and is in a position to know the innermost details of both manufacturing processes and tests.

Since at this time he is neither connected with any manufacturer nor publication, his choice of parts and his design have been without bias and precisely as his years of experience thought best. Incidentally,

he was building sets and "pounding a key" back in 1909.

During the war Mr. Thompson was in the air service at both the Air Service Radio Telephone School at Columbia University and the Advanced School for Practical Work at Guerstner Field. A little later he was with DeForest, then the Radio Corporation, still later with Freed-Eisemann and, during the 1924-25 and 1925-26 Radio seasons he was Technical Editor of Radio Digest.

of literature on a unit as perfect as this would run less than four paragraphs. So we'll give the maker a little help and I'll tell you a few more reasons why the use

curves shown below indicate the success attained." That is all.

I get a large chuckle out of that; I've written the advertising on a few American makes myself and no American piece

give even amplification of all the notes we must hear in order to resemble natural reproduction. How well each maker success in making his audio transformer pass all notes with equal increase depends

on both the materials used and the design.

For good handling of low notes, Ferranti has put in a large cross-section but well-laminated core, as high a winding

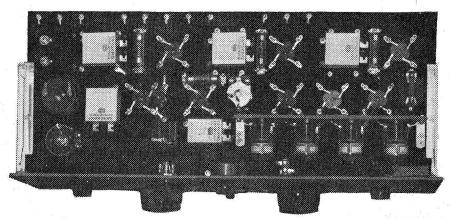


Figure 2—Bottom of Sub Base, Showing Special Mounting of . St. James Transformers

@ \$1.25

ratio as they found practical, and a very large primary with an inductance value of 80 Henries. This is larger than the chokes now on the market for taking the ripple out of B eliminators. Incidentally, I un-

out of B eliminators. Incidentally, I understand there is about 2½ miles of fine wire in a Ferranti transformer.

With appreciation of the fact that high notes also must go through, and be amplified in correct proportion to low notes, Ferranti have cut up their large windings into well-separated sections to reduce inherent capacity of these windings and eddy current losses. The result is a curve which is beautifully straight from well down in the range of human voice clear up to an audible frequency of around 5,000 vibrations per second. It is in the higher ranges that the harmonics occur and it is harmonics that make music beautiful; harmonics that make music beautiful; that enable you to distinguish one instrument from another, and that make reproduction either "tinny" or natural.

In the lower notes of the voice range

there is a slight falling off and down in the lower organ notes it runs as high as 25 per cent but that is very little compared to many audio transformers on the mar-

Speaking of Meters

For consistently good results, in preference to "now and then" operation, a good super should have meters. It is not enough to put in good parts and good workmanship. There must be careful operation. For this, meters are needed, and I have specified two. By all means use the voltmeter on the front panel; if one must be omitted because of short finances, disregard the milliammeter I have placed on the sub base. This milliammeter is a great help to one who takes Speaking of Meters have placed on the sub base. This milliammeter is a great help to one who takes pride in his receiver performance, and several uses for it will be described later, but it is not as necessary as the voltmeter. The meters used are Jewell model 135. In them, Jewell has kept all the precision and laboratory features of larger case instruments, while the outside diameter of the main case is only two inches.

struments, while the outside diameter of the main case is only two inches. This is small enough to present a pleasing appearance on a seven-inch panel without forcing the makers to lower efficiency.

The mounting of this series is unique in that instead of drilling three small holes close to the larger hole for securing to panel, the outer case clamps against the back of the panel while the flange holds the instrument in front.

In this special series of instruments,

In this special series of instruments, a number of very desirable voltage or current ranges are available and, in our (Continued on page 27)

# GOODY GOODY GIRL

# OHARACTER and Truth Hold Lois Faithful to Her Ideals of Right as She Faces More Temptations. Can

She Conscientiously Marry Raymond Lancaster?

CHAPTER XIII

A Confession

URNING from a daily quest for work—her lack of experience was proving a tremendous handicap— Lois, several days later, was met in the hall by Mrs. Trickett, who laid a finger on her lips in an admonition for silence and beckoned her into a room off

"A man's here asking for you," she said.
"He seems quite determined, insisted upon

"He seems quite determined, insisted upon waiting, said he wouldn't go until he'd seen you—I showed him into the parlor."

"A man?" Lois' heart skipped a beat. A detective? Had she been tracked down after all? Was she to be arrested, made the "goat" for Victor Jermin, as he had predicted? "What kind of a man, Mrs. Trickett?"

Trickett?"

The landlady's description was vague.
"I think, though, he's a gentleman," she

Lois considered. A policeman wouldn't strike Mrs. Trickett as a "gentleman." "I'll see him," she said and went to the parlor door. It was Raymond Lancaster who awaited her. He rose eagerly and came toward her.

"Loist I've hunted all over for you."

"He insulted me and I hit him with his own stick."

"You did? Bully for you! Evidently there must be a decent streak in the fellow and you roused it—but let that go. I came to you to beg from the bottom of my heart that you'd forgive me for—"

"Please. You hurt me horribly, but I don't want apologies. I'll forgive you, yes. Now, if that's all—"

"It isn't. I want you to marry me. You must know that I love you."

Yes, she told herself, she did know it. And she liked him, too; better than any man she knew. The one kiss he had given her had thrilled her, but—

"I'm sorry," she said. "What you ask is impossible. I cannot marry you. In fact, I hope never to see you again. I'm through with—"

"Nonsense. Mildred told me you had some such idea of cutting away from all of us, severing all relations—"

"It's not nonsense," she contradicted. "It's the only thing to do. Your kind of people are not my kind. Your kind of life is not mine. I don't fit. I don't want to fit. I—"

"What do you mean my kind of people.

"What do you mean my kind of people, of life?" he broke in.

OU know the set you run with and their lives," she replied impatiently. "Goldfish, human goldfish. People with money, idle hands, idle brains: hard put to it to kill time from one day to the next, jaded, bored, but unwilling or unable to do anything about it. Goldfish in a bowl, that's all. I've had a whirl at it. No more for me, thanks."
"Now I'm more sure than ever that I

Now I'm more sure than ever that I nt to marry you," he asserted. "And want to marry you," he asserted. "And I'm no goldfish. I hate them as much as you do. I have only contempy
Their silly lives disgust me. I"But—," she began.
"But—vou're going to I have only contempt for

"But—," she began.

"I know what you're going to say. Let me say it for you and answer it, too. You've thought I was connected with a bond house on La Salle street. I am—as a salesman, a plain, every-day salesman just like a couple of dozen others who work there. You've thought I was rich. I'm not. I own a few thousands, but I've earned them, just as I earn my daily bread and that of my mother and my sis-

By MERLIN MOORE JAYLOR

ter. You think I play around with the people you've called goldfish because I was one of them. I don't. I mingle with them and pretend to be one of them and to have the same interests because it's good for me in a business way. They buy my bonds because they know and like me. Do you think I'd pick a Victor Jermin—a bootlegger for all that he deals in truck loads where others deal with cases—do you think I'd pick him for an associate by his confession. It was incredible. Not loads where others deal with cases—do you think I'd pick him for an associate unless he salted away his profits in my

"Do you think I'd have anything to do with a Neil Becker, who handles only schemes that squall aloud for public support unless he bought my good safe bonds—or did until we broke? Do you suppose for an instant I'd have been on terms of friendship with a Mildred Gayton, until a week ago no better than a woman of the streets, if she wasn't smart enough to put by for a rainy day by investing the money she's been able to get out of Becker in what I have to sell?

by his confession. It was incredible. Not once in the circles in which he moved and into which she had dipped so briefly had she heard even a hint of such a thing. she neart even a fifth of such a thing.

She was quite certain that he never had confided in anyone else just what he had told her. As evidence that he really loved her, it was most convincing.

Temptation assailed her. Believing him

wealthy, beyond the necessity of working and just playing at it she would not have married him. But in the face of his revelations, what did it matter if she did not love him as she always had expected to love the man she would want to marry?

Woman was cut out for motherhood but Woman was cut out for motherhood but you're thinking only of a career, your singing. Do you realize how much enters into a career beside ability? Health, vitality, training—a lot of things—and opportunity. Who's going to give you a chance—you a little Miss Nobody from Nowhere, to speak bluntly?"

for a career," she said slowly. "I have learned that I lack even ability. I'm thinking how dishonest it would be, how unfair to you, to say 'yes' when I don't love you, when the only emotion I feel toward you is liking. I do like you. I respect you. I——"
"I'll take a chance that I can make you love me Lois. I'll take you on any towner.

love me, Lois. I'll take you on any terms; if not love now, then liking, respect."

She shook her head. "It wouldn't be fair

She shook her head. "It wouldn't be fair to me, because someone might come along later. I can't say 'yes'."

"Well, don't say 'no,' either," he begged quickly. "Don't say anything. I'll wait. Give me a chance. You intended to cut me off tonight, didn't you? Don't do it. Let me see you once in a while, let me try to sell myself to you."

"It may do no good probably won't"

sell myself to you."

"It may do no good, probably won't," she warned. "In the end it may be harder for you and me, too."

"It isn't because you know I'm a bluff, that I have no money? I haven't lost ground with you because of that?"

"You've gained it," she told him. "I don't care about money. If I had—Mr. Jermin asked me to marry him last week."

"The devil! Jermin? You passed up a cool million at least there. Well, shall we let things stand as they are? Good! Now, if you'll go to dinner with me. The refec-

let things stand as they are? Good! Now, if you'll go to dinner with me. The refectory over there—"

Several nights after that on North Clark street—she had eaten a solitary dinner downtown and elected to walk to Mrs. Trickett's—Lois saw just ahead of her a youth, she judged him to be, walking slowly and casting frequent glances over his shoulder in her direction. There were not many people on the street and half a block further along a building in the process of construction and material for use in it made a dark canyon of the sidewalk that she did not fancy. As a precaution she crossed the street.

THE youth did not seem interested in her. He stopped beside a lighted window and divided his attention between a display of food and watching the

tween a display of food and watching the street along which he had come. As she came abreast of him, but on the other side of the street, she caught a glimpse of his face. Herbie Coles!

But what a change from the dapper, cocky youth he once had been! Even from where she stood she could see that his clothing was rumpled, his face unshaved, his manner dejected. She stopped, debated whether she should cross over and speak whether she should cross over and speak

to him.

As she watched he leaped toward a great pile of bricks beside the curb, snatched up one and hurled it through the window. Then he reached through the shattered glass, seized a handful of what was being displayed and took to his heels. Ignoring the outery that followed, the rush of people to the broken window, Lois started walking swiftly in the direction which Herbie had taken. He stopped running after a bit, slowed down to a saunter and thus she was enabled to keep him in sight and see that he turned into the door of a dingy little hotel a

keep him in sight and see that he turned into the door of a dingy little hotel a block away.

Impulsively she crossed back to the other side and went into the hotel, too.

"I'd like to see the young man who just came in," she said to the elderly man reading a newspaper behind the tiny desk.

"Go right on up. Room 207," he told her and went back to his paper. Apparently such a thing as conventions did not enter into consideration here.

T OIS took the stairway he had indicated by a wave of the nand. The carpet was almost threadbare, the steps creaked. The hallway above was narrow, poorly-lighted, illy-ventilated. She quickly found 207, tapped upon the door. There was no answer. She tapped again. "Herbie," she called.

A boy grated in the lock, the door was cated by a wave of the hand.

A key grated in the lock, the door was jerked open.
"Lois Sylvester!" cried Herbic Coles.

"What are you doing here?"
"Calling on you," she returned evenly and when he made no move to ask her in, pushed past him into the shabby room. "Close the door. I want to talk to you."

(Continued on page 28)

bonds?
"Do you think I'd have anything to do

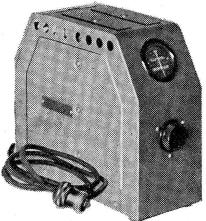
# The Lates of the said. When I ask you to marry me, I'm not dazzling you with any hopes of a luxurious apartment, a fine motor car, a handfull of servants, silks in answering him, for he broke in: "You're to the park to hear what I've got to say?" His pleading eyes stopped the refusal that rose to her lips. It was going to be no easy task to break with him as she had done with Jermin and Mildred. If there was going to be a scene— "Till come," she said. "Till come," she said.

URING the few blocks to the park they said little. But when he had ensconced her upon a bench in a grassy plot under the trees he at once went straight to what was in his mind.

"Neil Becker came to me a few days ago and admitted like a man that he had lied about you," he said. "It made me see red. If he hadn't had a broken arm—he was rather evasive as to how it happened—"

"He insulted me and I hit him with his own stick."

"You did? Pa"



It is not a trickle charger and operates only when the receiver is in use, inasmuch as it is automatically controlled by the filament switch on the set. The voltage output is constant, despite variations that may occur in the power supply line volt-

This unit will supply power for from three to eight vacuum tubes. Its maximum output is two amperes. A plug receptacle in the rear of the unit permits the attachment of a B eliminator, thus making both the A and B power units utemptically controlled utomatically controlled.



product gives constant, unvarying power to any set up to ten tubes and will operate

The Warren B eliminator has no variable resistance, but does have 150, 90, 67½, 45 and 22½ volt taps to give correct voltage. It also does not employ acids or tubes. The makers claim the eliminator costs less than one dollar a year to operate; gives full tone reception; is easier to hook up than a set of batteries; cannot blow out receiver tubes from short cir-cuit; needs little more attention than a loud speaker; is simple, compact, free from distortion; wonderfully well made of finest materials, beautifully finished in old gold color; bears the stamp of approval of Radio laboratories and is unconditionally guaranteed.

The device weighs but 17½ pounds, measures 5½x8x9 inches and is intended for connection to 110 volt, 60 cycle, alternating current.

# Day-Fan Fantenna

THE effectiveness of Radio reception has been greatly increased with the use of the Fantenna, a new development recently announced by the Day-Fan Electric company, of Dayton, Ohio, which multiplies the pleasure in Radio reception by making possible the clearer reception of an increased number of programs. The Fantenna is adapted to the majority of six Fantenna is adapted to the majority of six and seven-tube receivers and will bring in distant stations hardly audible from ordi-



Warren B Eliminator

The Warren Electric company of Peoria, III., has been successful in producing a B battery supply of 150 volts capacity at an unusually popular price. The manufacturers claim their an antenna of normal length the Fantenna will afford the equivalent of night-time reception during the daytime with time reception during the daytime with surprising volume and clarity. The Fantenna has proved very practical

when operated from inside antenna or short length of wire in congested dis-tricts, apartment houses, office buildings

rricts, apartment houses, omce buildings and similar locations.

The installation is simple, requiring only the connection of three wires, all of which are supplied with the Fantenna. The device increases B battery life by reducing the amount of current used. No additional tubes are necessary.

# Bremer-Tully's New Lower-Six

A LITTLE over a year ago Radio Digest published a series of articles describing how to build the Bremer-Tully Counterphase, the perfect bridge tuned R. F. set. The success of the Bremer-Tully Counterphase circuit during the past year has established its continued popularity. The selectivity and sensitivity of the three stages of stabilized tuned radio frequency amplification appeal alike to the DX listener and those located in a maze of nowerful stations.

maze of powerful stations.

The successful operation of the three stages of radio frequency is due to the patented Bremer-Tully Counterphase method used to counteract the tendency of radio frequency stages to oscillate. The efficient design of the Bremer-Tully Torostyle transformers insures an efficient

Torostyle transformers insures an efficient energy transfer from stage to stage and freedom from the difficulties of inductive coupling which is unavoidable with solenoid or single layer wound coils.

Two-dial control of the four-tuned circuits simplifies tuning to a degree to which none can seriously object. The methods employed insure exact resonance between all stages without materially between all stages without materially adding to the difficulties of tuning.

Power-Six Is Batteryless

Now Radio Digest will describe the Bremer-Tully Counterphase Power-Six circuit, operated direct from the electric light socket. This is made possible through the use of the Bremer-Tully B-Power Unit, which affords a positive and dependable source of plate current, and

POW to Build It to Operate Entirely from the House Electric Lighting Supply

By GEORGE R. IVES



Figure 1.—The Front Panel Presents a Very Finished Appearance

amplification. Although fundamentally the same as the Counterphase Six, it has been materially improved by the use of a power tube in the last stage of audio

frequency.

Improvements in Circuit Another new feature is a resistance just outside of the tuned circuit in series with the grid. Although this resistance does not alter the amplification properties of the tube, it assists in the stabilization of

The set is tuned with two Bremer-Tully control dials which have a ratio of 12 to 1.

Has Two Degrees of Antenna Coupling

Two degrees of antenna coupling are Two degrees of antenna coupling are provided in order to adjust the set to the selectivity and sensitivity requirements of the individual locality and antenna. A Carter number 3 jack switch is used to control the amount of energy which is fed from the antenna to the set.

from the antenna to the set.

Four CX-201A tubes are used for the three stages of radio frequency and for the first stage of audio. The new CX-200A tube is employed as detector because it has greater sensitivity than the ordinary detector tube and is especially effective in bringing in weak signals. It also does not require critical adjustment of the filament or plate voltages. In using the CX-300A tube Cunningham recommends that it be lighted for a period of three that it be lighted for a period of three minutes before tuning in distant or weak stations. This permits the tube to attain the extra sensitive condition, because the internal parts will have reached constant temperature. On local, strong stations it will not usually be necessary to wait for the tube to reach the sensitive condition.

One CX-112 power tube is used in the second audio stage.

C batteries are connected in both the radio and audio frequency stages. These greatly improve the all-around performance of this receiver and prevent overloading of the tubes. Two 4½-volt Eveready C batteries are employed.

Assembly Directions
Figure 1 shows the front view of the panel. The engraved panel gives the receiver a finished and manufactured appearance.

Figure 2 shows a top view of the baseboard layout without the wiring. It is advisable to mount all of the sockets first, being sure to place them in the same posineing sure to place them in the same posi-tion as shown on the baseboard layout accompanying the kit. Then mount the MMF condensers, the radio frequency chokes, the grid leak, audio transformers and binding posts.

and binding posts.

The Torostyle transformers should be handled with care and mounted last. Be sure that coil TA, the first coil on the left of the baseboard directly in back of the antenna binding post, is mounted in its proper place. The three TC coils are mounted between the sockets as designated on the baseboard layout

nated on the baseboard layout.

Before attaching the panel to the base-Before attaching the panel to the baseboard, mount the instruments on the panel; first the Carter Jack switch at the extreme left (looking at the front), then the volume control and the Carter Imp Filament switch. The Carter 3-ohm Imp rheostat is mounted in the hole at the extreme right of the panel near the top. The two holes at the bottom are for the two jacks. The Carter double circuit jack No. 104 is fitted in the left hole and the Carter single circuit jack No. 101 in the right hole. The two condensers are mounted last. mounted last.

The next issue of Radio Digest will contain the wiring, balancing and tuning instructions and directions for connecting the A and B current supply units.

Wave traps, for best efficiency in filtering out undesired stations, should either be in completely shielded cases, or placed four or more feet away from the receiver. Often traps do not function because these precautions are not observed.

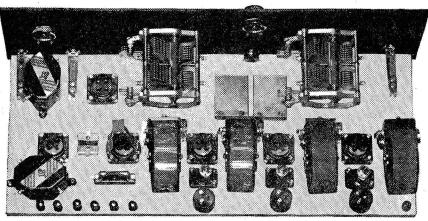


Figure 2.—Rear of Panel and Baseboard with Parts in Position

by obtaining A power by running the the circuit and, still more important, it alternating current from your light socket through a Model J Balkite battery charger and then through an Andrews Abox filter. and then through an Andrews Abox filter. The Abox filter is connected direct to the set in place of a storage battery, making a dependable A power supply. The connections and operation will be fully described in the next issue of Radio Digest. This circuit employs three stages of tuned radio frequency amplification, a detector and two stages of audio frequency

LIST OF PARTS Bremer-Tully Mfg. Co., 520 S. Canal St.,

eliminates one of the greatest general dif-ficulties observed in the past in regard to amplifiers, in maintaining the sensitivity constant over the entire range. This new resistance arrangement, properly balanced with the Counterphase feature, makes the sensitivity almost constant over the entire broadcasting band. It practically eliminates the necessity for a variable adjustment in the sensitivity control, thus affording greater simplicity in construc-

tion as well as operation.

Radio frequency chokes are added to the plate circuit of each radio frequency tube and the "Mikro Mike" condensers have been improved to make easier the balancing of the set.

All of these refinements make the Counterphase Power Six more selective, easily balanced and simple to operate.

balanced and simple to operate.

Essential Kit Made with Care

The essential units for the construction of this set are marketed in one complete kit by the Bremer-Tully Mfg. Co., and in developing these parts, this firm has gone the limit in efficiency. This kit contains, one TA Torostyle Transformer; three TC Torostyle Transformers; two LD-17 condensers, three MMF condensers, three radio frequency chokes, one 500,000-ohm resistance; three 1,500-ohm resistances, socket wrench, 50 soldering terminals and a set of very exact size color charts and understandable wiring diagrams.

In order to build this excellent set it is necessary first to buy the kit. To try to make these coils or parts would not only cause peedless trouble but cut down considerably the efficiency of the receiver. The color charts and diagram accompanying the kit give exact size templates for drilling the front peedless for parts would for places.

ing the kit give exact size templates for drilling the front panel and for placing the instruments on the base-board. For this reason we will not show these two diagrams.

diagrams.

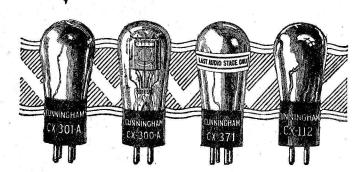
The sockets used are the new Bremer-Tully absorber type, five of the UXA type and one type UXD, which is a special shockproof model with extra side absorbers designed for the detector tube.

The panel is drilled and engraved Micarta 7" x 24" panel as manufactured by the Westinghouse Electric and Mfg. Co. Formica also makes a drilled and engraved panel which may be used. The sub base is of wood, 9¾" x 23½".

Two Bremer-Tully "Euphonic" audio transformers are used, one with a ratio of

transformers are used, one with a ratio of 2.2 to 1 and the other, 4.7 to 1. These transformers help to make the faithful tone quality for which this set is noted.





# 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

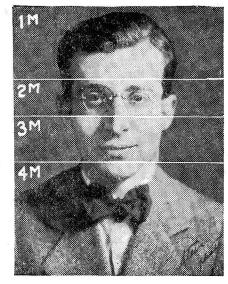
E. T. CUNNINGHAM, Inc.

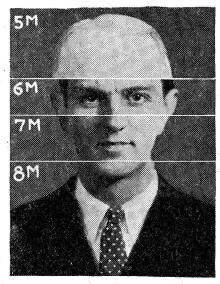
**NEW YORK** 

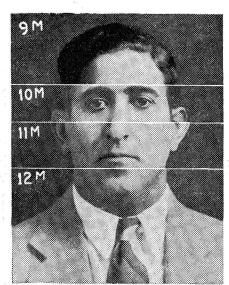
**CHICAGO** 

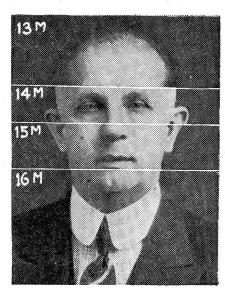
SAN FRANCISCO

# FIFTH FASCINATING GAME OF "WHOZIT" BEGINS

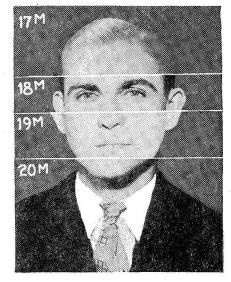


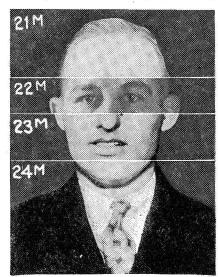


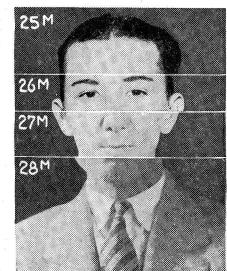




The following artists are in above panel: Maurice Kipen, WSOE; Frank Kuhl, WSOE; Charles Garden, KTHS; Urey McKenzie, KTHS.





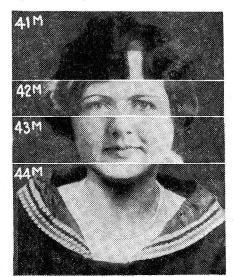




The following artists are in above panel: Louis Peine, KPRC; Richard Shannon, KPRC; Henry Slavick, WMC; Percy G. Root, WMC.

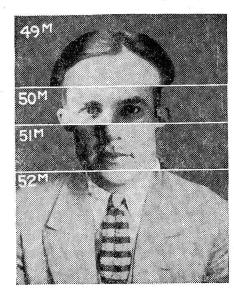


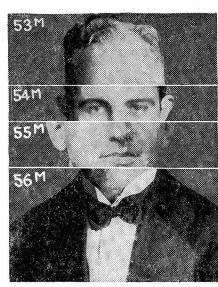


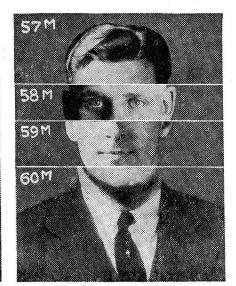


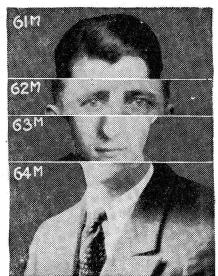


The following artists are in above panel: Jean Weiner, WPG; Hazel McOsker, WOOD; Clara Leckie, CKY; Charlotte Linnell, WNAC.









The following artists are in above panel: Louis Cunningham, WOOD; Edwin Fessenden, WPG; Al Kilgour, CKY; Frank Jenkins, WNAC.

# Radiophone Broadcasting Stations

Corrected Every Issue-Part II-Jan. 15, 1927

NE DOLLAR will be paid to the Radio fan reader of Radio Digest submitting the most errors in any one station's listing in the Direc-tory of Radiophone Stations, which appears in six parts, serially continuously on the next to last page. Letters must reach Radio Digest's office not later than one week from date of issue cor-rected. Readers are not limited to correcting one station, but such corrections must be verified by the stations themselves, and NOT by comparison to other so-called accurate Radio directo-ries or lists. Verifications must accom-pany corrections. Turn in corrections pany corrections. Turn in corrections for as many stations as you can findifyou can find errors! Use separate sheet of paper for each station submitted and place name and address on each sheet. In case of tie, duplicate awards will be made. Until wave lengths become stable again, we will not be able to count these in the challenge.

# United States (Cont'd)

(Note-The second part of the schedule list appears

kitote—The second part of the schedule list appears below.)

KHJ, Los Angeles, Calif. 405.2m-740kc. 500 watts. Los Angeles Times. Announcer, John S. Daggett. Slogan, "Kindness, Happiness, Joy." Daily ex Sun, Mon, 12:30-1:30 pm; 6:30-11. Mon, 12:30-1:30 pm. Sun, 10-12:30 pm; 6:30-11. Mon, 12:30-1:30 pm. Sun, 10-12:30 pm, 6-7:30, 8-11. Pacific. KHQ, Spokane, Wash. 394.5m-760kc. 1000 watts. Louis Wasmer, Inc. Announcer, C. P. Underwood. Slogan, "In the Friendly City." Daily ex Wed, Sun, 2:30-4:30 pm, 5-6, 6-7. Mon, 8-10:30 pm. Tues, 7-8 pm, 8:30-10, 11-12. Wed, 7-10 pm. Thurs, 8-10 pm. Fri, 8-10 pm, 10:30-12. Sat, 5-7 pm. Sun, 11-12:30 pm, 6-7:30, 7:30-9, 9-10. Every other Mon, 11-12 mid, Spokane coyote frolic. Pacific. KIAF, Shitpioc, Minn. 422.3m-710kc, 500 watts. Steele Co. Slogan, "Far from the Maddening Crowd." Mon, Wed, Fri, 7-8 pm. Sun, 2-3 pm. Central.

Steele Co. Slogan, "Far from the Maddening Crowd." Mon, Wed, Fri, 7-8 pm. Sun, 2-3 pm. KICK, Anita, Iowa. 272.6m-1100kc. 100 watts. Atlantic Automobile Co. Operated by Walnut Grove Hog Remedy Co. Announcer, H. A. Marshall. Daily ex Sun, 11:50-12:30 pm. question box, markets. Wed, 8:30-10 pm. Central.

KJBS, San Francisco, Calif. 234.2m-1280kc. 5 watts. Julius Brunton & Sons Co. Announcer, Edward Ludes. Daily ex Sun, 9-11:30 am; 2-4 pm. Sun, 5-6:30 pm. Pacific.

KJR, Seattle, Wash. 384.4m-780kc. 1,000 watts. Northwest Radio Service Co. Announcer, W. C. Gordon. Daily ex Sun, 11:30-12 m, 12 m, time; 5:40-6, 6, time; 6-6:10; 8:30-10, 10. Daily ex Sun, Sat, 8:30-10 pm; 7:15-7:30; 7:30-9; 9-10:30. Pacific.

KLDS, Independence, Mo. 440-9m-680kc. 1,000 watts. Reorganized Church of Jesus Christ of Latter Day Saints. Announcer, Arthur B. Church. Tues, Fri, 6:30 am, Tues, 6:30 am, 2:30 pm, 8. Thurs, 2:30 pm, 8. Sat, 8 pm, Sun, 11 am, 3 pm, 6:30, 9:15. Central.

KLS, Oakland, Calif. 249.9m-1200kc. 250 watts. War-

Mountain.

KOAC, Corvallis, Ore. 280.2m-1070kc. 500 watts.
Oregon Agricultural College. Announcer, W. L.
Kadderly, Mon, 7 pm. Wed, 7:20 pm. Fri, 7:30

pm. Pacific.

KOB, State College, N. M. 348.6m-860kc. 1,500 watts.

N. M. College of Agri. & Mech. Arts. Announcer.

Robert Stewart. Slogan, "The Sunshine State of
America." Daily 11:55-12:30 pm, time, weather,
markets, road reports, news; 9:55-10:10, time;
weather, road reports. Mon, 7:30-8:30 pm, farm
program. Fri, 7:30-8:30 pm, music. Mountain.

program. Fri, 7:30-8:30 pm, music. Mountain. KOCH, Omaha, Nebr. 258.5m-1160kc, 500 watts. Central H. S. Announcer, C. H. Thompson. Mon, Tues, Thurs, 8:30-10:30 pm. Sat, 12 midnight. Sun, 3:30 pm. Central. KOCW, Chickasha, Okla, 252m-1190kc. 500 watts, Okla, College for Women. Tues, Thurs, Sat, 8 pm, music. Wed, 10 am, chapel. Central. KOIL, Council Bluffs, Iowa, 305.9m-980kc. 500 watts. Mona Motor Oil Co. Daily ex Sat, Sun, 11:30-1 pm, music, talks, weather, markets: 1, shoppers' aid. Daily ex Wed, Sun, 5, weather; 5:15, farm; 5:30; 6-12 mid. Sat, 12-12:30 am, 1 pm. Sun, 11 am, service; 12:15, Uncle Jack; 7, 7:30, 11. Central. KOIN. Portland. Ore. 319m-940kc. 1,000 watts. KOIN, Portland, Ore, 319m-940kc, 1,000 watts.

KOMO, Seattle, Wash. 305.9m-980kc. 1000 watts. Bert F. Fisher. Tues, 7-8 pm, 8-9. Wed, 8-9:30, 9-10. Fri, 7-8 pm, 9-10. 10:15-12. Sun, 1-2 pm, 9:10-10:10, church service. Pacific.

KOWW, Walla Walla, Wash. 256.3m-1170kc. 500 watts. Frank A. Moore. Slogan, "The Valley They Liked So Well They Named It Twice." Mon, Thurs, Fri, 7-7:30, 9-12. Thurs, 12-1 pm, Sat, 2-7 pm, 7-7:30, 9-12. Thurs, 12-1 pm, Sat, 2-7 pm, 7-7:30, 9-12. Pacific.

KPJM, Prescott, Ariz. 215m-1395kc, Wilburn Radio Service.

KPO, San Francisco, Calif. 428.3m-700kc, 1,000 watts. Hale Bros., and the Chronicle. Announcer, Curtis Peck, Slogan, "The Voice of San Francisco, The City by the Golden Gate." Daily ex Sun, 6:48-7:15, 7:45, health drills; 10:30, utility features; 12 n, time, weather. Daily ex Sun, 1-7:30 pm, concert, talks. Mon, Tues, Wed, Thurs, Fri, 8-12 mid. Sat, 8-1 am. Fri, 12:15 pm, luncheon talks. Mon, 11-12 n. Sun. 9:45 am. service; 10:45, weather. KPJM, Prescott, Ariz, 215m-1395kc, Wilburn Radio Service.

KPO, San Francisco, Calif. 428.3m-700kc. 1,000 watts. Hale Bros., and the Chronicle, Announcer, Curtis Peck, Slogan, "The Voice of San Francisco, The City by the Golden Gate," Daily ex Sun, 6:45-7;15, 7:45, health drills; 10:30, utility features; 12 n, time, weather. Daily ex Sun, 1-7:30 pm, concert, talks. Mon, Tues, Wed, Thurs, Fri, 8-12 mid, Sat, 8-1 am. Fri, 12:15 pm, luncheon talks. Mon, 11-12 n. Sun, 9:45 am, service; 10:45, weather; 2:40 pm, orchestra; 6-12 mid, concert. Pacific.

KPPC, Pasadena, Calif. 228.9m-1310kc. 50 watts. Pasadena Presbyterian church, Announcer, G, Anton Follman. Wed, 6:45-9 pm. Sun, 10:30-12:30 pm, 6:45-9. Pacific.

Pohlman, Wed, 6:45-9 pm. Sun, 10:30-12:30 pm, 6:45-9. Pacific.

KPRC, Houston, Texas. 296.9m-1010kc. 500 watts. Houston Post-Dispatch, Slogan, "Kotton Port Rail Center." Announcer, Alfred P. Daniel. Daily ex Sun, 10:55 am, time; 11, weather, markets; 12 moon, entertainment. Daily ex Sat, Sun, Fri, 5:30 pm, Uncle Judd's kiddles' hour; 7:30-10 pm, concert. Wed, Sat, 11-12 mid, concert. Sun, 10:45 am, 8 pm, services; 9:30-12, music. Central.

KPSN, Pasadena, Calif. 315.6m-950kc. 1,000 watts. Pasadena Star-News. Daily ex Sun, 12 n, 6 pm, News; 6-7, music. Tues, Thurs, 8-9 pm. Sat, 8-9 pm. Sun, 10:30-12:30 am. Pacific.

KOV, Pittsburgh, Pa. 409m-733kc. 500 watts. Doubleday-Hill Elec. Co. Announcer, Howard E. Clark. Daily ex Sat, Sun, 10:30 am, music; 3, music. Sat, 10:30 am. Eastern.

KOW, San Jose, Calif. 333m-900kc. 500 watts. First Baptist church. Daily 9:30-10:30 am; 6:15-8 pm. Racific.

KRAC, Shreveport, La. 220m-1363kc. Caddo Radio Club.

Pacific.

RRAC. Shreveport, La. 220m-1363kc. Caddo Radio Club.

KRE. Berkeley. Calif. 256.3m-1170kc. 150 watts. Daily Gazette. Announcer, D. L. Black. Daily ex Sun, 7:30 am, 11:15, 5:30 pm. Mon, 8-10 pm. Tues, 9-11 pm. Thurs, 8-10 pm, 10-11. Fri, 9-12 midnight. Sat. 8-1 am, dance program. Sun, 10-11 am, church; 6:30-7:30 pm; 8-9. Pacific.

KRLD, Dallas, Texas. 357.1m-839.6kc. Dallas Radio Laboratories, Inc.

KRSC, Seattle, Wash, 499.7m-600kc. Radio Sales Corp. KSAC, Manhattan, Kan. 340.7m-880kc. 500 watts. Kansas State Agricultural College. Announcer, George Gemmell. Daily ex Sat. Sun. 9-10 am, 9:55, 12:35 pm, 4:30, 6:30. Sat, 12:35 pm. Central. KSBA. Shreveport, La. 260.7m-1150kc. 500 watts. KSBA. Shreveport, La. 260.7m-1150kc. 500 watts. St. Louis Lost-Dispatch. Announcer, W. P. Corwin. Daily ex Sun. 9:40 am, 10:40-11:40, 12:40, 14:0, 24:0, 3:40. Mon, 9-10 pm. Tues, 9:30 pm. Wed, 8-9:30 pm. Thurs, 8-10 pm. Erri, 8-9:30 pm. Wed, 8-9:30 pm. Thurs, 8-10 pm. Central. KSEL Broadcasting Assn. 6:15-9:15 pm. Central. KSLL proatello, Idaho. 260.7m-1150kc. KSEL Broadcasting Assn. 6:15-9:15 pm. Central. KSLL and Share Charles H. Hary. Daily ex Sun. 9:30, 26. Share Charles H. Hary. Daily ex Sun. 9:30, 27. 7:30, 8. 8:30. Thes, 7 pm. 7:30, 8. 8:30. Thurs, 7 pm. 7:30, 9. 30. Thurs, 7 pm. 7:30, 9. 30. Thurs, 7 pm. 7:30, 9. 30. Thurs, 7 pm. 7:30. Pacific. Share Daily ex Sun. 12-1 pm. talks. Daily ex Sat. Sun. 16:30. Thurs, 7 pm. 7:30. Thurs, 7 p

children's hour. Mon. Tues, Wed. Thurs, 6:30.7
pm, twilight hour. Mon. Tues, Wed. Fri. 8-10 pm,
entertainment. Sun, 10 am, 11: 7:45 pm. Pacific.
KTAP, San Antonio, Tex. 263m-1140kc. 10 watts.
Robert B. Bridge, Radio Service Shop. Daily ex
Sun. 10:30-11:30 am; 12:30-1:45 pm; 6:30-8. Sun,
KTBI, pm. Angeles, Alife 29.3 9m-1020kc. 750 watts.
Bible Inst. other and the sun of t

KVOO, Bristow, Okla. 374.8m-800kc. 1,000 watts.
Southwestern Sales Corp. Announcer, Bobby Griffin.
Daily ex Sun, 8-9 am, 11, markets, 11:30, 12:30,
1:30-2:30, 2:45, 3-4; 5:30, children's hour; 6-9, 12.
mid, music. Fri, 11 pm, Knights of the Empty
Skull. Sun, 9:15 am, Bible class; 1-2 pm, music;
5-6, 6-7, 7-9, church service; 12 mid, music. Central.
KVOS, Seattle, Wash. 333.lm-900kc. L. L. Jackson
& L. Kessler.
KWCR, Cedar Rapids, Iowa. 269m-1115kc. 500
watts. Announcer, H. F. Paar, Slogan, "The Voice
of Cedar Rapids," Mon, Wed, Sat, 4:15-5 pm,
9-10:30. Mon, 10:45 pm, Sun, 11 am, 5:15-5:45,
5:45-6:30. Central.
KWG, Stockton, Calif. 247.8m-1210kc. 50 watts.
Portable Wireless Telephone Co. Announcer, Cecil
T. White. Slogan, "Voice of the San Joaquin Valley," Daily ex Sun, 4-5 pm, news, concert, markets.
Tues, Wed, Fri, 8-9 pm, concert. Sun, 6-7 pm,
service. Pacific.
KWKC, Kansas City, Mo. 236.1m-1270kc. 100 watts.
Wilson Duncan Studios. Announcer, Elmer C.
Hodges, Slogan, "Keep Watching Kansas City,"
Tues, Wed, Thurs, Fri, 7 pm, 9. Central,

casters. KXRO, Seattle, Wash. 240m-1249kc, Brott Labora-

KXRO, Seattle, Wash. 240m-1249kc, Brott Laboratories.

KYW, Chicago, III. 535.4m-560kc, 3,500 watts. Westinghouse Elec. & Mfg. Co. Daily 10 am, time, weather. Daily ex Sun, 11:35-11:55 am, home hour; 12-2 pm; 2:30-4, frolic: 44-415, World Crier; 5:45-6, markets; 6-6:15, KDKA; 6:30-7, music; 7-7:30, bedtime story. Daily ex Sun, Mon, 11, time, weather; 11-12, Mon, Thurs, Fri, 4:15-4:30 pm, Fri, 4:30-5 pm. Tues, Wed, Thurs, Fri, 24:30-5 pm; 8-9. Tues, Thurs, Fri, Sat, 9-10 pm. Tues, Wed, Thurs, Fri, 50-11 pm. Sun, 11:35 am, Central; church; 2:30-3:30 pm, chapel; 4:30-5:30, concert; 7, Sunday Evening club; 9:30-11, music. Central.

Sunday Evening club; 9:30-11, music. Central.

KZIB, Manila, P. I. 249,9m-1200kc. I. Beck, Inc.

KZIB, Manila, P. I. 249,9m-1200kc. I. Beck, Inc.

KZM. Oakland, Calif. 239,9m-1250kc. 100 watts.

Western Radio Institute (Hotel Oakland). Announcer, Elbert Cowan. Daily ex Sun, 6:30-7 pm, orchestra. Pacific.

KZRQ. Manila, P. I. 222m-1350kc. 500 watts. Radio Corporation of the Philippines. Slogan, "Radio Manila," KZUY, Baguio, P. I. 360m-833kc. Variable power.

F. Johnson Elser.

NAA, Radio, Va. 434.5m.690kc. 1,000 watts. United States Navy Dept. Daily ex Sun, 10:05-10:20 am, 11:55. time; 3:45-4 pm, 9:55, 10:05-10:20. Tues, 2:45-3 pm, Tues, Tues, 6:45-7 pm Mon, Tues, Wed, Thurs, 7:25-8 pm. Mon, Tues, 8:05-8:20 pm; Mon, 8:25 pm. Wed, Fri, 8:45-9:40 pm. Eastern, WAAD, Cincinnati, Ohio. 258,5m-1160kc. 25 watts.

Mon, 8:25 pm. Wed, Fri, 8:45-9:40 pm. Eastern.
WAAD, Cincinnati, Ohio. 258.5m-1160kc. 25 watts.
Ohio Mechanics Institute. Sat, 9:45 pm. Central
daylight.
WAAF, Chicago, Ill. 277.6m-1080kc. 200 watts. Chicago Daily Drovers Journal. Announcer, Carl Ulrich. Daily ex Sun, 8:45 am, 10:50, 11, 12:50 pm.
Daily ex Sun, Sat, 3 pm, 4:30, live stock and
weather reports. Central.
WAAM, Newark, N. J. 263m-1140kc. 500 watts. I.
R. Nelson Company. Announcer, D. Franklin Scott.
Daily ex Sat, Sun, 11 am; 6 pm. Tues, Fri, 10:30
am; 11:30. Sat, 6 pm. Sun, 11 am. Eastern.
WAAT, Jersey City, N. J. 235m-1276kc. 500 watts.

R. Nelson Company. Announcer, D. Franklin Scott. Daily ex Sat, Sun, 11 am; 6 pm. Tues, Fri, 10:30 am; 11:30. Sat, 6 pm. Sun, 11 am. Eastern.

WAAT, Jersey City, N. J. 235m-1276kc. 500 watts. Bremer Broadcasting Corp. Announcer C. J. Ingram, Slogan, "The Voice at the Gate of the Garden State." Daily ex Sun, 6-7 pm, 7-11. Sun, 2-5 pm, 6-11. Eastern.

WAAW, Omaha, Nebr. 384.4m-780kc, 500 watts. Omaha Grain Exchange. Announcer, James Thompson. Slogan, "Pioneer Market Station of the West." Daily ex Sun, 8:30 am, 8:45, 9:15, 9:45, 10:15, 10:45, 11:15, 11:45, 12:15, 1:15, 1:40, 8, 8:30. Daily ex Wed, Sun, 7-9 pm. Central.

WABB, Harrisburg, Pa. 204m-1470kc. Harrisburg Radio Co.

WABC, Richmond Hill, N. Y. 315.6m-950kc. 5,000 watts. Atlantic Broadcasting Co.

WABF, Pringleboro, Pa. 285m-1052kc. Markle Broadcasting Corp.

WABI, Bangor, Me. 239.9m-1250kc. 100 watts. First Universalist church. Announcer, Prof. W. J. Creamer, Jr., Sun, 10:30 am, 7:30-9 pm. Eastern. WABR, Toledo, Ohio. 263m-1140kc. 50 watts. Lake Avenue Baptist church. Announcer, Maurice Clark. Sun, 10:15-12 noon, 7:15-9 pm. Eastern.

WABW, Wooster, Ohio. 263m-1140kc. 50 watts. Scott The College of Wooster, Dept. of Physics. Announcer, Frank C. Isely.

WABW, Mt. Clemens, Mich. 245.8m-1220kc. 500 watts. Henry B. Joy.

WABZ, New Orleans, La. 275.1m-1090kc. 50 watts. John Magaldi, Jr., Slogan, "Quaker City Sleep Dodgers". Cub. "The American Broadcasting Cub." Sun, 9 pm, music; 10:30, "Sleep Dodgers," Cub. "The American Broadcasting Central.

WABZ, New Orleans, La. 275.1m-1090kc. 50 watts. The Coliseum Place Baptist church. Announcer, W. C. Clemmons. Slogan, "The Station with a Message." Sun, 11-12:15 pm, 7:30-8:48, church service. Central.

WADC, Akron, Ohio. 258.5m-1160kc. 1,000 watts. Allent Theater Broadcasting Station, Announcer, N. C. Isemmons. Slogan, "The Station with a Message." Sun, 11-12:15 pm, 7:30-8:48, church service. Central.

WAFD, Port Huron, Mich. 275.1m-1090kc. 500 watts. Albert Be, Parfet Co. Announcer, Stanley G. Smith.

WADC, Akron, Ohio. 258.5m-1160kc. 1,000 watts. Allen Theater Broadcasting Station, Announcer, Roy Stewart. Daily ex Sun, 11-12 noon, Mon, Fri, 8-11 pm. Thurs, 9-11 pm. Sun, 12:30-1:30 pm. Eastern.
WAFD, Port Huron, Mich. 275.1m-1090kc. 500 watts. Albert B. Parfet Co. Announcer, Stanley G. Smith. Slogan, "Gateway to the Great Lakes," Mon, 8-12 mid. Wed, Fri, 8-10 pm. Sat, 12 mid. Sun, 10:30 am, 7:30 pm. Eastern.
WAGM, Royal Oak, Mich. 225.4m-1330kc. 50 watts. Robert L. Miller. Announcer, R. L. Miller. Mon, 8-12:30 am. Wed, Fri, 8-10:30 pm. Central.
WAGM, Sommerville, Mass. 250m-1199kc. Willow Garages, Inc.
WAIT, Taunton, Mass. 228.9m-1310kc. 10 watts. A. H. Waite & Co., Inc.
WAIT, Columbus, Ohio. 293.9m-1020kc. 1,000 watts. American Insurance Union. Announcer, Don Bernard. Daily ex Sun, 10:05 am, 10:55, time, 12-1 pm, music, news, markets, weather. Daily ex Sat, Sun, 2-4 pm, stock, music. Mon, Tues, Wed, Thurs, 6-7 pm. Fri, Sat, 6-7 pm. Mon, Fri, 7:50-12 mid. Tues, Sat, 9:15-12 mid. Sun, 2-4 pm. First and Third Sun, 6-1 mid. Eastern.
WAMD, Minneapolis, Mon, 2-4 pm. First and Third Sun, 6-1 mid. Eastern.
WAMD, Minneapolis, Mon, 2-4 pm. First and Third Sun, 6-1 mid. Eastern.
Wed, 7:20, benefits and Sun, 12-30 pm. 12-30

WBAP, Fort Worth, Tex. 475.9m-630kc. 3,300 watts. Fort Worth Star-Telegram. Announcer, "The Hired Hand." Club, "Radio Truth League." Daily ex Sun, 9, 10, 11, 12 m, 1 pm, 2, 3, "Port of Missing Men." Mon, Tues, Thurs, Fri, Sat, 12:05-12:30 pm, 7:30-8:30, 9:30-11, concert. Mon, Thurs, Fri, 11-12 midnight. Sun, 11 am, church; 9:30-11. Central.

Men. Mon, Tues, Thurs, Fri, Sat, 12:05:12:30 pm, 7:30-8:30, 9:30-11, concert. Mon, Thurs, Fri, 11-12 midnight. Sun, 11 am, church; 9:30-11. Central midnight. Sun, 11 am, church; 9:30-11. Central MBAR, Sisiht, Wis. 270.1m-1110kc. 500 watts. Kopp Radio Co. Slogan, "The Station of Northern Wissonin. WBAR, Sisiht, Wis. 270.1m-110kc. 500 watts. Kopp Radio Co. Slogan, "The Station of Northern Wissonin. December 11 pm. Central Scott. Solidary 10-1-10 pm. Wed, 8-9 pm. Thurs, 7:30-30 pm. Central Co. Announcer, Hearly Stone. Sun, 7:30 pm. Central Co. Stone Covenant Presbyterian church. Announcer, WBBC, Brooklyn, N. Y. 249.9m-1200kc. 100 watts. Peter J. Testan. WBBL, Richmond, Va. 228.9m-1310kc. 100 watts. Peter J. Testan. WBBL, Richmond, Va. 228.9m-1310kc. 100 watts. Atlass Investment Co.-Stewart Warner. Announcer, Nate Caldwell. Daily ex Sun, 4-6 pm. Mon, 12:02-2 pm; 4-7. Thurs, Sun, 12:02-2 am. Tues, Thurs, Sat, 8-12 mid. Wed, Fri, Sun, 8-10 pm. Sat, 8-12 mid. Wed, Fri, Sun, 8-10 pm. Sat, 8-12 pm; 4-7. Thurs, Sun, 12:02-2 am. Tues, Thurs, Sat, 8-12 mid. Wed, Fri, Sun, 8-10 pm. Sat, 8-2 am. Sun, 12:30-2 pm. Central. WBBP, Petoskey, Mich. 238m-1260kc, 200 watts. Petoskey High School. Announcer, Carl Bowman. Tues, 9-10:30 pm. Fri, 8-9:30 pm. Sun, 10:30 am. Church services; 3 pm. sacred concert. Central. WBR, Staten Island, N. Y. City, N. Y. 416.4m-720kc, 500 watts. International Bible Students' Association. Mon, Thurs, Sat, 8-9 pm, lectures, music. Sun, 10-12 m, 2-4 pm, 9-10:30. Eastern. WBW, Norfolk, Va. 222.1m-1350kc, 50 watts. Rufferer, Slogan, "The School You'd Like to Go To. Mon, 645-7:15 pm. Thurs, 6:45-7:15 pm. 9:30-10:30. Eastern. WBBY, Charleston, S. C. 267.7m-1120kc, 10 watts. WBSP, Charleston, S. C. 267.7m-1120kc, 10 watts. Southtown Economist. Announcer, Lee M

WBMC, Woodside, N. Y. 293,9m-1020kc. Milbrook Co.

WBMS, North Bergen, N. J. 223,9m-1340kc. 10 watts. George Julius Schewerer. Daily ex Sun, 8:30-12 mid. Sun, 1-3 pm, 7:30-11. Eastern.

WBNY, New York, N. Y. 322,4m-930kc. 2,000 watts. B. A. Ruchome Corp. Daily ex Sat, Sun, 7:11 pm. Sun, 2:30 pm; 6. Eastern.

WBOQ, Richmond Hill, N. Y. 236,1m-1270kc. 500 watts. Atlantic Broadcasting Co.

WBRC, Birmingham, Ala, 247,8m-1210kc. 50 watts. Birmingham Broadcasting Co. Announcer, Dud Connolly. Slogan, "The Biggest Little Station in the World," Mon, Wed Thurs, Sat, 8 pm. Tues, 7:30-8 pm. Fri, 8-9 pm. Sat, 11-1 am. Sun, 10:45 am. Central.

WBRE, Wilkes-Barre, Pa. 230,6m-1300kc. 100 watts. Baltimore Radio Exchange. Announcer, Louis G. Baltimore. Wed, Fri, Sun, 8:30-11 pm. Sun, 9-12 mid. Eastern.

WBRE. Wilkes-Barre, Pa. 230.6m-1300kc. 100 watts. Baltimore Radio Exchange. Announcer, Louis G. Baltimore. Wed, Fri, Sun, 8:30-11 pm. Sun, 9-12 mid. Eastern. Wed, Fri, Sun, 8:30-11 pm. Sun, 9-12 mid. Eastern. WBRL, Tilton, N. H. 420m-713kc. 500 watts. Booth Radio Laboratories, Wed. Thurs, 10-11:30 pm. Daily 2-4 pm, 7-10. Eastern. WBRS, Brooklyn, N. Y. 394m-761kc. 100 watts. Universal Radio Mig. Co. Announcer, Gerard Miller. Daily ex Sun, 8-11 pm. Sun, 2-5 pm. Eastern. WBT, Charlotte, N. C. 275.1m-1000kc. 250 watts. Charlotte Chamber of Commerce. WBZ. Springfield, Mass. 333.1m-900kc. 5,000 watts. Westinghouse Elec. & Mig. Co. Announcer, Lestern. WBZA, Boston, Mass. (333.1m-900kc), 250 watts. Westinghouse Elec. & Mig. Co. Same programs as WBZ. Westinghouse Elec. & Mig. Co. Same programs as WBZ.

music, Sun, 7 pm, organ; 8:30, concert, Eastern, WBZA, Boston, Mass. (333.1m-900kc), 250 watts. Westinghouse Elec, & Mig. Co. Same programs as WBZ.

WCAC, Storrs, Conn, 275.1m-1090kc, 500 watts. Connecticut Agricultural College, Announcer, Daniel E. Noble, Slogan, "From the Nutmeg State," Mon, Wed, Fri, 7:30-9 pm. Eastern.

WCAD, Canton, N. Y. 263m-1140kc, 250 watts. St. Lawrence University, Announcer, Ward C, Priest, Slogan, "The Voice of the North Country," Daily, 11 am, weather, reports, talks, time. Thurs, Fri-7:30-12 midnight, from WGY on 1,560 meters. Wed, 8 pm. Eastern.

WCAE, Pittsburgh, Pa. 461.3m-650kc, 500 watts. Pittsburgh Press, Announcer, Jerry Wyman, Mon, Wed, Sat, 11:15 am. Daily ex Sun, 12:05 pm, farm talks; 12:15, flashes; 12:30, weather; 6, dinner hour; 7, 8, 9, Daily ex Sat, Sun, 10 pm. Daily ex Sun, Sat, 3:50 pm, news; 4, 5:40, markets; 5:50, farm school, Sun, 9:30 am, 11, 3 pm, organ; 4, 5:30, 6:30, 7:18, WEAF; 9:15, WEAF; 10:15, music, Eastern.

WCAH, Columbus, Ohio, 265,3m-1180kc, Entrekin Elec, Co.

WCAJ, University Place, Nebr. 254,1m-1180kc, 500 watts, Nebraska Wesleyan University. Announcer, Hector Stiffer, Slogan, "The College on the Hill." Daily ex Sun, 9:45 am, Mon, 7 pm; 3:15. Central. WCAM, Camden, N. J. 336,9m-890kc, 250 watts. City of Camden.

WCAA, San Antonio, Tex, 263m-1140kc, 1000-2000 watts. Southern Radio Corporation of Texas An-

Montmental Radio, Mc. Announcer, Wm. L. Atkinson. Mon, Wed, Fri, 8-10 pm, 10-11. First Sun, of Mon, church. Third Church of Christ, Scientist.

WCAR, San Antonio, Tex. 263m-1140kc. 1000-2000 watts. Southern Radio Corporation of Texas. Announcer, J. H. Dreyer. Daily ex Sun, 8-10 pm. Central.

WCAT, Rapid City, S. D. 239-9m-1250kc. 50 watts. South Dakota State School of Mines. Announcer, J. O. Kammerman. Daily ex Sun, 9:30 am, 12:30 pm, oweather, reports. Thurs, 7:30 pm, concert. Mountain.

WCAU, Philadelphia, Pa. 277.6m-1080kc. 500 watts. Universal Broadcasting Co. Announcer, Stan Lee Brozz. Slogan, "Where Cheer Awaits U." Mon, 7:30-12 midnight. Tues, 6:45-12 midnight. Wed, 6:45-12 midnight. Fri, 6:45-12:30 am. Sun, S-9 pm. Eastern.

WCAX, Surlington, Vt. 252m-1190kc, 100 watts. University of Vermont. Slogan, "The Voice of the Green Mountains." Fri, 7-8 pm. Eastern.

WCAX, Carthage, Ill. 245.8m-1220kc. Carthage Colege. WBA, Allentown, Pa. 254.1m-1180kc. 200 watts. Cuen. Gity Radio station. Wed. 8:15-11 pm. Fri, 6:55-7.45 pm. bedtime stories, Bible lessons. Sat, 250-11 pm, dence music. Sun, 10 am, 5:30 pm, 7, church. Voice of Rules, Man. Prospers. Tues, Thurs, 2:30-3:45 pm, service. Sun, 10 am, 5:30 pm, 7, church. Voice. Man. Prospers. Tues, Thurs, 2:30-3:45 pm, service. Sun, 10 am, 5:30 pm, 7, church. Sun, 10 am, 5:30 pm,

(To be continued)

# \$26,000.00 IN PRIZES FOR SOLVING "WHOZITS"

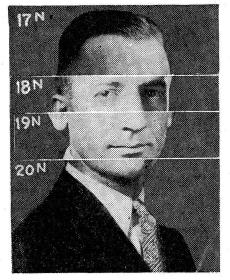




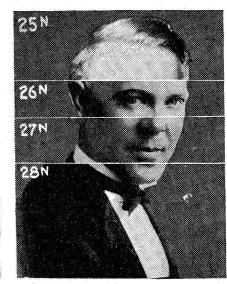


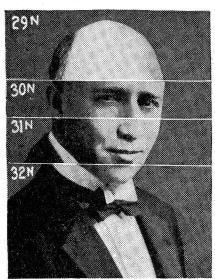


The following artists are in above panel: Honorine LaPee, KMOX; Lucille Mayer, KMOX; Pearl Howard Melvin, WOW; Mrs. Guy Ulysses Purdy, WOW.







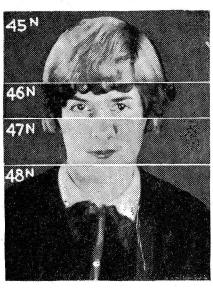


The following artists are in above panel: E. E. Schultz, WLW; W. G. Kirchner, WLW; Bill Perry, KJR; Bud Wieser, KJR.

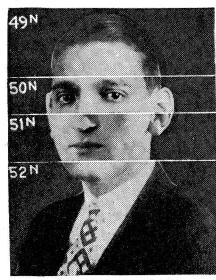


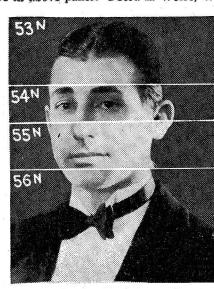


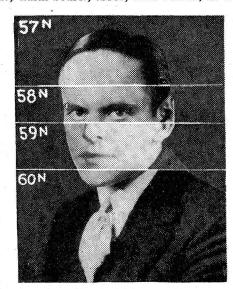




The following artists are in above panel: Deora L. Wolfe, WJR; Edith Sedrel, KOA; June Parker, KFWB; Nell Larson, KFWB.





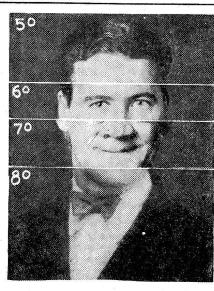


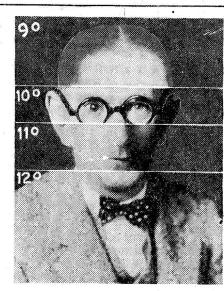


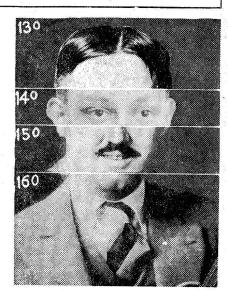
The following artists are in above panel: Joe Davis, WMCA; "Uke" Al. Bert, WMCA; Leroy Burrill Phillips, KOA; John F. Patt, WJR.

# ASSEMBLE THESE PICTURES OF RADIO ARTISTS

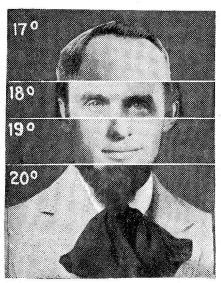


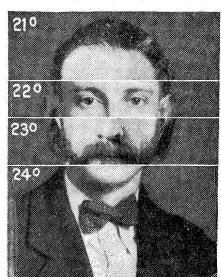




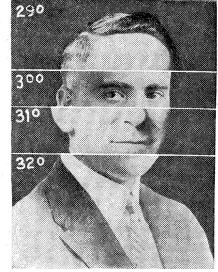


The following artists are in above panel: Avery Powell, WJAX; Art Cook, WHK; Dick Moffet, WJAX; Eddie Soto, WHK.

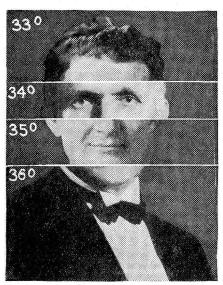


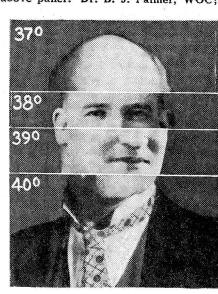


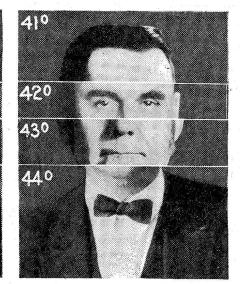


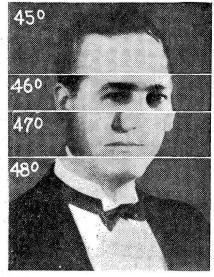


The following artists are in above panel: Dr. B. J. Palmer, WOC; Reed E. Snyder, WOC; Frank R. Marks, WHB; S. F. Rendina, WHB.









The following artists are in above panel: George E. Butts, WMAK; Uncle Dave Macon, WSM; Walter Schoggin, KVOO; Duke Rehl, WHT.









The following artists are in above panel: Ruth Pettit, WMAK; Mrs. Daisy Fentress, WSM; Princess Pakaneli, KVOO; Alice Johnson, WHT.

# Radio Digest

Reg. U. S. Pat. Off. & Dom. of Canada Published by the

RADIO DIGEST PUBLISHING CO.,
(Incoroporated)
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

CTRACES LASTICOUNCED 241 PUBLISHED SEMI-MONTHLY

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

Vol. XX

January 15, 1927

No. 1

# Who Is to Pay for Radio?

M ANY times during the past few years interested persons and economists have asked the vital question, "Who is to pay the bill for Radio?" We have steadfastly maintained that advertising would. We are now seeing that prophecy come true.

Many large national magazines, and one in particular, are almost solely supported by the advertisers' dollars. One very large magazine sells for a ridiculously low price, hardly as much as the magazine is worth as waste paper. The publisher of that magazine could not give his readers the stories, illustrations and splendid articles that every issue contains, were it not for the many conspicuous advertisers.

The public does not object to the advertising in this magazine we are discussing. In fact, it is known that many of its readers buy the periodical chiefly to look

over the advertising pages.

The American public are applying the same philosophy to high grade good will advertising via the Radio microphone. It is the answer to "Who will And the big advertisers are finding that broadcast or Radio advertising of the proper quality and correctly done, is a wonderful new medium to reach the public.

Read from the splendid exposition of broadcast advertising which was prepared by Lee Bristol, of the Bristol-Myers company, manufacturers of Ipana toothpaste, and sponsors of the Ipana Troubadours over the Red Network of the National Broadcasting company. He says:

"The statistics of one of the largest stations made us sit up and take notice. They showed . . . an approximate total audience of more than 20,000,000

persons.

"With the network nook-ups maintained by some of the biggest stations, broadcasting simultaneously from stations all over the country, it is possible to obtain almost a complete national coverage. At least this applies to practically all the territory east of the Rocky Mountains, an area with a population of over

"We studied these figures but remained incredulous as to the value of the medium. Then a year ago last April . . . we ventured into Radio advertising. "Of course, it goes without saying that Radio adver-

tising and a national magazine campaign are not comparable. But I know of no other form of advertising that carries the peculiarly human interest value this does, and creates to such a degree good will toward the advertiser on the part of the public.

"I do not claim that Radio advertising is to be credited with the direct sale of merchandise. I do claim that it serves as an auditory billboard, potentially as important in advertising as the ocular, with which we are all familiar.

"The manufacturer . . . has never had such an opportunity to enter innumerable homes and leave his listeners in such a cordial, friendly and grateful state of mind. It is advertising that tucks away the name of the product in the mind along with the pleasant memory of entertainment.

Another point to watch is high standard of quality in the entertainment you offer, taking care to broadcast only from the first class station in any community

"Our vehicle is music—good music—cheerful music—joyous advertising, and we have received thousands of cards and letters, various as life itself, as a result Letters showing how we have cheered the sick in hospitals; entertained lonely people on the plains; provided entertainment for large gatherings of people in hotels; whiled away tedious hours for passengers on a snowbound Canadian train.
". . . The largest station in the country, realizing

that a turn of a dial is all the revolt necessary on the part of its public tired of listening in on programs overloaded with advertising, has stipulated against this very thing, imposing exacting limitations upon its advertising clients. . . . It is a list of restrictions that would seem to make the case hopeless. But 'the faith' is quite scrupulously maintained for it pays to respect a valuable medium."

# RADIO INDI-GEST

### Adoration

Sweetheart with the rose-kissed cheek, You move me to this song, A finer feeling ne'er will speak; So high it knows no wrong.

Though untold time it's taken, For slow nature to unfold, At last 'tis not mistaken And has struck the proper mold.

You personify the fragrance That rules the Realm above; I look an Angel askance With you on Earth to Love-

My wave length.

ERNEST O. GROSS.

# Well, Whattaya Gotta Say About It?

WICE a month, Indi-Gest, aided and abetted by P. T. S. (of Fort Wayne, KKKindiana), will allow Radioknuts to chew the fat upon some vital question of general Radio interest. This issue's question:

If 6,000,000 receiving sets are installed within the borders of continental United States, why don't Bill and George Hay, Graham McNamee, Lambdin Kay, the Hired Hand, Leo Fitzpatrick, Gloomy Gus Grubb, Pete MacArthur, Henry Field, et al, wear brown derbies?

Der Dritte Tromboner Gespieler: "Yes and no. On

Der Dritte Tromboner Gespieler: "Yes and no. On the other hand, I am convinced that the safer course would be to pursue the safer course."

Old King Tutt, Hiz-self: "If you are referring to the percentage found in the usual run of hair tonic, I would recommend you distil Ed Pinaud's brand in a copperlined kettle."

Barbara of the Short Shaves: "My yes, oh mercy me, for goodness sake, yes. I agree with you perfectly—his left leg IS wood, because I pushed a thumb tack into it."

Tondon Bobby: "At 2LO we have encountered a most unusual incident, dontcher know. The walls of the studios, to be soundproof, have to felt. This, the B. B. C. insists, makes the artists sing with much more feeling.

Well, now that that's settled, the great questions for the First and Second February numbers, respectively, of Radio Indi-Gest will be: "Resolved, that you can always tell a wave-grasshopper, but you can't tell him much," and "If George Washington were alive today, would be permit broadcasting by direct wire of his crossing of the Delaware?"

### Ode to the Whozits

Whozit, Whozit, What a game! Many faces without a name, Come this way but not in vain; For the artists are of fame.

Misplaced segments, misplaced names All go as part of the game.
Beware lest they are placed awry;
Get the paste and have a try.

Eyes of blue, of brown or black Of the ears they do not lack; Lips that could a volume speak; But to me they are a freak.

So I'll paste them down with care, Lest they wander from the trail; Send them to the "Digest"—there! Place them on the morrow's mail.

WHOZITEER LILLIAN.

# Insert Missing Word Before "World"

Dear Indi: The romantic young announcer momentarily forgot, in the ardor of his newly-awakened affections, that he had failed to shut off his "mike." Hence, he exclaimed spontaneously, as the fair soprano entered the studio: "Oh, Alice, how lovely you are this morning. I adore you!" and more than one hundred thousand fans, listening in, chortled with glee.

And thus originated the popular phrase: "I'll tell the world."

# NuRsRie RiMes % @c/.

NuRsRie RiMes % @c/.

Hie DeCkerie DeCkEriE DocK/,c;.
HeNrey LookEd at Thee Clock, .@:.
THee Clock stRiked OnE.,
BuTT hee HaD jEst BuGun—
too Reede leeteRs frOam Fanns %—
AsKin HoW too SmoAK HaMMs/.,
Oar WaUT waz GooD to FedE a Dogue,
& PleeZe seNd mEE a SedE caTalOgue.
Hee DeD noTT caRe
Iff hee MesseD upp tHee Aer,
Talk is Cheep i've HeeRed Em say,
BuTT we WazenT lookin feR barGins theT day
So wE LeTT him Rave and LeTT him shoUt
And PrOMptlie TunnEd thee SuCker OUT.
Yourns Turlie,
OLD KING TUTT

Station HUMOR

OLD KING TUTT

Hiz-Self.

Broadcasting on 131313 Meters
Arthur C. Stowell, Announcing

"At 8:15 p. m. the Grand Bank's quartet, composed of various members of a Gloucester fishing boat crew, will render a pleasing little vocal number, entitled, "Three Crabs and a South Sea Octopus.' A nice kettle of fish, as your Aunt might say. However, if the Grand Bank's quartet arrives from the fishing grounds without getting floundered on a bar somewhere, or rather around one, we hope you enjoy their little program contribution. one, we hope you enjoy their little program contribution swimmingly."

# It's Coming to Him



# Condensed BY DIELECTRIC

Each time that Station WSMB, New Orleans, Louisiana, is tuned in there is an added feeling of cordiality toward the broadcaster. This may be due largely to the personality of the announcer—the same one having charge of Mike each time I get them—as the features presented are seldom extraordinary either in character or talent. There is a quality in the voice of this announcer which rings true to the spirit of friend-

liness, while the announcements are utterly free of

any taint of self-glory.

When the National Broadcasting company secured the reappearance of Ernestine Schumann-Heink on their program they presented a great musical artist with as large a Radio following as held by any artist of the day. After so many years of generous response to the public's demand for more program than concerts listed; after, too, giving her artistry so freely to the encouragement of the war's maimed, it would be base ingratitude to mention any defects that hour of broadcasting revealed. Remarkable is her vitality, but more so her wonderful retention of vocal control, besides revealing a huge capacity for taking us all into her affection. It is fortunate that so gifted a woman should live until Radio broadcasting could reveal her to those no other medium might reach.

Surely the majority listening to a program arranged by a singing club of Dayton, Ohio, broadcast through Station WLW, Cincinnati, Ohio, experienced nothing but pleasure from their efforts. The selections chosen for the evening were taken from among songs known to everyone. That should have insured them a continuous hearing. Add to that values blanding have to everyone. That should have insured them a continuous hearing. Add to that voices blending harmoniously in common accord as to phrasing and modulation and you have a feature to make Radio's appeal almost universal. By some miraculous means I was able to hear most of this feature, while denied the pleasure of hearing numbers marked for broad-casting on subsequent evenings.

Precious little weight would the law have with me if I could reach some of these station directors whose length of programs, broadness of tuning or shifted position in wavelength prevents getting distant features worthy a place of review in these columns. Just here reference is intended to Station KOA, Denver, Colorado, which should have a full review of the anniversary program, but which must be content with a partial review. Seldom do my dials register this station with success, as compared with former years, yet it is possible to state how well balanced was the program and pleasing the instrumental and vocal numbers received. No doubt those able to get the whole program found it worthy a place beside that presented on their first anniversary. How long shall we suffer this intolerable condition in Radio broadcasting to con-

Station WSB, Atlanta, Ga., offered skillful saxophone players interspersed with—TELEGRAMS; WNAC, Boston, Mass., an organ recital from the Metropolitan theatre in that city which introduced some interesting and surprising effects on that instrument; another concert by the famous Boston symphony orchestra of classical numbers ranging from Bach to Rimsky Karsakoff-at least the last named composer was to be represented. Thanks to the stations rebroadcasting this feature that last great number, "Scheherezade," was not heard, Some other minor feature must needs have the air and the station to which I was listening—WJZ, New York—got the same atmospheric tribute.

# AN EVENING AT HOME WITH THE LISTENER IN IN EASTERN TIME

	<u></u>	The same and the s	- E-Parametric		114	EASIE	LKN II	ME		to an in the same of the same	
	Call	Location	Met	Kc.	Saturday	Sunday	Monday	Tuesday	Wed.	Thursday	Friday
	CFCA CFCN CJCA CKAC CKCL CKNC CKNC CKY CNRO CYH CYJ	Toronto Calgary Edmonton Montreal Toronto Toronto Winnipeg Ottawa Mexico City. Mexico City.	356.9 434.5 516.9 410.7 356.9 384.4 434.5	690 580 730 840 840 780	12:00- 2:00 11:00- 1:00 7:15-12:00 7:00- 8:00 9:00-10:00 8:30-11:30 7:30-12:30 Silent	2:45- 5:45 3:00- 4:55 Silent 7:00-10:00 Silent Silent	Silent 9:30-11:30 Silent Silent 8:00- 9:00 8:30-12:00 Silent Silent	7:15-11:30 6:45-12:00 Silent	Silent Silent 9:00- 1:00 7:30-12:30 10:30- 1:00	10:30-11:00 11:00- 1:00 8:30- 9:30 12:00- 1:00 Silent 8:30-10:00 Silent Silent	10:00- 1:00 Silent Silent Silent
	KDKA KFAB KFDM KFH KFJF KFKX KFNF KFOA KFOA	Pittsburgh Lincoln Beaumont Wichita Los Angeles. Okla. City Hastings Shenandoah Seattle Long Beach.	315.6 267.7 467 260.7 288.3 461.3 454.3	880 950 1120 642 1150 1040 650 660	Silent 8:30- 9:30 10:00- 5:00 8:15-11:30 Silent 8:00- 1:00 12:30- 2:00	2:30-10:00 Silent 8:00- 1:00 Silent	Silent 8:30- 9:30 10:00- 2:00 8:15-10:45 6:15-11:00 8:00-10:00 10:00- 1:00	9:00-11:00 8:30- 9:30 10:00- 2:00 Silent 6:15- 7:15 8:00-10:00 9:00- 2:00	6:15- 9:55 6:30-11:30 Silent Silent 10:00- 2:00 8:15-10:45 6:15- 7:15 8:00- 1:00 10:00- 1:00 9:00- 2:00	6:15-12:00 Silent Silent Silent 9:30- 2:00 8:15-10:45 6:15-11:00 8:00- 9:00 Silent 9:00- 2:00	1 9:00- 2:00
	KFOB KFSD KFUO KFWB KFWI KGO KGW KHJ KIAF KJR	Fort Worth. San Diego. St. Louis. Hollywood. San Fran. Oakland. Portland. Los Angeles. Sihtipok Seattle.	245.8 545.1 252 249.9 361.2 491.5 405.2	1220 550 1190 1200 830 610 740	7:00- 1:00 8:45- 9:45 11:00- 2:00 Silent 12:00- 4:00 9:00- 3:00	10:15-11:15 12:00- 2:00 11:00- 3:00	9:00-10:00 9:30- 2:00 11:00- 3:00 9:00-12:00 9:00- 3:00	11.00 3.00	9:00- 1:00 9:00- 1:00	9:30-10:30 7:00-10:00 Silent 11:00- 2:00 1:00- 3:00 11:00- 3:00 9:00- 3:00 9:30- 2:00 Silent 10:00- 2:00	9:00- 3:00
	KLDS KLX KMA KMMJ KMOX KNX KOA KOAC KOIL KPO	Oakland Shenandoah Clay Center. St. Louis Hollywood Denver Corvallis Council Blfs	229 280.2 336.9 322.4 280.2	590 650 1310 1070 890 930 1070 980	9:00-10:00 Silent 10:00-12:00 9:00-10:00 7:30-12:00 10:00- 2:00 12:30- 1:30 Silent 8:30- 1:00 8:30- 3:00	7:30- 1:00 5:00- 9:30	Silent 11:00- 1:00 10:00-12:00 9:00-10:00 7:30-12:00 9:30- 3:00 9:30-10:15 10:00-12:00 7:03- 1:00 9:30- 3:00	9:00-12:59 Silent 10:00-12:00 9:00-10:00 7:30-12:00 10:00- 4:00 9:30- 1:00 Silent 7:03- 1:00 9:30- 2:00		9:00-10:00 Silent 10:00-12:00 9:00-10:00 Silent 10:00- 3:00 Silent Silent 7:03- 1:00 9:30- 2:00	
	KSL KSO KTAB	Pasadena Shreveport Salt Lake Clarinda Oakland Seattle Hot Springs. Fayetteville.	260.7 299.8 405.2 302.8 305.9 374.8	950 1150 1000 740 990 980	10:00- 1:00 10:00- 1:00 Silent Silent	9:30-12:00 Silent 10:45-12:15	8:30-11:00 Silent 10:00-12:00 9:00- 1:00 8:30-10:00 11:00- 1:00 10:00-11:00 10:00-12:15 7:00- 2:00 7:00- 2:00	9:00-12:30 8:30-10:00 11:00- 1:00	9:30- 1:00 8:30-10:00 11:00- 1:00 Silent	7:30-11:00 11:00-12:00 9:00-10:30 9:30-1:00 8:30-10:00 12:00-3:00 Silent 10:00-1:00 8:00-2:00 8:00-2:00	Silent Silent Silent 9:30-12:00 8:30-10:00 11:00- 1:00 10:00- 3:00 10:00- 1:00 8:00- 2:00 8:00- 3:00
	KWWG KYW NAA PWX WADC WAAM	Havana Akron	348.6 278	1080 969 860 1080 560 560 750	Silent 8:00- 1:00 Silent Silent 6:30-12:00 Silent 8:30-11:30 9:00-10:00 6:00-11:00 7:30-11:30		10:00-11:00 8:00- 1:00 10:15-12:00 9:30- 1:00 Silent 7:45- 8:00 Silent 9:00-10:00 6:00-11:00 7:30-11:30	Silent 8:00- 1:00	10:00-11:00 8:00-1:00 10:15-12:00 Silent 6:30-12:00 7:25-8:40 8:00-12:00 9:00-10:00 6:00-11:00 7:30-11:30	Silent 8:00- 1:00 Silent 9:30- 1:00 6:30-12:00 7:45- 8:00 8:30- 9:30 9:00-11:00 6:00-7:00 Silent	10:00-11:00 8:00- 1:00 10:15-12:00 Silent 6:30-12:00 7:45- 8:00 Silent 7:50- 3:00 6:00-11:00 7:30-11:30
	WBAL WBAP WBAR WBBM WBBR WBCN WBZ	Minneapolis Baltimore Fort Worth. Sisiht Chicago Staten Isld. Chicago Springfield.	246 475.9 406 226	1230 1220 630 756 1330 720 1130 900	9:30-10:30 8:30- 9:30 Silent 8:30-12:00 Silent 9:00- 3:00 8:00-10:00 6:15-10:45 6:00-11:30	3:30- 7:00 7:15-11:30 6:30- 7:30 10:30-12:00 11:00-12:00 5:00- 2:00 9:00-10:15 5:00-10:15 6:30-11:00 3:00-10:15	6:00-11:30 8:00- 1:00 6:00-12:00 8:30- 1:00 10:00-11:00 Silent 8:00- 9:00 Silent 6:15-11:30 6:00-12:30	6:00-10:15 7:15-1:00 6:00-12:00 8:30-12:00 Silent 9:00-1:00 Silent 8:00-2:00 7:15-11:03 6:00-1:00	6:00- 7:00 7:15-12:00 Silent Silent 9:00-10:00 9:00- 3:00 Silent 8:00- 1:00 6:15- 9:00 6:00-12:30	6:00- 7:00 7:15- 1:00 6:00-12:00 8:30- 1:00 8:30- 9:30 9:00- 1:00 8:00- 9:00 6:15-11:30 6:00-12:30	6:00:11:00 7:15- 1:00 6:00-12:00 8:30-12:00 Silent 9:00-11:00 Silent 8:00- 1:00 6:15-11:03 6:00-12:00
	WCBD WCCO WCFL WCOA WCX WDAF WDBO WDOD	Philadelphia Zion MinnSt. P. Chicago Pensaccla Detroit Kansas City Winter Park Chattanooga New York	344.5 416.4 491.5 222 516.9 365.6 239.9 256.3	1350 580 820 1250 1250	Silent Silent 7:15-12:05 7:00- 1:00 Silent 6:00- 7:00 7:00- 2:00 6:30- 8:55 Silent 5:00-12:00	5:00-11:00 9:00-11:30 5:10-12:30 5:00- 9:45 Silent 7:15- 8:15 5:00- 5:45 7:30- 8:30 10:15-11:15 2:00-10:45	6:45-11:30 Silent 7:15-1:30 Silent 7:30-11:00 6:00-9:00 7:00-2:00 6:30-10:10 7:30-10:15 4:00-12:00	7:30-11:30 9:00-11:30 8:00- 1:00 7:00- 1:00 Silent 6:00-11:00 7:00- 2:00 6:30-10:30 10:00-10:30 4:00-12:00	7:30-11:00 Silent 8:00- 1:30 7:00- 2:00 7:30-11:00 6:00- 9:00 7:00- 2:00 7:30-10:15 4:00-12:00	6:30-11:00 9:00-11:30 7:15-12:05 7:00- 1:00 Silent 6:00- 9:00 7:00- 2:00 6:30-10:00 Silent 4:00-12:00	7:30-11:00 Silent 6:15-11:05 7:00- 1:00 7:30-11:00 6:00-11:00 7:00- 2:00 6:30-10:00 7:30- 1:00 4:00-12:00
	WEBY WELL WELL WINR WFAA WFBE	Providence Columbus Chicago New York Boston Chicago Dallas Cincinnati Berrien Spg. Philadelphia	293.9 370.2 272.6 348.6 265.3 475.9 232.4	810 1100 860 1120 630 1290	5:30- 9:30 Silent 7:00- 3:00 Silent 6:45-10:00 7:00- 3:00 7:00- 1:00 7:30-10:00 Silent 6:45-11:00	6:30- 7:45 Silent 6:00-10:00 Silent 3:00-11:15 3:00- 1:00 7:00- 1:00 9:30-11:00 9:15-10:15 7:30- 8:30	5:30- 9:30 Silent Silent Silent 6:00-12:00 Silent 7:30-10:30 7:30-12:00 9:15-10:15 6:45- 7:45	5:30- 9:30 7:00- 9:00 6:00-12:00 7:00- 9:00 6:00-10:36 7:00-11:00 7:30- 2:00 7:30-11:30 Silent 6:45-11:30	5:30- 9:30 8:00- 9:00 6:00- 1:30 7:00- 9:00 6:00-11:00 8:00- 3:00 Silent 7:30-11:30 9:15-10:15 6:45- 7:45	5:30- 9:30 8:00-11:00 6:00-12:00 Silent 6:00-11:00 7:30-11:30 7:30-11:30	Silent Silent 6:00-12:00 7:00- 9:00 6:00-11:00 7:30-10:30 7:30-10:30 10:00-11:00 6:45- 7:45
	WGHB WGHP WGN WGR WGY	Evansville New York New York Chicago Clearwater Detroit Chicago Buffalo Schenectady Milwaukee	266 270 302.8 319 379.5	1130	Silent 6:00-11:30 8:30-12:00 6:00- 2:00 8:30- 1:00 Silent 6:00-12:00 Silent 7:30-11:30 7:15- 9:00	Silent 6:00-11:30 3:00- 6:00 6:00- 2:00 Silent Silent 3:00-12.*0 7:45-10:15 7:30- 8:30 4:15- 5:15	Silent 7:30-11:30 9:00-11:30 Silent 8:30-1:00 6:00-10:00 Silent 8:00-1:00 6:30-7:30 7:10-10:30	7:30-11:00 6:00-11:30 Silent 6:00- 2:00 8:30- 1:00 6:00-10:00 7:01-12:00 6:30-11:30 6:30-11:30 7:10-10:30	Silent 7:30-11:30 7:00- 9:15 6:00- 2:00 8:30- 1:00 6:00-10:00 7:01- 1:30 6:30-11:00 7:10-11:30	Silent 6:00-11:30 10:30- 1:00 6:00- 2:00 8:30- 1:00 6:00-12:00 7:01-12:00 6:30-11:00 6:30-12:30 7:10-10:30	8:00-11:00 7:30-11:30 7:00- 9:10 6:00- 2:00 8:30- 1:00 6:00-12:00 7:01-12:00 9:00- 1:00 6:30-12:00 7:10-10:30
2 2 2 2 2 2 2	WHAS WHAZ WHB WHK WHN WHO WHT WIBO WIP	Atlantic City Louisville Troy Kansas City Cleveland New York Des Moines. Chicago Chicago Philadelphia	399.8 379.5 365.6 272.6 361.2 526 399.8 226	750 790 820 1100	7:30- 9:00 8:30-10:00 Silent 5:00-12:00 Silent 5:00-1:00 7:00- 9:00 7:00-12:05	7:50-10:00 5:30- 6:30 Silent 8:00- 2:00 5:00- 9:45 6:30-12:00 6:00- 1:00 7:00- 1:00 3:00- 1:00 4:00-11:00	7:30-12:00 Silent 9:00-12:00 8:00- 9:00 7:00-11:00 6:30-12:00 8:30- 1:00 Silent 6:45- 8:00	7:30- 9:00 8:30-10:30 Silent 8:00-10:30 6:00-11:00 8:00-12:00 7:00- 1:00 7:00- 3:00 6:00-11:30	Silent 8:30-10:00 Silent 8:00-12:30 7:00-11:00 7:00-12:00 7:00-1:00 7:00-1:00 6:00-8:00	7:30 12:00 8:30-10:00 Silent 8:00-11:00 6:00-10:00 6:30-12:00 8:30- 1:00 7:00- 1:00 7:00- 3:00 6:00-11:30	7:30- 9:00 8:30-10:00 Silent 8:00- 9:00 6:00-11:30 6:30-12:00 7:00- 1:00 7:00- 2:00 6:00- 8:00
	WJAX WJAZ WJJD WJR WJZ WKAQ WKRC WLIB WLIT	Providence Jacksonville Chicago Mooseheart Pontiac New York San Juan Cincinnati Chicago Philadelphia	336.9 329.5 370.2 516.9 454.3	618 890 910 810 580 660 880 920 990 760	Silent 8:00-10:00 7:30- 2:00 9:00-12:00 7:00-12:30 7:00-12:00 Silent Silent 8:30- 2:00 Silent	6:00- 9:15 8:00- 9:00 6:00-10:00 3:00- 6:00 10:00-11:00 7:00-11:15 Silent 6:45- 1:15 6:00- 7:15 Silent	7:45-11:00 7:00-12:00 Silent Silent 7:00-10:00 7:00-11:30 Silent 6:15- 1:00 Silent 8:00-11:30	7:30-10:00 7:00-10:00 7:30- 1:00 9:00- 2:00 7:00-10:00 7:00-11:45 Silent 10:00-12:00 8:00- 2:00 Silent	7:30-11:00 8:00-10:00 7:30- 1:00 9:00-10:00 7:00- 1:00 7:00-11:30 7:00- 9:00 8:15- 1:00 8:00- 2:00 7:30-11:00	7:45-11:00 Silent 7:30- 1:00 9:00- 2:00 7:00-10:00 7:00-11:30 7:00- 9:00 8:00-10:00 8:00- 2:00 Silent	7:45-11:30 7:00-10:00 7:30- 3:00 9:00- 2:00 7:00- 9:00 7:00-12:00 7:00-9:00 Silent 8:00- 2:00 7:00-11:00
	WLW WLWL WMAK WMAQ WMBB WMBF WMC WMCA	Cincinnati. New York Lockport Chicago Chicago MiamiBea'h Memphis New York Boston	384.4 265.5 447.5 250 384.4 499.7 340.7 431	870 710 780 1130 670 1200 780 600 880 697	6:30- 1:00 7:45-10:00 Silent 7:00- 9:30 7:00-11:00 8:00-12:00 7:00- 1:00 9:30-10:30 6:00-12:15 6:00-11:00	7:00- 8:55 7:30- 9:50 Silent 7:45- 8:45 Silent 4:00-12:00 7:00- 1:00 Silent 6:00-12:15 4:00- 8:30	Silent 7:00-11:20 8:00-11:20 7:15-10:30 Silent Silent 7:00- 1:00 9:30-10:30 6:00-12:15 6:00-12:30	6:30- 8:55 7:00-10:00 9:00-11:45 7:15-10:30 7:00-10:45 8:00-12:00 9:30- 1:00 6:00-12:15 6:00-11:05	6:30- 1:00 7:00-12:00 9:00-11:30 7:15-10:00 7:00-11:00 8:00-12:00 7:00- 1:00 Silent 6:00-12:15 6:00-10:00	6:30- 8:55 7:00- 1:15 9:00-11:20 Silent 7:00-11:00 8:00-12:00 7:00- 1:00 9:30-10:30 6:00-12:15 6:00-10:30	6:30-12:00 Silent Silent 7:45-10:00 7:00-11:00 8:00-12:00 7:00- 1:00 9:30- 1:00 6:00-12:15 6:00-10:30
20 10 10 10 10 10 10 10 10 10 10 10 10 10	WOAN WOC WOI WOK WOO WOOD WOOD	New York San Antonio Lawrenceb'g Omaha Davenport Ames Homewood Philadelphia Grand Rpds. Kansas City	282.8 526 483.6 270.1 217.3 508.2 241.8 278	620 1110 1380 590 1240 1080	6:00-10:35 Silent Silent 7:00-12:00 8:00-10:00 Silent 7:00- 1:00 7:30- 8:30 Silent 9:00-12:00	6:00-10:35 8:45- 9:45 10:00-11:00 7:00-11:00 7:30-12:00 Silent 7:00- 1:00 6:00- 8:30 Silent 9:00-10:15	6:00-10:35 9:30-10:30 10:00- 2:30 7:00-12:00 Silent 8:45- 9:45 Silent 7:30-11:30 8:35- 2:00 Silent	6:00-10:35 9:30-10:30 10:00-11:00 7:00-12:00 7:30-11:30 Silent 7:00- 1:00 7:30- 8:30 8:50-12:00 9:00-10:00	6:00-10:35 9:30-10:30 10:00-11:00 Silent 7:30-11:30 Silent 7:00- 1:00 7:30-12:00 8:50-12:00 Silent	6:00-10:35 9:30-10:30 10:00-11:00 7:00-12:00 7:30-12:00 8:30- 9:30 7:00- 1:00 7:30- 8:30 8:50-12:00 8:00-10:00	6:00-10:35 9:30-10:30 10:00-11:00 7:00-12:15 8:30-11:30 Silent 7:00- 1:00 7:30-11:30 8:35-12:00 Silent
	WPG WQJ WRC WREO WRR WRVA WSAI	Batavia Jeffer'n City AtlanticCity Chicago Washington Lansing Dallas Richmond Cincinnati	299.8 447.5 468.5 285.5 245.8 256 325.9	670 640 1050 1220 1170 920	7:00-10:00 Silent 7:45- 1:00	Silent 2:30-10:00 8:30- 9:30 3:15-11:00 4:00-11:00 4:00-11:15 Silent 8:45-11:30 Silent 8:45-10:15	6:15-12:00 Silent 8:00-12:00 7:00-12:00 Silent 7:00-12:00 Silent 7:00-11:30 8:30-11:30 9:00-12:00	6:15-12:00 7:00-12:45 Silent 7:00-12:00 8:00- 3:00 7:00-11:30 8:15-10:00 7:00-10:00 Silent 7:45-10:00	6:15-12:00 7:00-12:00 8:00-10:00 Silent 8:00- 3:00 7:00-11:00 6:00- 7:00 Silent 8:30-11:00 8:30-10:30	6:15-12:00 7:00-10:00 Silent 7:00-12:30 8:00- 3:00 7:00-11:00 6:00- 9:15 7:10-11:30 8:45- 1:00 7:00-11:00	6:15-12:00 7:00-12:45 8:00-10:00 7:00-12:00 8:00- 3:00 7:00-12:30 6:00- 7:00 7:00-11:00 7:00-11:00 Silent
	WTIC	Atlanta	475.9	630	9:00- 1:00 7:30- 2:00 11:00- 2:00 9:00-10:00 9:30-11:30 10:00-11:00 7:00- 2:00 Silent 7:30-10:00 Silent Silent	6:00- 9:00 Silent	6:00-12:00	9:00-10:00 1 7:30- 2:00 Silent 7:00-10:00 Silent Silent 7:00- 2:00 7:30-10:30	1:45- 1:00 7:30- 2:00 9:00-11:00 7:00-10:00 9:30-11:30 8:30- 9:30 7:00- 2:00 7:00-10:30 6:00-12:00	9:00- 1:00 7:30- 2:00 Silent 7:00-11:00 9:30-11:30 Silent 7:00- 2:00 8:00-11:00 6:00-12:00 6:00-11:00	9:00- 1:00 7:30- 2:00 Silent 7:00-11:00 Silent Silent 7:00- 2:00 7:15-10:30 6:00-12:00 6:00- 1:00
									12,001	2. 2.001	**********************************

OPE & PETALTO		A 370 MM MM	-000-		
<b>STATIONS</b>	IN	ORDER	OF	WAVE	IFNCTHS

Meters	s Call	Meter	s Call	Meters	s Call	Meters	s Call	Meters	Call	Meters	Call
217.3	WOK	265.6	WMAK	302.8	KTAB	350	CZE	400	CYI	467	KFI
226	WBBM	268	KFH	305.9	KOIL	352.7	WWI	400	PWX	468.5	WRC
226	WIBO	270.1	WGHP	305.9	KOMO	356.4	WOAN	405.2	KHI	475.9	WBAP
229	KMMJ	270.1	WOI	309.1	KDKA	356.9	CFCA	405.2	KSO	475.9	WTIC
232.4	KFON	272.6	WEBJ	312.6	KWKH	356.9	CKCL	405.2	WOR	475.9	WFAA
232.4	WFBF	272.6	WHK	315.6	KFDM	356.9	CKNC	406	WBAR	480	CYL
236.1	WGBF	275.1	WHAD	315.6	KPSN	361.2	KGO	410.7	CKAC	483.6	WOC
241.8	WOOD	275.1	WHAR		WABC	361.2	WHN	416.4	WBBR	483.6	WSUI
244	WAMD	275.1	WORD	315.6	WEMC	365.6	WDAF	416.4	WCCO	485.1	WJAR
246	KFSD	275.1	WSWS	315.6	WGBS	365.6	WHB	421	KIAF	491.5	KGW
246	WBAL	278	KWCR	315.6	WGES	367	WEAN	422.3	WLW	491.5	WCFL
246	WSOE	278	WCAU	319	WGR	370.2	WEBH	428.3	WSB	491.5	WEAF
249.0	KFWI	278	WOQ	319	WSMB	370.2	WIID	428.3	KPO	499.7	WMC
250	WMBB	280.2	KMOX	322.4	KOA	374.8	KTHS	431	WNAC	502.8	KFQB
252	KFWB	280.2	KOAC	325.9	WKRC	374.8	KVOO	434.5	CNRO	508.2	KĽX
252	WCOA	285.5	WEMC	325.9	WSAI	379.5	WGY	434.5	CFCN	508.2	WIP
252	WGCP	285.5	WREO	329.5	WJAZ	379.5	WHAZ	434.5	NAA	508.2	WOO
	WDOD	288.3	KFKX	333.1	WBZ	384.4	CKY	440.9	KLDS	516.9	CJCA
256	WRVA	288.3	WSBC	336.9	KNX	384.4	WLWL	440.9	wos	516.9	WCX
258	WADC	293.9	WAIU	336.9	WJAX	384.4	KJR	447.5	WMAQ	516.9	WJR
260.7	KFJF	293.9	WEAO	340.7	KFAB	384.4	WMBF	447.5	WQJ	526	WHO
260.7	KSBA	296.9	KPRC	340.7	WKAQ	389.4	WTAM	454.3	KFOA		WNYC
260.7	WSKC	299.8			WMCA	394.5	WFI	454.3	WJZ	526	WOAW
	WAAM	299.8	KUOA	344.6	WCBD	394.5	WLIT	455	KTW	535.4	KYW
265.6	WBCN	299.8		344.6	WLS	394.5	WOAI	461.3	KFNF	545.1	KFUO
265.6	WENR	302.8	WGN	348.6	KWSC	399.8	WHAS	461.3	KMA	545.1	WTAG
265.6	WGHB	302.8	WLIB	348.6	WEEI	399.8	WHT	461.3	WCAE	// // // // // // // // // // // // //	

# **New Stations**

New stations licensed by the department of commerce last month include: WLBR, Belvidere, Ill., 335m-895kc; KGDX, Shreveport, La., 291.1m-1030kc; WBSO, Wellesley Hills, Mass., 242m-1239kc; WBET, Boston, Mass., 384.4m-780kc; WMPC, Lapeer, Mich., 222m-1351kc; WLPP, Ashland, Ohio, 220.4m-1360kc; WLBJ, Cleveland, O., 300m-999.4kc; WLBN, Chicago, Ill., 225.4m-1330kc; KGDY, Oldham, S. D., 210m-1428kc; WCOM, Manchester, N. H. 252m-1190kc; KGDZ, Decorah, Ia., 431m-695.6kc; KYA, San Francisco, Calif., 399.8m-750kc; WLBA, Philadelphia, Pa., 236.1m-1270kc; WRSC, Chelsea, Mass., 270.1m-1110kc; KFCR, Santa Barbara, Calif., 413m-726kc; WTRL, Midland Park, N. J., 280.2m-1070kc; WOKT, Rochester, N. Y., 340m-881.8kc; WLBO, Galesburg, Ill., 243m-1234kc; WLBQ, Atwood, Ill., 230.6m-1300kc.

WKBO, Jersey City, N. J., may now be found on 303.9m-986.6kc. Two stations, KFUU, Oakland, Calif. and WIBH, New Bedford, Mass., are off the air.

The two deletes of the month are KGBW, Joplin, Mo., and WEBZ, Savannah, Ga.

The General Electric Company of Mexico City has just entered the ether with a new 2,000-watt station. This station uses the call CYJ and may be heard on 400 meters.

The Atlantic Broadcasting Corporation announces a change in call letters for the new super-power 5-kw transmitter WAHG. This new giant of the air will be known hereafter as WABC.

"This is Station KGA of Spokane, U. S. A." This sentence will be used within the next few weeks to announce the opening of the new north hill broadcasting station at Spokane, Wash., by the Northwest Radio Service company of Seattle, owners. The Spokane station is one of five in a Pacific coast chain. The new Station KJR, located near Seattle, was opened recently. The Portland, Ore., station will be ready for broadcasting in a few days. The other two stations are being built in California.

The Spokane station will start broad-

The Spokane station will start broadcasting with 8,000 watts power but the ultimate power will depend on tests made over a period of a week or more. KGA will operate on a tentative wave length of 340 meters.

New equipment to cost around \$35,000 was announced recently for Station KHQ of Spokane. The power will be raised from 1,000 to 5,000 watts.



# 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.

The Vibrator Type: This is the pioneer of radio battery chargers. Nearly a quarter of a million of this type of Valley Charger has gone into service all over the world.

Charges 6-volt batteries at 6 amperes, 12-volt batteries at 3 amperes. Quiet. Efficient. Cannot harm the battery.

Mounted in black case with bakelite panel and glass top. Pleasing in appearance and will harmonize 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.

Using both bulbs, you have a 5-ampere charger. Using only one bulb, you have a 2 1/2-ampere charger. Thus the charging rate and the purchase of one bulb or two are entirely optional.

Absolutely noiseless. Built in handsome black grained metal case. Complete with cord and plug, and leads and clips.

RADIO DIVISION

# VALLEY ELECTRIC CO., ST. LOUIS, MO.

District Offices; Boston, Chicago, Cleveland, Indianapolis, Kansas City, Minneapolis, New York, Philadelphia, San Francisco

Manufacturers of
B Power Units—Radio Receiving Sets—Vibrator Type Chargers—Twin Bulb Type Chargers

# WHAS, WSB ON CHAIN; DAMROSCH FE.

# HIGH LIGHTS OF THE AIR

RENCH songs arranged by Edouard Defresne, French baritone, will occupy the period between 5 and 7 p. m. Central time, Sunday, January 16, from WSBC. The freshness and piquancy of these songs will attract the attention of listeners to this program.

Rollicking old sea songs and songs of the backwood settlers of Kentucky and Carolina will be sung by 60 male voices and picked up by the Hartford station, WTIC, Tuesday, January 18. The University glee club of New Haven once more takes to the ether.

An Irish trio, M. F. Sullivan, fiddler, Patrick Linehan, Irish piper, and Catherine Sullivan, pianist, will attract those who slightly remember the fitted and the sullivan.

and Catherine Sullivan, pianist, will attract those who slightly remember the "auld sod" to tune in for WCCO, Wednesday, January 19. The program will consist of Irish folk songs, lively jigs and even ballads which recall the little people of Ireland.

WLW now has a light opera company which puts on programs very far from light. Thursday, January 20, the company will give the opera "Il Trovatore."

A prize fight went down into his-

A prize fight went down into history because it was one of the big radio events of 1926. Blow for blow the description went out over the microphones of the larger stations in microphones of the larger stations in the United States. It remains to be seen whether a wrestling match can make such a vivid appeal to the imagination. Such an experiment will be made Saturday, January 22, when WOI broadcasts the wrestling match between Missouri and Ames. "Sampling in a Pastry Cook's Pantry" is the intriguing title of a program to be given over WRNY, Tuesday, January 25. During the Edison hour of this station the listener may turn back the years, steal into the musical pantry and extract all sorts of sugar plums without being caught. Fun, pep, speed and ginger are only a few of the things promised by

WRVA, Richmond, for Friday night, January 28, during the Edgeworth Lobster review. There is promise of a glee club and a number of old time fiddlers.

The old-time contests so popular in the United States have also penetrated the Radio field of our neighbor, Canada. CNRA, Moncton, N. B., schedules such a contest for Friday, January 28. Winners will be chosen among the old-time fiddlers and other musicians who play the accordion, tin whistle etc. As the champions will be acclaimed by the amount of mail ap-

acclaimed by the amount of mail applause received the fans will really be the judges.

Works by France's great musician, Camille Saint-Saens, will make up the entire program to be broadcast during the Balkite hour, Saturday, January 29, at 9 p. m. Walter Damrosch, conductor of the New York symphony, has arranged this program in memory of his friend, Saint-Saens, whose well known opera "Samson and Delilah" is given every year by the various grand opera companies.

The romantic ghost town of Buck-The romantic ghost town of Buckskin Joe, Colorado, will come to life in a musical dramatization sponsored by the Denver Post, over KOA, Monday at 8:15 p. m. Mountain time. Indian tribal chants, cowboy ballads, dance hall music by pioneer fiddlers, mission chants are only a few of the properties of the invisible stage which will create again frontier life. We want to call our readers' at

which will create again frontier life. We want to call our readers' attention to the two WEAF chain programs now being given over WHAS. Tuesdays at 9 p. m. Eastern time the Eveready hour will be broadcast. Sunday WHAS will be a part of the chain giving the Capitol theater program at 7:20 p. m.

WSB will broadcast the Eveready hour of the red network on Tuesday.

hour of the red network on Tuesday and will broadcast the Atwater Kent program on Sunday.

Eastern Central Mountain 9:30 p. m. 8:30 7:30 613
WMC (499:7m-600kc) Memphis Plectrum orch

tra.
10
9
8
7
CNRW (322.4m-780kc) Fort Garry hotel dance

To the right may be seen one of the new dance steps of the Tango Waltz now being taught over KOA, Denver, every Wednesday night, at 8:15 p. m. by Josephine Block. Below is Elfrieda Steindorff, soprano, member of the comic opera company featured regularly over KGO, Oakland.





# **Educational Features** Saturday Central Mountain

7 p. m. 5 4

WOW (526m-570kc) Historical talks,
8:30 7:30 6:30

WOW (526m-570kc) Creighton educational period
9:30 8:30 7:30 6:30

WMAQ (447.5m-670kc) Photologues.

# Regular Saturday Features

Kegular Saturday Features
Eastern Time Stations
CKAC Montreal, Que., Can. (410.7m-730kc) 7:15 p. m.
dinner concert; 10:30, Red Jackets.
CKCL Toronto, Can. (357m-840kc) 7-8 p. m. trio.
KDKA Pittsburgh, Pa. (309.1m-970kc) 6:15 p. m.
dinner concert, Westinghouse band; 8, concert.
PWX Hayana, Cuba (399.8m-750kc) 8:30 p. m. frolic.
WAAM Newark, N. J. (263m-1140kc), 7:15 p. m.
children's program; 7:45, evening musicale.
WABC New York, N. Y. (315.6m-950kc) 12 mid. dance
1, vaudeville. WABC New York, N. Y. (315.6m-950kc) 12 mid. dance I. vaudeville.

WBZ Springfield, Mass. (333.1m-900kc) 6:30 p. m. orchestra; 7:15, orchestra; 7:45, male quartet; 8:10, orchestra; 10:15, dance music.

WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. dance orchestra; 8, WEAF; 9, WEAF.

WCX Detroit, Mich. (516.9m-850kc) 6-7 p. m. dinner program, Goldkette ensemble.

WBBO Winter Park, Fla. (239.9m-1250kc) 6:30 p. m. dinner concert; 7:45, musicale.

WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner mer music; 7, Janssen's Hofbrau orchestra; 7:30, headliner; 7:45, talk; 9, Balkite hour, WEEI, WGR, WFI, WCAE, WWJ, WSAI, WTAM, WGN, KSD, WCCO, WDAF; (regular) 10, WEAF Revue; 10:30, orchestra; 11:30, orchestra.

WEEI Boston, Mass. (348.6m-860kc) 7:55 p. m. Boston Globe; 8, WEAF; 9, WEAF; 10, Cruising the air. the air.
WFI 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 Room orchestra.

WGBS New York, N. Y. (315.6m-950kc) 7 p. m. WGBS New York, N. Y. (315.6m-950kc) 7 p. m. music; WGHB Clearwater, Fla. (266m-1130kc) 7 p. m. music; 8:30, studio program; 10, dance program. WGR Buffalo, N. Y. (319m-940kc) 9-10 p. m. WEAF MGY Schenectady, N. Y. (379.5m-790kc) 6:30 p. m. dinner program, Oncondaga hotel, WFBL, WGY; 7:30, Shea's Buffalo hon; WMAK, WGY; 8:05, Y:30, beas's Buffalo hon; WMAK, WGY; 8:05, WIZ; 10:30, dance program. WMAK, WGY; 8:05, 11:12, Whozit, 9, orchestra; 10, Happy hours; 11:12, Whozit, 9, orchestra; 10, Happy hours; 11:12, Whozit, 9, orchestra; 10, Happy hours; 11:12, Whozit, 11:12, Wh

WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean Goldkette's Petite symphony orchestra, soloists; 9, studio program; 11:30, Merry Old Chief.
WJZ New York, N. Y. (454.3m-660kc). Note: WJZ programs to be announced over the air. The following program is only tentative. 7 p. m. Hotel Commodore dinner orchestra; 7:45, Don Voorhees orchestra, 8:25; orchestra, WBZ, WGY, WRC; 10:30, \*ack Denny's Frivolity Club orchestra, WRC will . Iso broadcast.

broadcast.

WKRC Cincinnati, Ohio (325.9m-920kc) 10 p. m. Swi-s
Garden Loons; 11, popular program; 11:15, dance

WKRC Cincinnati, Ohio (325.9m-920kc) 10 p. m. Swi-ss Garden Loons; 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 Grosse; 8. Seckatary Hawkins Radio club; 8:15, Ford and Glenn; 10, 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, musicale; 10:30, dance music.

WMACA New York, N. Y. (340.7m-880kc) 11 p. m. Ernie Golden and his Hotel McAlpin orchestra; 12, MCAlpin entertainers.

WNYC New York, N. Y. (526m-570kc) 7 p. m. piano selections.

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

WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Jacques Jacobs' Hotel Shelton ensemble; 6:45, Bill Wathey in sports; 7:15, program; 11, orchestra.

WPG Atlantic City, N. J. (229.8m-1000kc) 7:15 p. m. organ recital, Arthur Brook; 7:30, Hotel Morton dinner music; 8. dinner music; 8:35, "Little Journeys to the Homes of Great Musicians", Alice Sachse, pianist; 9, Hotel Chelsea concert; 9:30, Hotel Traymore concert orchestra; 10, studio program; 10:30, dance music; 11:30, Gateway casino, WRC Washington, D. C. (468.5m-640kc) 7 p. m. Hotel Washington orchestra; 8, WEAF; 9, WEAF; 10, dance music; 11, orchestra.

WSC Bay City, Mich. (260.7m-1150kc) 11-2 a. m. studio program; 9. Bancroft hotel orchestra: 10, WEAF

WSKC Bay City, Mich. (280.7m-1150Kc) 11-2 a. m. studio program.
WTAG, Worcester, Mass. (545.1m-550kc) 8 p. m., program; 9, Bancorít hotel orchestra; 10, WEAF.
WTAM Cleveland, Ohio (389.4m-770kc) 6:15 p. m. Hotel Cleveland orchestra; 7:15, studio program; 9, WEAF; 10, Ev Jones' Merrymakers.
WTIC Hartford, Conn. (475.9m-630kc) 6 p. m. Hub Restaurant trio; 8, program; 10, orchestra.
WWJ Detroit, Mich. (352.7m-820kc) 9 p. m. WEAF.

# Central Time Stations

CKY Winnipeg, Can. (384.4m-780kc) 9:30-10:30 p. m. Herbert Sadler, organist. KFAB Lincoln, Nebr. (340.7m-880kc) 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. musicale; N.LDS Independence (440.9m-680kc) 7 p. m. musicale; 8, studio program.

KFNF 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, orchestra; 9, Do, Re, Mi's; 9:30, soloists; 10, program; 12-1, dance music.

KOU Compil Bluffer 1

dance music.

KOIL Council Bluffs, Ia. (305.9m-980kc) 6 p. m.

McCrory's music period; 6:30, Stewart Warner program; 7:30, program; 11, Pow-WOW.

KPRC Houston, Tex. (299.8m-1000kc) 7:30 p. m.

Bible class; 8, concert; 11, frolic.

KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9 p. m. organ; 9:15, dance frolic; 10-11, specialities. cialities.

KVOO Bristow, Okla. (374.8m-800kc) 6-7 p. m. S. S. lesson; 7-8, Gleeman; 8-9, orchestra; 12, Southern

lesson; 7-8, Gleeman; 8-9, orchestra; 12, Southern entertainers.

KYW Chicago, III. (535.4m-560kc) 6 p. m. bedtime story; 6:30, orchestra; 7, Family hour; 9-10:30, classical concert; 10:30-12, Congress carnival.

WBAP Fort Worth, Tex. (475.9m-630kc) 8-8:30 p. m. pianist; 9:30-11, orchestra.

WBBM Chicago, III. (226m-1330kc) 8 p. m. Coonsanders, Night Hawks; 9, orchestra, artists; 10, Log Cabin days; 11-12, supper club; 12, Nutty club. Coon-Sanders' Night Hawks.

**D'ANCING** 

# Central Time

Central Time

Monday

8, Wgep; 9, W
Wor; 9:15, Wahg;
Kths, Wgep, Wgr, WI
Wpg; 10:15, Wor; 10
Wgep, Whn; 11, K
Koil, Wgbu, Wgep, W Whn, Who, Wjaz; 11 Wdaf; 12, Knx, Kpo.

Tuesday
10:15, Kths; 10:30, K
Whn; 10:45, Wsb;
Kgw, Koil, Wgbu, W Wjaz; 11:45,, Wdaf; Kgw, Khj, Knx, K Wdaf, Wjaz; 1, Wqj.

Wednesday 9:15, Wahg; 9:30, Wr Who, Wor; 10, K Wbap, Weaf, Wg Wgep, Wjaz, Wqj; 10: Wcco; 10:30, Wbap, W 11, Kmex, Koil, K Webh, Wgbu, Wgep, W Whn, Wjaz; 11:45, Wo 12, Kfwa, Knx, K Wjaz, Wjjd.

Thursday
8, Wjr; 9, Webh, Wo
Whn, Wjr; Wmbb, Wr
Wtag; 9:05, Wbz, W
9:30, Wgbs, Wgy, W
9:35, Wnye; 10, Ki
Wbbm, Weaf, Wg Wbbm, Weaf, Wg Whn, Wmca, Wpg, W 10:30, Kths, Whn, We Wgbu, Whn, Woe; 11: Wdaf; 12, Kgo, K Knx, Kpo, Wjjd.

Friday 8, Wwj; 9, Wcx, We Jeei, Wgbu, Wg Wmbb; 9:15, Wahg; 9: Wcau, Whn; 10, K Whn, Wgr, Wqj.

Saturday

9, Webh, Wiaz, Wm
Wnye, Wreo; 9:10, Ki
Wip; 9:30. Kths, Wip
Wor, Wre 9, Km
Kiwa, Koa, KDo, Wi
Wgn, Wiaz, Wir, Wi
Wmea, Wnye, Wor, W
Weo; 10:30, Wat
10:45, Wls; 11, Wf
Kho, Kpo, Webh, Will
Who, Wiaz, Wig; 11:
Kfwb, Kpo, Webh, Widaf;
Kfwb, Kpo, Webh, Widaf;
Kfwb, Kpo, Webh, Widaf;
Kfog, It-145, Wdaf;
Kfog, Kgw, Knx, Wg
Wiaz, Wijd.

# Note to Readers

HE "Regular Features" give a handy timetable for use when referring to any particular station's feature. All the evening hours are given. Many sta-tions list the same dance orchestras, the same harmony teams and the same dinner concerts every week. Instead of giving these similar features to you twice and sometimes three times, we have given

and sometimes three times, we have given them to you but once.

At the head of the "Regular Features" you will find the high spots of the programs listed under "Headliners," for the day you are interested in. The "Educational Features" are listed like the "Regular Features" (just once), because so many of these are university courses and run from week to week. We shall be glad run from week to week. We shall be glad to hear from our readers if these instruc-tions are not clear and shall be glad to have our readers offer suggestions.

# SATURDAY, JANUARY 15 Headliners Eastern Central Mountain Pacific 12 n. 11 10 9 WQJ (447.5m-670kc) F. E. Ormsby, "Character Reading."

reading.	
6 p. m. 5 WTIC (475.9m-630ke) Hub trio.	3
	3:30
WBZ (333.1m-900kc) Dick Newcomb's	enciety or-
chestra.	Society Oi-
	4
WJZ (454.2m-660kc) Don Voorhees E	ari Carroll
theater orchestra.	
7:15 6:15 5:15	4:15
7:15 WCCO (416.4m-720kc) Ellen Nordstro	om Olson.
Corinne Jordan.	
7:30 6:30 5:30	4:30
WEAF (491.5m-610kc) "Fancy Free."	4:30
WEAF (491.5m-610kc) Fancy Free.	42 cm
7:45 6:45 5:45 WBZ (333.1m-900kc) Knights of Pyt	4:45
WBZ (333.1m-900kc) Knights of Pyt	hias male
quartet.	
8 7 6	5
CIZAIC (257ma 0401ra) The Dattoner Base	
WRAP (475 9m-630kc) Florence Masser	male
WEAF (401 5m-610kg) WEET (348	6m-8601zo)
WDC (469 Em 6401co) WCAE (461	2m (501rg)
WKC (400.3HI-040KC), WCAE (401.	Magter "
WG1 (3/9.5m-/90kc), The Fencing	master.
WBAP (475.9m-630kc) Florence Masser WEAF (491.5m-610kc), WEEI (348, WRC (468.5m-640kc), WCAE (461, WGY (379.5m-790kc), "The Fencing WFI (394.5m-760kc) The Euterpians,	economic en la
WOJ (447.5m-670kc) "Instrumental Ho WJZ (454.2m-660kc) Criterion male qu	our.
WIZ (454.2m-660kc) Criterion male qu	artet.
WTIC (475.9m-630kc) Hartford compose	rs' period.
8:10 7:10 6:10	5:10
WBZ (333.1m-900kc) Boston symphony	orchestra.
8:30 7:30 6:30	5:30
WHAS (399.8m-750kc) German music s	ociety
WTIC (475.9m-630kc) Mildred Warne	
Young.	i, kobert
8:35 7:35 6:35	F. 0F
0:33 (1:35 (T':41 T	5:35
WPG (299.8m-1000kc) "Little Journey Homes of Great Musicians."	s to the
9 8 7	6
WEAF (491.5m-610kc), WEEI (348.	6m-860kc),
WGR (319m-940ke), WFI (394.	5m-760kc),
WGR (319m-940kc), WFI (394. WCAE (461.3m-650kc), WSAI (325.	9m-920kc).
WTAM (389.4m-770kc), WWJ (352.	7m-820kc),
WGN (302,8m-990kc), WCCO (416.	4m-720kc).
KSD (545.1m-550ke), WDAF (365.	
WOC (483.6m-620kc), WRC (468	
Walter Damrosch, Wagner's "(	
Walter Damrosch, Wagner's "(	
KSD (545.1m-550kc), WDAF (365. WOC (483.6m-620kc), WRC (468. Walter Damrosch, Wagner's "(merung," Act III. WFAA (475.9m-630kc) Tom D. Collins	6m-820kc), 5m-640kc), Gotterdam-
Walter Damrosch, Wagner's "( merung." Act III. WFAA (475.9m-630kc) Tom D. Collins and guitar club.	6m-820kc), 5m-640kc), Gotterdam-

CNRW (322.4m-780kc) Fort Garry hotel dance program.
WCG (483.6m-920kc) musical program.
WCG (483.6m-920kc) musical program.
WCG (299.8m-1000kc) Marcele Duo.
WT1E (475.9m-630kc) Club Worthy orchestra.
10:05 8:05 8:05 7:05
WIP (508.2m-590kc) Jewish welfare drive, 10:10 9:10 8:10 7:10
WEAF (491.5m-610kc), WTAG (545.1m-550kc), dance music, Le Perroquet de Paris.
10:15 (416.4m-722:15 Russian Art troupe.
10:15 (416.4m-724:15 Russian Art troupe.
WMAQ (447.5m-670kc) Pratt and Sherman.
11 (467m-642kc) Gamut male quartet, Louise KIOs, harpist, KHJ (405.2m-740kc) Mr. and Mrs. Benjamin Sears, old time fiddler and pianist, 12 mid.
CNRE (516.9m-580kc) Sullivan's academy of dancing program,
1 a. m. 12 11 10
KOWW (285m-1052kc) Croxdale serenaders. SATURDAY, JANUARY 22 Headliners Central Mountain WGY (379.5m-790ke), Walter Damrosch, New York symphony.

1. Overture, "Fingal's Cave..... Mendelssoln 2. Dance of the Old Ladies..... Casella 3. Andante from Symphony No. 5. Tschaikowsky 4. Air on G string (Gavotte)... Bach 5. Dances from "Henry VIII"... Saint-Saens 10 9 8 7 WCCO (416.4m-720kc) Minneapolis Chamber of Commerce glee club. 11 10 9 8

KFI (467m-642kc) "Faust," KPO.

WBBM (226m-1330kc) "Log Cabin Days" mixed 11:10 10:10 9:10 8:10 KTHS (374.8m-800kc) Guest talent presentation

# Z a. m. 1 KFI (467m-642kc) Dixieland Blue Blowers. SATURDAY, JANUARY 29 Headliners

| Central Mountain Pacific | T. P. m. | Central Mountain | Pacific | T. P. m. | Central Mountain | Pacific | T. P. m. | Central Mountain | Central

# FEATURES SAINT-SAENS' MUSIC JAN. 29



Frances Sebel, lyric soprano of the WEAF Grand opera company may be heard during the presentations by this company through WEAF and associated stations, Monday evenings at 10 p. m. On Monday, January 17, "La Traviata," will be given; January 24, "Fidelio," and January 31, "Romeo and Juliet."



### **DANCING** Central Time

Monday 8, Wgep; 9, Wjar, Wor; 9:15, Wahg; 10, Kths, Wgep, Wgr, Wnye, Wpg; 10:15, Wor; 10:30, Wgcp, Whn; 11, Kgw, Koil, Wgbu, Wgcp, Wgr, Whn, Who, Wjaz; 11:45, Wdaf; 12, Knx, Kpo.

Tuesday 10:15, Kths; 10:30, Kths. Whn; 10:45, Wsb; 11, Kgw, Koil, Wgbu, Whn, Wjaz; 11:45,, Wdaf; 12, Kgw, Khj, Knx, Kpo, Wdaf, Wjaz; 1, Wqj.

Wednesday 9:15, Wahg; 9:30, Whap, Who, Wor; 10, Kfve, Wbap, Weaf, Wgbu, Wgcp, Wjaz, Wqj; 10:05, Wcco; 16:30, Wbap, Whn; 11, Kmox, Koil, Kpo, Webh, Wgbu, Wgep, Wgr, Whn, Wjaz; 11:45, Wdaf; 12, Kfwa, Knx, Kpo, Wjaz, Wjjd.

Thursday 8, Wjr; 9, Webh, Weei, Whn, Wjr, Wmbb, Wsai, Wtag; 9:05, Wbz, Wip; 9:30, Wgbs, Wgy, Whn; 9:35, Wnyc; 10, Kths. Wbbm, Weaf, Wgbu, Whn, Wmea, Wpg, Wqj; 10:30, Kths, Whn, Webh, Wgbu, Whn, Woe; 11:45, Wdaf; 12, Kgo, Khj, Knx, Kpo, Wjjd.

Friday Wgep, Weei, Wgbu, Wgcp, Wmbb; 9:15, Wahg; 9:30, Weau, Whn; 10, Kpo, Kths, Wgbu, Wgcp, Whn, Wgr, Wqj.

Saturday Saturday

9, Webh, Wiaz, Wmbb,
Wnyc, Wrec; 9:10, Kths,
Wip; 9:30. Kths, Wgbs,
Wre 9, Kmox,
Kfwa, Koa, rkp., Weat,
Wgn, Wiaz, Wir, Wkre,
Wmea, Wnyc, Wor, Wqi,
Wreo, 10:30, Wamd,
10:45, Wis; 11, Wfwa,
Kfwb, Kpo, Webh, Wfaa,
Who, Wiaz, War, 11:30,
Kfoa; 11:45, Wdaf; 12,
Kgo, Kgw, Knx, Wgbu,
Wjaz, Wjjd. WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:15 p. m. Wesley Barlow's Nicollet hotel orchestra; 8. WEAF; 10:05, dance program, Wallie Erickson's orchestra; 10:15, program, WCFL Chicago, Ill. (491.5m-610kc) 7 p. m. Brevoort trio; 8, vaudeville hour; 10, Alamo orchestra; 11-12, entertainers

WCFL Chicago, Ill. (491.5m-610kc) 7 p. m. Brevoort trie; 8, vaudeville hour; 10, Alamo orchestra; 11-12, entertainers.

WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. school of the air; 8-9, WEAF; 9-10, around the town; 11:45-1, Nighthawk frolic.

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

WENR Chicago, Ill. (265.3m-1130kc) 6-6:30 p. m. organ; 6:30-6:50, classical program; 8-9, trie; 9-10, orchestra; 12-2, Last Minute club.

WFAA Dallas, Tex. (475.9m-630kc) 6:30-7:30 p. m. entertainers; 8:30-9:30, concert; 11-12, concert.

WGN Chicago, Ill. (302.8m-990kc) 6:35-7 p. m. Drake concert ensemble; 8-9, WEAF; 9, Grand opera period; 10, Sam 'n Henry; 10:10, The Music Box; 10:20-11, songs.

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

orchestra and vocal selections, wisconsin notel; //, children's hour, WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. studio concert.

WHAS Louisville, Ky. (593-5ml-750kc) 7.50-9 p. in. studio concert.
WHT Chicago, III. (399-8m-750kc) 6 p. m. Al Carney, organist; 7:45 (238m-1260kc), Stuart Dawson; 9:30 (399-8m-750kc), Irene and Albert; 11, Pat and Al. WIBO Chicago, III. (225-4m-1350kc) 6-7 p. m. dinner concert; 7-8, Bradley college hour.
WIAZ Chicago, III. (329-5m-910kc) 6:30 p. m. dinner program; 7-8, Shoreland; 8, musical highlights; 9-11, Shoreland; 11-2, frolic.
WJJD Mooseheart, III. (370.2m-810kc) 8 p. m. Victorians.

WJB Moosenart, III. (302.8m-990kc) 7-8 p. m. victorians.
WLIB Chicago, III. (302.8m-990kc) 7-8 p. m. dinner concert; 11-12:30, organ, orchestras.
WLS Chicago, III. (344.6m-870kc) 6-40 p. m. College Inn'orchestra; 7-1, frolic.
WMAQ Chicago, III. (447.5m-670kc) 6 p. m. Chicago theater organ; 6:30, Gus Edwards' orchestra; 8, photologue; 8:30, Chicago theater revue; 9:30, songs, WMBB Chicago, III. (249.9m-1200kc) 7-8:30 p. m. Trianon ensemble; artists; 8:30-11, Trianon orchestra, ensemble.

WMBB Chicago. III. (249.9m-1200kc) 7-8:30 p. m. Trianon ensemble; artists; 8:30-11, Trianon orchestra, ensemble. Tenn. (499.7m-600kc) 7:30 p. m. dance music; 8:30, entertainment.

WOC Davenport, Iowa (483.6m-620kc) 7-8 p. m. musicale; 8-9, WEAF; 9-10, program.

WOK Chicago, III. (238m-1260kc) 6-7:45 p. m. string ensemble; 8-9 (217.3m-1380kc), program; 9:30-12 (238m-1260kc), syncopators.

WOQ Kansas City, Mo. (278m-1080kc) 6:15 p. m. orchestra; 10, service.

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

WOW Omaha, Neb. (526m-570kc) 6 p. m. literary hour; 9, program; 10, Tracy-Brown's Oklahomans.

WOJ Chicago, III. (447.5m-670kc) 7-8 p. m. Rainbo orchestra; 10-3 a, m. Rainbo Gardens frolic.

WRR Dallas, Tex. (245.8m-1220kc) 8-9 p. m. Atlanta.

SB Atlanta, Ga. (428.3m-700kc) 8 p. m. Atlanta Atwater Kent hour; 10:45, Ernest Rogers' Red Head club.
WSBC Chicago, II. (288.3m-1040kc) 6:30-8 p. m. dinner program; 9-1, entertainers.
WSMB New Orleans, La. (319m-940kc) 8:30 p. m. popular program.
WSOE Milwaukee, Wis. (245.8m-1220kc) 8 p. m.

WSUC Milwaukee, Wis. (245.5m-1220kf) & p. in. Whozit, artists.

WSWS Chicago, Ill. (275.8m-1090kc) 6 p. m. dinner program, Terrace Garden orchestra; 8, production, Magic Crystal; Walter Dyckman, bass; 10, orchestra; John Clark, baritone; ballads, John Ude; 12 midnight, Witching hour.

Mountain Time Stations KOA Denver, Colo. (322.4m-930kc) 10:30 p. m Scheuerman'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, Mona Motor Oil Company; 9-10, headliner; 10-11, Warner Brothers frolic.

KGO Oakland, Calif. (361.2m-830kc) 8:15 p. m. pro-gram; 9:15-1 a. m. Whitcomb band; Frank Gibney, soloist, KGW 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 p. m. male quartet; 6:30-7:30 p. m. children's hour; 8-10, varied approximation. 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. States Restaurant orchestra; 8-1, dance music.

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

Saturday, silent night for: CFCA, KFDM, KFDY, KFUO, KLX, KOB, KSWC, KUOA, KWWG, WBAL, WCAL, WCAY, WCBD, WCOA, WCX, WEBJ, WEMC, WGBF, WGCP, WGHB, WGHP, WGR, WHA, WHAD, WHB WHN, WHO, WICC, WJAR, WLWL, WOAI, WOS, WRVA, WTIC, WWJ.

# SUNDAY, JANUARY 16 Church Services

Church Services

Eastern Central Mountain 7:30
WOS (440.9m-6808c) First Christian church.
10:45 9:45 8:45 7:45
WTAM (389.4m-770kc) Euclid Ave. Christian church.
10:45 9:45 8:45 7:45
WTAM (389.4m-770kc) Euclid Ave. Christian church.
10:50 8:50 8:50 7:50
WH2 (333.1m-900kc) Church of the Unity.
WLW (422.3m-710kc) Seventh Presbyterian church.
WSAI (325.9m-920kc) Avondale Methodist Episcopal church.
12 m. 11 10 9
KSO (405.2m-740kc) M. E. church services.
KTHS (374.8m-830kc) First Presbyterian church.
WHO (526m-570kc) Briazi Jeshrum congregation.
1 p. m. 12 11 10
KOWW (285m-1052kc) First Presbyterian church.
2 11 KGO (361.2m-830kc) First Presbyterian church.
6 5 9
WBAP (475.9m-630kc) Vesper services, Baptist seminary.
WSB (428.3m-700kc) Lutheran church.

WBAP (475.9m-630kc) vesper services, Baptist seminary.
WSB (428.3m-700kc) Lutheran church.

WOC (483.6m-920kc) Methodist Episcopal church.
7:30 6:30 5:30 4:30
WLW (422.3m-710kc) First Presbyterian church.
8 FFH (268m-1120kc) First Baptist church services.
WFAA (475.9m-630kc) First Presbyterian church.
WTAM (389.4m-770kc) Euclid Ave. Christian church, 8:30 7:30 6:30 5:30
KPRC (299.8m-1000kc) Service of South Main Baptist church.
WOS (440.9m-680kc) First Presbyterian church.
9 WSB (428.3m-700kc) Worth Ave. Presbyterian church.
9 WSB (428.3m-700kc) Worth Ave. Presbyterian church.
9 9:35 7:35

SUNDAY, JANUARY 16 Headliners

church. 10:35 9:35 8:35 7:35 KGO (361.2m-830kc) First Presbyterian church.

WTIC (475.9m-630kc) Prof. Henry Jepson, organist, 5:40 3:40 3:40 2:40 KGO (361.2m-830kc) San Francisco symphony. 6 WEAF (491.5m-610kc) "The Rivals," WEAF nlayers, WMCA (340.7m-880kc) Romer's Homers, WSBC (288.3m-1040kc) Hultman Conservatory of Missic concert.

# FARMER'S PROGRAM INDEX

Special Farm Features

KMA (461.3m-650kc), Farm talk, agricultural aid.
WCCO (416.4m-720kc), Farm talk, feed choppers.
WEAO (293.9m-1020kc), Timely economic information for the farmers.
1:35 12:35
KSAC (340.7m-880kc). Jan. 17, Winter horse feeding; Jan. 24, hogs; live stock; Jan. 31, hog houses, rabbit fever.
1:40 12:40 11:40
WLW (422.3m-710kc), U. S. Radio Farm school.
1:45 12:45 11:45 10:45
WOI (270.1m-1110kc), Questions and answers on horticulture.
2 1 12 11

Wolf (270, In-110ke), Questions and answers on Inorticulture.

2 WSB (428,3m-700kc), Georgia State College farm course.

3:30 1:30
Wl.W (422,3m-710kc), Weekly letter to Dad.

5:20 4:20
WBBO (239,9m-120kc), Farm Bashes.

6:40 (239,9m-120kc), Farm Bashes.

6:40 (340,6m-870kc), U.S. Farm school.

6:40 (344,6m-870kc), U.S. Farm school.

6:40 (340,7m-880kc), Jan. 17, Kansas agriculture; Jan. 24, market forecasts; Jan. 31, planning production, livestock industry.

6:50 (408,2m-740kc), U.S. Farm school.

8:80 (408,2m-740kc), U.S. Radio Farm school.

WAMD (243,8m-1230kc), U.S. Radio Farm school.

8:60 (408,2m-740kc), U.S. Radio Farm school.

8:70 (408,2m-740kc), U.S. Radio Farm school.

school. WOS (440.9m-680kc), U. S. Radio Farm school. WRVA (256m-1170kc), Farmers' chat, Dibble,

Cline.
8:20
7:20
6:20
5:20
KFJF (260.7m-1150kc), U. S. Agricultural service.
8:30
7:30
KUOA (299.8m-1000kc), Farm filosophy; Jan.
17, "Making Fences Last" H. T. Barr; "The Farmer's Production Problems." A Sane Farming Plan for 1927." Jan. 24, "Lespedeza," "Finishing the Fall Pig Crop." Winter Control of Insects." Jan. 31. State seed aboratory; spring lambs; farm timber.
WCO (416.4m-720kc), Farm lecture.
WMC (499.7m-600kc), Farm talk.
WOS (440.9m-680kc) Jan. 17, Missouri farmers week.

8
7

week, 8 7 6 8

KFNF (461.3m-650kc), Poultry talk.
WMC (499.7m-600kc), Farm talk.
9:30 KOB (348.6m-850kc), Farm program.
WFAA (475.9m-630kc), Sars-Roebuck program.
10:30 9:30 7:30

KOAC (280.2m-1070kc), hog production.
10:45 9:45 8:45 7:45

KOAC (280.2m-1070kc), Poultry breeding.
10 KOAC (280.2m-1070kc), "Strawberries in Oregon.

Eastern Central Mountain 9:30 8:30 7:30
WFI (394.5m-760kc). Farm feature. 11 10 8
KMMJ (228.9m-1310kc). Poultry talks. 1 p.m. 12 11 10
WCCO (416.4m-720kc), Farm flashes. 1:10
WMAQ (447.5m-670kc), Prairie Farmer farm talks. 12 11 10 10:10 1:13 12:13 11:13 10:13 WHO (526m-570kc), Radio Farm school 1:15 12:15 11:15 10:15 WEAO (293.9m-1020kc), Farm flash, crops and

wtaw (270.1m-1110kc), Important agricultural news; Jan. 18, Soy Beans; Jan. 25, Broom corn. 1:30 12:30 11:30 10:30 KMA (461.3m-650kc), Agricultural aid. 1:35 10:35 10:35 10:35 10:35 KSAC (340,7m-880kc), Jan. 18, Freed's white dent; damaged sweet clover; Jan. 25, harmful rodents.

rodents.

1:40
12:49
11:40
10:40
KFJF (260.7m-1150kc), State farm talks.

1:45
V01 (270m-1110kc), "Animal Husbandry."

2
WCCO (416.4m-720kc), Glass cloth.
WSB (428.3m-700kc), Georgia State College farm course.

6:20
5:20

farm course.
6:20 5:20 4:20 3:20
WDBO (239.9n-1250kc), Farm talk.
6:40 5:40 3:40
WGHP (270m-1110kc), U. S. Farm school. 6:45 5:45 4:45 3 WGY (379.5m-790kc), Agricultural program

WGY (379.5m-790kc), Agricultural program.
7:10 6:10 5:10 4:10
WEAO (293.9m-1020kc), Plant diseases.
7:30 6:30 5:30 4:30
KSO (405.2m-740kc), U. S. Farm school.
WEAO (293.9m-1020kc), Jan. 18, varieties of alfalia; Jan. 25, getting a stand of alfalia.
8 7 6 5
KOIL (305.9m-980kc), U. S. Radio Farm school.
KYW (535.4m-560kc), American Farm Bureau Federation. Federation.

WAMD (243.8m-1230kc), U. S. Farm school.

WTAW (270.1m-1110kc), Jan. 18, Poultry husbandry. Cover crops for the orchard. Jan. 25, poultry,

9:30 8:30 6:30 6:30 KOA (322.4m-930kc), Farm question box. 10:10 9:10 8:10 7:10 WOW (526m-570kc), Poultry, pig troubles.

Wednesday Eastern Central Mountain
10:30 a.m. 9:30 8:30
WFI (394.5m-760kc), Farm feature. 8:50 11:50 10:50 9:50 KFNF (461.3m-650kc), Poultry talk. 1 10 HB (365,6m-820kc), U. S. farm flashes, 1:10 p. m. 12:10 11:10 Til. 10:10 WMAQ (447.5m-670kc), Prairie Farmer farm talks. WMAQ (447,3m-670)(c), Frame Farmer farms talks, 1:13 p. m. 12:13 11:13 10:13 WHO (526m-570)kc), Radio Farm school. 1:15 12:15 11:15 10:15 WEAO (293.9m-1020)kc), Farm flash, poultry. WTAW (270.1m-1110)kc), Farm topics, dairying.

Eastern Central 1:30 Mountain 10:30 M.M. 12:30 Agricultural aid.

WFAA (461.3m-650kc), Agricultural aid.

WFAA (475.9m-630kc), Sears-Roebuck agricultural program.

1:35 11:35 11:35 10:35

KSAC (340.7m-880kc), Jan. 19, straw loft for poultry house; protein in winter ration; Jan. 26, money in broilers; portable colony brooder house.

1:40 11:40 10:40

WLW (422.3m-710kc), U. S. Radio Farm school.

1:45 W0I (270.1m-1110kc), Poultry husbandry.

WSB (428.3m-700kc), Georgia State college farm course. farm course. 5:40 4:40 3:40 WGHP (270m-1110kc), U. S. Farm school. 6:45 5:45 WGY (379.5m-790kc), WGY Agricultural pro-WGY (379.5m-/2006), WGL 2510 4:10

7:10 6:10 5:10 4:10

WOC (483.6m-620kc), Poultry talk.

7:30 6:30 4:30

KSAC (340.7m-880kc), Jan. 19, drainage; Jan. 26, irrigation in Kansas.

WLW (422.3m-710kc), Farm Bureau Federation talk WLW (422.3m-710kc), Farm Bureau Federation talk, KSO (405.2m-740kc), U. S. Farm school. S. WAMD (243.8m-1230kc), U. S. Farm school. WOS (440.9m-680kc), Radio Farm school. 8:10 WEAO (293.9m-1020kc), animal husbandry, 8:27 KOA (322.4m-930kc), Radio Farm council. 8:35 WCCO (416.4m-720kc), Farm talk, 6:35 9 KUOA (299.8m-1000kc), The University Cream-

ery. 12 m. 11 10 9 KGO (361.2m-830ke), U. S. farm program. Thursday Central Mountain 10:30 a.m. 9:30 8:30 7:30 WFI (304.5m-760kc), Farm feature. 12:30 p.m. 16:30 9:30 KVOO (374.8m-800kc), Oklahoma A. & M. course. course, 1 12 n. 11 10
WCCO (416.4m-720kc), Farm hour.
WHB (365.6m-820kc), U. S. farm flashes.
1:10 11:10 11:10
WMAQ (447.5m-670kc), Prairie Farmer farm talks, 1:10 12:10 Prairie Farmer farm talks.

1:13 12:13 11:13 10:13

WHO (526m-570kc), Radio Farm school.

1:15 12:13 11:15 10:15

WEAO (293, 9m-1020kc), Farm talk,
WTAW (270,1m-1110kc), Farm and Home Question box; Jan. 20, mixed vegetable production; Jan. 27, vegetable marketing,
1:30 12:30 11:30 10:30

KMA (461.3m-650kc), Agricultural aid.

1:35 12:35 11:35 10:35

KSAC (340.7m-880kc), Jan. 20, perennials for the garden; Kansas lumber; Jan. 27, small fruits; cabbage.

1:45 12:45 11:45 10:45

WOI (270m-1110kc), Farm crops.

2 VSB (428.3m-700kc), Georgia State college 4:30 3:30 2:30 1:30

WLW (422.3m-710kc), Fifth Farm flashes.
6:20 5:20 4:20 3:20

WBBO (239.9m-1250kc), Primer for town farmers.
6:40 5:40 4:40 3:40 mers.
6:40
WGHP (270m-1110kc), U. S. Farm school.
7:45
KSO (405.2m-740kc) U. S. Farm school.
8
KSO (405.2m-740kc) U. S. Farm school.
8
KOIL (305.9m-980kc), U. S. Government crop KOIL (305,5m-y80kc), U. S. Government crop survey.
WAMD (243,8m-1230kc), U. S. Farm school.
WOC (483,6m-620kc), poultry talk.
8:30 7:30 6:30 5:30
WCCO (416,4m-720kc), Farm lecture.
WOI (270m-1110kc), Farm crops,
WOS (440,9m-680kc), Jan. 20, Farm talk, Frank
0, Lowden, 7:33 6:30 5:33
KYW (535,4m-550kc), American Farm bureau.
WOI (270,1m-1110kc), Franklin County Farm
Bureau, program. Bureau program.

WOS (440.9m-680kc), Missouri State Board of Agriculture.

Ryciculture,

8
KUOA (299.8m-1000kc), Jan. 20, "Nature and Importance to Agriculture," Jan. 27, "Our State's Water Power Resources."

9:30 8:30 7:30 6:30

KOA (322.4m-930kc), Farm question box.

Friday

gram.
WEAO (293.9m-1020kc), Farm flash, dairying.
1:10 12:10 11:10 10:10
WMAQ (447.5m-670kc), Prairie Farmer farm 1:10

WMAQ (447.5m-670kc), Prairie Farmer farm
talks.

1:13

WHO (526m-570kc), Radio Farm school.

1:15

WTAW (270.1m-1110kc), Farm talks; Jan. 21.
Feterita and other grain sorghums; Jan. 28.
sweet sorghums.

1:30

1:30

1:30

1:30

1:30

1:30

1:30

1:30

1:30

1:30

1:35

KSAC (340,7m-880kc), Jan. 21, farm accounts;
Jan. 28, winter control of jackrabbits.

1:40

1:45

1:40

1:45

1:45

1:45

1:45

1:45

1:45

1:45

WI (270m-1110kc), U. S. Radio Farm school.

1:45

WI (270m-1110kc), Jan. 21, farm accounts;
Jan. 28, winter control of jackrabbits.

1:45

1:45

1:45

WI (270m-1110kc), Jan. 21, farm school.

1:45

WI (270m-110kc), Georgia State college WTAW (270.1m-1110kc), Farm topics.

2 11

WSB (428.3m-700kc), Georgia State college farm course,
6:40 5:40 4:40 3:40

WGHP (270m-1110kc), U. S. Farm school.
6:45 (256m-1170kc), Uncle Sam's farm flashes.
6:20 239.9m-1250kc), Agricultural economist.
7 6 WTIC (475.9m-630kc), Farm course, Agricultural college. college, 7:45 5:45 4:45 KSO (405.2m-740kc), U. S. Farm school. RSO (408.2m-740kc), U. S. farm school, 8 (7 Koll. (305.9m-980kc), U. S. Radio Farm school. WAMD (243.8m-1230kc), U. S. Farm school. WOS (440.9m-680kc), Radio Farm school. WTAW (270.1m-1110kc), Jan. 21, Tanning of Hides, Jan. 28, "Clays of Texas." 5:30 C(416.4m-720kc), Farm lecture, WCC (483.6m-620kc), Question box. 9 6

9 KOA (322.4m-930kc), Aggie Kickoffs.

Eastern Central Mountain Pacific 6:30 p. m. 5:30 4:30 3:30 WCCO (416.4m-720kc) Minneapolis string quartet. 

BO (344.6m-870kc) Studio ensemble, Celestial



Madame Kurenko. L. Arditi
13.30 Madame Kurenko and orchestra.
13.30 MGBS (315.6m-9506x) Old Time Minstrels.
10 9 8 7
WSBC (288.3m-1040kc) Hugh Swift and his serenaders.
10.220 8.230 R.230 R.23 10:30 9:30 8:30 7:30 WBAP (475.9m-630kc) Texas hotel orchestra.

### SUNDAY, JANUARY 23 Church Services

Central Mountain 1:55 12:55 11:55 10:55 KGW (491.5m-610kc) St. Stephen's cathedral.

Central Mountain Pacific 8 p. m. 7 6 WFAA (475.9m-630kc) First Church of Scientist. 8:30 7:30 6:30 5:30 KPRC (299.8m-1000kc) First Christian church. 9 (428,3m-700kc) First Methodist church, 9:45 (8:45 7:45 6:45 KOA (322,4m-930kc) church, 10:30 9:30 KGW (491,5m-610kc) Hinson-Memorial Baptist church, 10:30 9:30 Hinson-Memorial Baptist

# SUNDAY, JANUARY 23

# SUNDAY, JANUARY 30

WFAA (475.9m-630kc) Service First Presbyterian R:30 7:30 6:30 5:30 WFAA (475.9m-630kc) First Presbyterian church, 9:45 7:45 6:45 KOA (322.4m-930kc) Service of Immaculate.

# SUNDAY, JANUARY 30 Headliners

Eastern Central Mountain Pacific 3:30 p. m. 2:30 1:30 1:30 12:30 1:30 12:30 12:30 13:30 p. m. 2:30 1:30 12:30 12:30 13:30 p. m. 2:30 1:30 12:30 13:30 p. m. 2:30 1:30 13:30 p. m. 2:30 13:30 p. m. 2:30 13:30 p. m. 2:30 13:30 p. m. 2:30 p. m. 2:

# Regular Sunday Features

Eastern Time Stations
CFCA Toronto, Can. (356.9m-840kc) 11 a. m. services;
7 p. m., St. Paul's Anglican church; 8:45, musical

p. m., St. Paul's Anglican church; 8:45, musical program.
 WBBR New York, N. Y. (416.4m-720kc) 10 a. m. music, choral singers; 2 p. m., Watchtower string quartet, vocal, Bible lecture; 8, Watchtower violin choir, vocal selections.
 WBZ Springfield, Mass. (333.1m-900kc) 10 a. m. services; 6:30 p. m. organ; 7, quartet; 7:30, program; 8, musical; 9, program.



HE better your set, the more it deserves a Farrand "B" Eliminator. The more powerful your set, the more it demandsa Farrand "B" Eliminator. No sacrifice of power, as with other eliminators—even if your set has ten tubes. Not only takes the place of "B" batteries, but gives you the FULL equivalent of their maximum voltage —all the current your set requires—at all times. Troubleproof. Foolproof. Economical. Nothing to wear out. No acid or water. Go NOW to your dealer and see and hear this marvelous device in action.

> Operates on 60 cycle A.C. Provides ample current for sets up to ten tubes, giving following voltage: 15 to 70 volts on detector tube; 60 to 100 volts to radio frequency tubes; 135 to 200 volts on last audio stage -equal to one stage of power amplification. Only one rectifying tube-either UX-213 or CX-313.

# ELIMINATOR

FARRAND MFG. CO., INC. / LONG ISLAND CITY, N.Y



# The Jewell A-B-Relay is an automatic switch which connects and

disconnects the B-Eliminators and trickle charger of a radio set instantly, with the snap of the filament switch.

When the set is turned on the B-Eliminator is connected to the house supply current and the trickle charger is disconnected, eliminating any hum from that source. Turning the filament switch off disconnects the B-Eliminator and connects the trickle charger again.

The A-B-Relay is a convenient addition to any set having a B-Eliminator or a trickle charger or both.

> Write for our special descriptive circular No. 1023 and also ask for a copy of our radio instrument catalog, No. 15-C.

Jewell Electrical Instrument Co. 1650 Walnut St. Chicago

"27 Years Making Good Instruments"



# Garrison at WBAL



An intimate little talk to young music students was given recently by Mabel Garrison, operatic and concert star from WBAL. Miss Garrison is well known to listeners through her broadcasting on various Atwater Kent hours.

WCAE Pittsburgh, Pa. (461.3m-650kc) 6:30 p. m. orchestra; 7:15, WEAF; 9:15, WEAF; 10:15, trio. WCAU Philadelphia, Pa. (27:6m-1080kc) 11 a. m. services, First Unitarian church; 5, recital; 5.15, Undenominational church services; 5:25, sermon, Rev. John W. Stockwell; 6:45, orchestra; 7:45, Cathay Garden orchestra; 8:30, Bonwit Teller Ensemble; 10, Al Zemsay's orchestra.

WCX Detroit, Mich. (516.9m-580kc) 7:15 p. m. Central Methodist Episcopal church.

tral Methodist Eviscopal church.

WDBO Winter Park, Fla. (239,9m-1250kc) 11 a. m.
church; 7:30, service.

WEAF New York, N. Y. (491,5m-610kc) 6 p. m.
program; 7:20, musical program from the Capitol
theater, WEEI KSD, WRC, WWJ, WJAR, WCAE,
WTAG; 9:15, Atwater-Kent Radio hour, WEEI,
WGR, WRC, WWJ, WSAI, WGN, WCCO, KSD,
WJAR, WTAG, WCAE, WTAM, WOC, WFI; 10:15,
musicale

musicale WEEI Boston, Mass. (348.6m-860kc) 10:50 a. m. Old South church; 2 p. m., program; 4, WEAF; 7:20, WEAF; 9:15, WEAF; 10:15, B. F. Keith's theater. WGBS New York, N. Y. (315.6m-950kc) 9:30 p. m. Old Time minstrels. WGR Buffalo, N. Y. (319m-940kc) 10:45 a. m. service; 7:45, Central Presbyterian church; 9:15-10:15, 13375 G.

ice; 7:45. Central Fleshforda (N. Y. (379.5m-790kc) 11 a. m. service; 3 p. m., musicale; 5, organ; 9, WJZ; 9:15, Atwater Kent Hour.

WGY Schenectady, N. Y. (379.5m-790kc) 11 a. m. service; 3 p. m., musicale; 5, organ; 9, WJZ; 9:15. Atwater Kent Hour.

WHK Cleveland, Ohio (272.6m-1100kc) 10 a. m. Bible association; 5 p. m. twilight musicale; 6. dinner program; 7:30. lecture; 8:45. program.

WHN New York, N. Y. (361.2m-830kc) 6:30 p. m. Libbys Hotel orchestra; 10, orchestra; 11, orchestra; 12, The Playground.

WICC Bridgeport, Conn. (285.5m-1050kc) 10:50 a. m. service; 2 p. m., Sunday afternoon concert; 7, Forum. WIP Philadelphia, Pa (508.2m-590kc) 7:15 p. m. evening service; 10, ymphony.

WJAX Jacksonville, Fla. (336.9m-890kc) 11 a. m. service; 8-9, services.

WJR Detroit, Mich. (516.9m-580kc) 10 a. m. First Baptist church; 10 p. m. special song service, First Baptist church; 10 p. m. special song service, First Baptist church; 10 p. m. special song service, First Baptist church; 10 p. m. packalong only tentative lineup, 11 a. m. and 7 p. m., Park Avenue Baptist Church Carillon; 7:20, Hotel Commodore concert orchestra, WBZ, WGY; Godfrey Ludlow, violinist.

WKRC Cinchnati, Ohio (325.9m-920kc) 6:45 p. m. Walnut Hi.ls Christian church; 10, classical program; 11:15, Louisville Loons; 12, Marie Turner; 12:15, Louisville Loons; 12, Marie Turner; 12:15, Louisville Loons, 12, Marie Turner; 12:15, Louisville Loons, 12, Marie Turner; 18:50, Crosley concert orchestra.

WHMC New York, N. Y. (288.3m-1040kc) 8:15 p. m. Paulist choristers.

WMCA New York, N. Y. (268.5m-1130kc) 10:25 a. m. service; 3 p. m., WFBL; 7:50, First Church of Christ, Scientist, M. Y. (269.5m-1130kc) 10:25 a. m. service; 3 p. m., WFBL; 7:50, First Church of Christ, Scientist, N. Y. (260.7m-880kc) 6 p. m. Romer's Homers; 7, Ernie Golden and his Hotel

WMAA Bulliane, Service; 3 p. m., WFBL; 7.00, Christ, Scientist.
WMCA New York, N. Y. (340.7m-880kc) 6 p. m.
Romer's Homers; 7, Ernie Golden and his Hotel
McAlpin orchestra; 9, Moment musicale; 10, Monte

McAlpin orchestra; 9, Moment musicale; 10, Monte Carlo orchestra.

WOO Philadelphia Pa. (508.2m-590kc) 10:30 service; 2:30 p. m. Sunday School musical exercises; 6, organ recital, Clarence K. Bawden; 7:30, service.

WOR Newark, N. J. (405.2m-740kc) 6 p. m. ensemble; 7:45 concert

hle: 7:45, concert.

WPG Atlantic City, N. J. (299.8m-1000kc) 3:15 p. m. organ recital, Arthur Brook; 4:15, community vocal and instrumental recital; 5:30, concert; 9, news; 9:15, concert orchestra; 10, Sunday evening con-Washington, D. C. (468.5m-640kc) 11 a. m. circe: 4 p. m. chapel; 6:45, vespers; 7:20, WEAF,

9:15, WEAF, WSAI Cuncinnati, Ohio (325.9m-920kc) 11 a, m. Pres-byterian church; 3:45 p. m. chimes; 4-5:30, WEAF; 8, sermonette: 9:15-10:15, WEAF, WSKC Bay City, Mich. (260.7m-1150kc) 11-12 noon

services.
WTAG Worcester, Mass. (545,1m-550kc) 7:20 p. m.
WEAF: 9:15, WEAF.
WTAM Cleveland, Ohio (389,4m-770kc) 10:45 a. m.
service; 3 p. m. musicale; 6, Hollenden hotel orchestra; 7, Stillman theater orchestra; 8, services; 9:15, WEAF: 10:15, Austin Wylie's Vocalion Recording

orchestra. WTIC Hartford, Conn. (475.9m-630kc) 6 p. m. State theater concert. WWJ Detroit, Mich. (352.7m-820kc) 10:30 a. m. service: 3:30 p. m. orchestra; 7:20, WEAF; 9:15, WEAF.

Central Time Stations

CKY Winnipey, Can. (384.4m-780kc) 11 a. m. Wesley church; 7-8:30 p. m. First English Lutheran church; 9-10. Royal Alexandre hotel.

KFAB Lincoln, Neb. (340.7m-880kc) 9-10:30 p. m. Sunday evening musicale.

KFH Wichita, Kan. (268m-1120kc) 7 p. m. church service

service.

KFNF Shenandoah, Iowa (461.3m-650kc) 10:45 a. m. services; 2:30 p. m. Seed House song service; 3, program; 6:30, Golden Rule Circle; 7:30, services, KLDS Independence, Mo. (440.9m-680kc) 8:30 a. m. Bible study; 11, Stone church; 3 p. m. Radio church; 6:30, vespers; 9:15, studio service.

KMA Shenandoah, Iowa (461.3m-650kc) 4-5 p. m. sacred program; 7:30-8:30, service.

KMA Shenandoah, Iowa (461.3m-650kc) 4-5 p. m. sacred program; 7:30-8:30, service.

KMOX St. Louis, Mo. (280.2m-1070kc) 9 p. m. Sunday night club; 10:30-12, ballroom.

KOIL Council Bluffs, Iowa (305.9m-980kc) 11 a. m. First Congregational church; 7, children's hour; 7:30, program; 11, Paramount orchestra.

KPRC Houston, Texas (299.8m-1000kc) 7:30 p. m. church service; 9:30, evening concert; 11, Texan theater pipe organ.

KSO Clarinda, Iowa (405.2m-740kc) 11 a. m. M. E. church.

church.

KTHS Hot Springs National Park, Ark. (374.8m-800kc) 11 a. m.-12:15 p. m., service; 9-9:45, Meyer Davis ensemble, classic hour concert; 9:45-10:30, Lawson Reid, organist; 10:30-11:30, Arkansas Traveler Radio Train.

KVOO Bristow, Okla. (374.8m-800kc) 1-2 p. m. Walter Schoggan, Doris Kintner; 5-6, Gospel hour; 6-7, Sophia Osina, pianist; 7-9, services; 12-1, Melody Bovs.

Boys. KYW Chicago, Ill. (535.4m-560kc) 11 a. m. Central church service; 4:30 p. m. Edwin Harper; 7-8:30, Sunday evening club; 9:30-11, classical concert.

WBAP Fort Worth, Texas (475.9m-630kc) 11 a. m. First Methodist; 5-6 p. m. vesper services, Baptist seminary; 9:30-11, Sorin-White Texas hotel orches-

tra.
WBBM Chicago, III. (226m-1330kc) 8 p. m. Coon-Sanders Night Hawks; 9-12, frolic; 12, Nutty club; Coon-Sanders orchestra.
WCBD Zion, III. (344.6m-870kc), Sunday evening

WCBD Zion, Ill. (344.6m-870kc), Sunday evening musical musical

orchestra. WGBF Evansville, Ind. (236.1m-1270kc) 7:30 p. m

services. WGN Chicago, Ill. (302.8m-990kc) 6:45-7 p. m. Black-stone string quintet, solo artists; 7, The Million Sing; 7:20, Old Fashioned Almanack; 7:30, Drake concert ensemble; Correll and Gosden; 8, Auld Sandy; 8:15, WEAF; 9:15, Our Music Room; 10, Sam 'n' Henry; 10:10, Armand Buisseret, violinist; 10:20, Bible reading; 10:25, piano.

WHAD Milwaukee, Wis. (275.1m-1090kc) 3:15 p, m. Turnverein concert, WHAS Louisville, Ky, (399.8m-750kc) 10 a, m. services; 4:30-5:30 p, m. choral evensong, WHB Kansas City, Mo. (365.6m-820kc) 9:40 a, m. Linwood Blvd. Christian church; 11:10-12:30, Inde-

pendence Blvd. Christian church; 7-7:45, Dr. Burris A. Jenkins; 8-9, Westport Methodist church; 11:15-11, Morrill Moore, organist; Don Anchors, poet. WHO Des Moines, Iowa (526m-570kc) 11 a. m. service; 5-6 p. m. Bankers Life Little symphony; 7:30-8:15, orchestra; 11-12, musical program.

WHT Chicago, Ill. (399.8m-750kc) 1-12 midnight, Paul Rader.

WJAZ Chicago, Ill. (399.8m-750kc) 7:45-8:45 a. m. Catholic services; 9:30-10:30, Protestant services; 1-2 p. m. Howard Peterson, organist; 2-2:30, Bible class; 2:30, Sacred song service; 3-4, popular concert; 4-5, Palmer House Sunday symphony orchestra.

WLIB Chicago, Ill. (302.8m-990kc) 5-6:15 p. m. Her-

cert; 4-5, Palmer House Sunday symphony orchestra.

WLIB Chicago, Ill. (302.8m-990kc) 5-6:15 p. m. Herbert Johnson, pianist; Leon Lichtenfeld, cellist; Tommy Coates, baritone; Blackstone string quintet.

WLS Chicago, Ill. (344.6m-870kc) 10:45 a. m. University of Chicago service; 12:15, Elsie Mae Look, organist; 1-1:30, trio; 1:30-2:30, chapel service; 6-8, WLS Little Brown church.

WMBB Chicago, Ill. (249.9m-1200kc) 3-6 p. m. Sunday afternoon concert; 7:40, Fifth Church of Christ, Scientist; 9-11, Trianon orchestra, artists.

WMC Memphis, Tenn. (499.7m-600kc) 11 a. m. church service.

WMC Memphis, Tenn. (499.7m-600kc) 11 a. m. church service.

WOC Davenport, Iowa (483.6m-620kc) 1-2 p. m. old folks' musicale; 6:30-7, church service; 8:15-9:15, WEAF; 10-11, Palmer Little symphony.

WOQ Kansas City, Mo. (278m-1080kc) 11 a. m. Unity service; 7 p. m. evening service; 7:45, Grand Avenue Methodist church.

WORD Chicago, III. (275.1m-1090kc) 10 a. m. I. B. S. A. service; 2:30 p. m. Chicago Rapid Transit company program; 3:30, Bible lecture; 7, Webster hotel duo orchestra; 9, I. B. S. A. choral singers.

WOW Omaha, Nebr. (528m-570kc) 9 a. m. Omaha Gospel tabernacle; 1:30 p. m. Father Flanagan's Boys' home period; 6, Bible study; 9, chapel service.

WOJ Chicago, III. (447.5m-670kc) 10:45 a. m.-12:45 WQJ Chicago, III. (447.5m-670kc) 10:45 a. m.-12:45 p. m. People's church; 3-4, musical program; 8-10, popular program; Rainbo Gardens orchestra; Jack Klein, Adelaide Kerkoff, Harry Geise.

WRR Dallas, Tex (245.8m-1220kc) 11 a. m. service; 8 p. m. service; 9:30, program.
WSB Atlanta, Ga, (428.3m-700kc) 5 p. m. sacred concert; 8, services.
WSBC Chicago, Ill. (288.3m-1040kc) 5-7 p. m. Sunday concert: 9-1. concert WSM Nashville, Tenn. (282.8m-1060kc) 10:30 a. m.

### Mountain Time Stations

KOA Denver, Colo. (322.4m-930kc) 10:30 a. m. church service; 3 p. m. afternoon musicale; 6:30, organ; 7:45, church service.

### Pacific Time Stations

KFI Los Angeles, Calif. (467m-642kc) 7-8 p. m. Jack Smith's dance orchestra; 8-9, Aeolian organ recital; 9-10, Bob Bottger's Venetians; 10-11, Packard Six dance orchestra.

KFWB Hollywood, Calif. (252m-1090kc) 9-11 p. m.

Warner Brothers Sunday night movie frolic.

KGO Oakland, Calif. (361.2m-830kc) 11 a. m. service; 2:40 p. m. symphony; 6:30-7:30, little symphony; 7:35, service; 9-10, symphony.

KGW Portland, Ore. (491.5m-610kc) 11 a. m. church; 7:30-9 p. m. church; 9-10, symphony orchestra.

KHJ Los Angeles, Calif. (405.2m-740kc) 7-8 p. m. service, First M. E. church; 8-10, Request program by Orpheus Four male quartet and Frederick Mac-Murray, viola soloist.

KMTR Hollywood, Calif. (370.2m-810kc) 6:30-7 p. m. Leila Castberg's half hour; 7-8, Cafe Lafayette string quartet; 8-9:30, orchestra.

string quartet; 8-9:30, orchestra.

KNX Hollywood, Calif. (336.9m-890kc) 6:30 p. m. service; 8, orchestra; 9, feature.

KPO San Francisco, Calif. (428.3m-700kc) 6 p. m. States Restaurant orchestra; 6:35, Palace hotel concert orchestra; 8:35-10, Rudy Seiger's Fairmont hotel concert orchestra; 10-12, (Trianon ballroom.

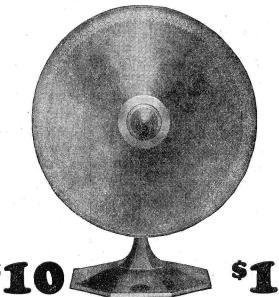
KPSN Pasadena, Calif. (315.6m-950kc) 10:30 a. m. Family Altar service, United Brotherhood.



# It's Here

# The Sensation of 1927

The Newest Addition to the World's Most Complete Line of Speakers



# The New **UTAH CONE SPEAKER**

14½" high

Also Utah Cone Speaker

Free Edge **\$1600** 17½" high



UTAH SUPERFLEX Reg. U. S. Pat. Off.

We are

5<u>1000</u>



UTAH BOOK SPEAKER Looks like an open book. \$1000 17½" x 13½"



Utah Radio Products Co., 1421 S. Michigan Ave., Chicago

Sunday, silent night for: CKAC, CKNC, CNRW, KFDY, KFXF, KLX, KMA, KOB, KSWC, KWWG, WABC, WCFL, WCOA, WDAF, WEBJ, WFI, WGBF, WGHB, WGHP, WHAD, WHAS, WJJD, WJR, WJIT, WLWL, WMAQ, WMC, WNYC, WOI, WOO, WOR, WSMB, WRVA, WSWS, WTIC.

### **MONDAY, JANUARY 17** Headliners

7:15 WTIC (475.9m-630kc) Leona Bunnell. 7:30 6:30 5:30 4:30
WMCA (340,7m-880kc) Grel-Meister's Hungarian orchestra.

WBAL (245.8m-1220kc) Wilma Lanyon, mezzo-

 WBAL
 (245.8m-1220kc)
 Wilma
 Lanyon,
 mezzo-contratto,

 WLW (422.3m-710kc)
 Ford and Glenn,
 5:30
 5:30

 CNRO (434.5m-690kc)
 "Health Transported by Air."

Air. KFH (268m-1120kc) The Boys of 496. WBZ (333.1m-900kc) commemorating Benjamin Franklin. Franklin.
WHO (536m-570kc) "WHO" quartet.
8:45 7:45 6:45
WHAZ (379.5-790kc) Ethel A, Burch, Lucia Walker

9 8 7 6
CKNC (357m-840kc) Toronto Conservatory instrumental trio.

mental trio.

CNRO (434.5m-690kc) CNRO quartette.

WABC (315.6m-950kc) Barrere ensemble.

WBAL (245.8m-1220kc) George C. Smith.

WLW (422.3m-710kc) The New Crosley synchronized orchestra.

9:10 8:10 7:10 6:10 WRVA (256m-1170kc) Maust-Austin concert company. 9:30 8:30 7:30 6:30 KPRC (299.8m-1000kc) Kobusch and Shay. WHAZ (379,5-790kc) Bill Harbrecht and his or-chestra.

10:30 8:30 7:30 6:3 KPRC (299.8m-1000kc) Mrs. La Rue Nelson,

NFR. (299,8m1-1000Rc) NFS. La Rue Nelson, so-prano.
WBAP (475,9m-630kc) The Grapevine fiddle band.
WBZ (333,1m-900kc) "The Happy Trio."
WGST (270,1m-1110kc) Georgia Tech glee club.
11:30 9:30 8:30
CNRC (434,8m-690kc) Jack Rushton's, serenaders.
11 (467m-642kc) Brahm's quartet.
12:10 a.m. 11:10 10:10 9:10
KGW (491,5m-610kc) Portland symphony orchestra.

1 12 11 10 CNRV (291m-1030kc) Cabaret Belmont orchestra.

# **MONDAY, JANUARY 24** Headliners

Eastern Central Mountain Pacific 7:30 p. m. 6:30 5:30 4:30 KSO (405.2m-740kc) Hay Mow Five. 8:30 5:30 5:30 5:30 CNRO (434.5m-690kc) "How We Measure Distance," Mr. F. A. McDiarmid. WTIC (475.9m-630kc) Beethoven glee club, 9 6 Neck. 11:20 10:20 9:20 8:20 KTHS (374.8m-800kc) Natalie Arnoux, violinist.

### MONDAY, JANUARY 31 Headliners

Eastern Central Mountain
7:30 p. m. 6:30 5:30
KSO (405.2m-740kc) Old Time orchestra,
8 6 8 VTIC (475,9m-630kc) Clark university glee club. 

# **Educational Features**

| Caption | Control | Cont WNYC (526m-570kc) Elementary German lessons. V. H. Berlitz. 6
WDAF (365.6m-820kc) School of the Air. 4
WNYC (526m-570kc) Advanced German lessons. 7:18
WEAF (491.5m-610kc) Columbia University. 7:30
KSAC (340.7m-880kc) Jan. 17, sociology; Jan. 24, 37, taxation. 6:45
KDKA (309.1m-970kc) 5:45
WDBO (239.9m-1250kc) Rollins college. 4:55
WDBO (239.9m-1250kc) Rollins college. 4:55
WDBO (399.8m-1000kc), Jan. 17, "Why Boys and Girls Should Have an Allowance."
WHAZ (379.5m-790kc) Educational address. WSUI (483.6m-620kc) U. of lowa courses. 9:30
KOB (348.6m-860kc) N. M. state college.

### Regular Monday Features Eastern Time Stations

CFCA Toronto, Can. (356.9m-840kc) 6:15 p. m. dinner concert; 7:15, organ recital, Clifford McCormick, KDKA Pittsburgh, Pa. (309.1m-970kc) 8 p. m. feature; 9, light opera.

WABC New York, N. Y. (315.6m-850kc) 7:30 p. m. talk; 7:40, ensemble; 9, Barrere ensemble; 12, dance orchestra; 1 a. m. vaudeville.

WBAL Baltimore, Md. (246m-1220kc) 6:30-7:30 p. m. dinner orchestra; 7:30-8, organ recital, Frederick Weaver; 8-9, musical program; 9:10-10, ensemble; 10-11, concert, Roberta Glanville, soprano; Helene Broemer, cellist; George Bolek, pianist; 11-12, dance orchestra.

orchestra.

WBZ Springfield, Mass. (333.1m-900kc) 7 p. m. organ; 7:30, talk; 8, orchestra; 8:30, trio; 9, band; 9:30, feature; 10:03, music.

WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. William Penn hotel orchestra; 7:45, talks; 8, program; 8:30, Penn hotel orchestra; 7:45, talks; 8, program; 8:30, WEAF; 9:11, WEAF; 11, Press frolic. WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg recital; 8:5kiler's Skylarks; 8:25, recital; 8:45, Merry Minstrels; 9:30, trio; music; 10:30, Parodians' dance orchestra, Parodians' dance orchestra, WCX Detroit, Mich. (516.9m-580kc) 6-7 p. m. dinner program, Goldkette ensemble; 8, studio program. WDBO Winter Park, Fla. (239.9m-1250kc) 8:55 p. m. citrus talk; 9:10, musicale.

WDBO Winter Park, Fla. (239.5m-1250kc) 8:55 p. m. citrus tall 9:10, musicale.

WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. dinner music (rot, N. Y. (491.5m-610kc) 6 p. m. trio, WGBS (hew York, N. Y. (315.6m-950kc) 6 p. m. trio, WGHB Clearwater, Fla. (265.3m-1130kc) 8:30 p. m. story lady; 8:45. studio program; 9, band; 10:30-12, dance program.

story law, o. 78, dance program.

WGHP Detroit, Mich. (270.1m-1110kc) 6-8 p. m. dinner concert, Hotel Tuller; 8-8:30, Little symphony orchestra; 8:30-9:30, famous composer's hour; 9:30-10, studio program.

WGR Buffalo, N. Y. (319m-940kc) 6:30-7:30 p. m. dinner music; 8:30, musicale; 9-10, dance program, WQJ; 11-1, supper music.
WGY Schenectady, N. Y. (379.5m-790kc) 6:30 p. m. dinner music, Hotel Van Curler.
WHAZ Troy, N. Y. (379.5m-790kc) 8-12 mid., music, talks

WHAZ 1roy, N. Y. (378,5m-790kc) 8-12 mid., music, talks.
WHK Cleveland, Ohio (272,6m-1100kc) 7-9 p. m. specialty night; 9-10, studio concert; 10-10:30, trio.
WHN New York, N. Y. (361,2m-830kc) 6:30 p. m. WHN Radio Movie club; 8:30, Roseland dance orchestra; 11, entertainers; 11:30, Cotton Club orchestra; 12, Silver Slipper orchestra.
WICC Bridgeport, Conn. (232,4m-1290kc) 7 p. m. kiddies' story; 9, theater presentation; 10, orchestra; 11, Bugpy Riders, 508.2m-590kc) 6:10 p. m. Benjamin Franklin concert orchestra; 7, Uncle Wip's bedtime stories; dancing lessons, WJAP Providence, R. I. (485,1m-616kc) 8 p. m. music; 9-11, WEAF.
WJAX Jacksonville, Fla. (336,9m-890kc) 7-7:30 p. m.

WJAR Providence, R. I. (485.1m-618kc) 8 p. m. music; 9-11, WEAF.

WJAX Jacksonville, Fla. (336.9m-890kc) 7-7:30 p. m. Hotel Carling dinner music; 8-9, popular program; 9-10, classical music; 11-12, Arcade theater.

WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean Goldkette's Petite symphony orchestra, soloists; 7:15, Caspar Lingeman entertainers; 7:45, Good will Oakland and Chief Pontiac; 9, studio program.

WJZ New York, N. Y. (454.3m-680kc), Note: WJZ programs will be announced over the air. The following program is only tentative. 7 p. m. Hotel Commodore concert orchestra; 7:55, John B. Kennedy; 8, Markel's dance orchestra; 8:30, Willys Overland; 9:30, Thayer West Point Cavaliers; 10:30, Waldori-Astoria grill dance orchestra.

WKRC Cincinnati, Ohio (422.3m-710kc) 6:15 p. m. Hotel Alms orchestra; 8, msicale.

WLIT Philadelphia, Pa. (394.5m-760kc) 7:55 p. m. Salicon weatherman; 8, WEAF.

WLW Cincinnati, Ohio (422.3m-710kc) 7 p. m. orchestra; 7:40, orchestra; 8, Ford and Glenn; 9, orchestra; 7.40, orchestra; 8, Ford and Glenn; 9, orchestra; 7.40, orchestra; 8, Ford and Glenn; 9, orchestra; 9, Ford and Glenn

tra.
WLWL New York, N. Y. (288.3m-1040kc) 8 p. m.
musicale; 8:30, McEvoy concert; 9, question box

10. music.

WMAK Buffalo, N. Y. (265.5m-1130kc) 6:15 p. m. diuner music; 7:30, dance program; 8. band; 9. music.

WMCA New York, N. Y. (340.7m-880kc) 6:30 p. m. Ernie Golden's Hotel McAlpin orchestra; 7, Kerry Conway; 7:15, orchestra; 7:30, Hungarian orchestra; 8, talk; 12, entertainers.

WNYC New York, N. Y. (526m-570kc) 6 p. m. Piano woo Philadelphia, Pa. (508.2m-590kc) 8, organ recital, Mary E. Vogt; 8:30, address, Rev. Forest E. Dager: 9, concert: 10:30, dance orchestra

tal, Mary E. Vogt; 8:30, address, Rev. Forest E. Dager; 9, concert; 10:30, dance orchestra. WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Jacques Jacobs' Hotel Shelton ensemble; 6:45, Bill Wathey in sports; 7, Jacques Jacobs' Hotel Shelton ensemble; 8:45, N. Y. U.; 9, musicale; 11, Jascha Guerwich's dance orchestra. WPG Atlantic City, N. J. (299.8m-1000kc) 7:15 p. m. Arthur Brook, organist; 7:30, Hotel Morton dinner music; 8:05, Hotel Shelburne dinner music; 8:03, program; 10:30, music; 11, dance orchestra; 12, Gateway Casino.

music; 8:05, Hotel Shelburne dinner music; 8:30, program; 10:30, music; 11, dance orchestra; 12, Gateway Casino.

WRC Washington, D. C. (488.5m-640kc) 7 p. m. dinner music; 7:30. Emerson hour; 8:30, WEAF; 10, WEAF; 11-12, Loew's Palace theater.

WRVA Richmond, Va. (256.3m-1170kc) 8:15. Evening program; 9, "Virginia Folk Lore." Dr. Douglas S. Freeman; 9:10, music; 11, Hotel Richmond Winter Garden orchestra.

WSAI Cincinnati, Ohio (325.9m-920kc) 7:30-11 p. m. WEAF; 11, dance music.

WSAC Bay City, Mich. (260.7m-1150kc) 9-11 p. m. dance music.

WTAG Worcester, Mass. (545.1m-550kc) 8 p. m. program to be announced.

WTAM Cleveland, Ohio (389.4m-770kc) 6 p. m. orchestra; 7, Allen Theater orchestra; 8, orchestra; 8:30, WEAF; 9, WEAF; 10, Willard concert orchestra, 11. Emerson Gill and Bamboo Garden orchestra, WTC Hartford, Com. (475.3m-630kc) 6 p. m. Mother Goose; 6:30, Hotel Bond trio; 7, program; 11, Walter Dawley, organist.

WWJ Detroit, Mich. (382.7m-850kc) 6 p. m. Dinner concert; 8, musical program; 9, WEAF.

Central Time Stations
CKY Winnipeg, Can. (384.4m-780kc) 8:30-9 p. m. Studio program; 9:10, Stewart Warner concert; 10-11, Reliable battery hour; 11-12, Capitol theater revue.

revue.

KFAB Lincoln, Nebr. (340.7m-880kc) 5:30-6:30 p. m. Hotel Lincoln orchestra; 8:30-10:30, musicale. KFNF Shenandoah, Iowa (461.3m-650kc) 7 p. m. Seed concert; 11. old time music. KMA Shenandoah, Iowa (461.3m-650kc) 9-11 p. m. Farnham trio.

KMOX St. Louis, Mo. (280.2m-1070kc) 6 p. m. Organ; 6:30, quartet; 7, quartet; 9, soloists; 10:15, orchestra; 12-1, orchestra.



# **Greatest \$1**

# Interference Eliminator No Radio Set Complete Without It

Select stations at will. Especially necessary for 1 and 2 dial controlled sets. Under present conditions the average set falls to bring in the desired stations properly. The Steinite Interference Eliminator shuts out local and other interference. You get one station at a time, the one you want, and tune in loud and clear. Operates on any set—attach to aerial wire and to set—no changes—no extra New 1927 Model

Fred W. Stein.

Improved Results with Tube or Crystal

Try entirely at my risk the wonderful improvement this inexpensive little device will make in the reception of your set. Improve results on both crystal and tube sets that seemly on both crystal and tube sets that seemly on the reception wonderfully, increases olume, a reception wonderfully, increases olume, and partially absorbs static. Money-Back Guarantee. Put this interference eliminator on your set and note amazing improvement. No tools needed—install in a moments time. Connect with set and follow simple instructions. Money back promptly if not delighted.

31 postpaid when cash with order. ORDER TODAY—a dollar bill will do. REFERENCES: Exchange National Bank, Attenion Savings Bank.



**Postpaid** If you are not delighted with results you get your dollar back

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 Ic an hour. Write for descriptive literature before buying an expensive Battery Set. Also Steinite Long Distance Crystal Set \$6—6-Tube Battery Set \$45. WRITE TODAY.

STEINITE LABORATORIES, 408 Radio Bidg., Atchison, Kansas

# Tam Dial-get stations everwhere: -30 Days Free! Send Coupon for a Mazing Special. Offers Motes this offer is made to prospective buyers by famous big Radio Corporation, one of Americas, bigst reliable manufactures of line sets—seventh successful year. Many satisfied users in every bythe manufactures of line sets—seventh successful year. Many satisfied users in every bythe manufactures of line sets—seventh successful year. Many satisfied users in every bythe manufactures of line sets—seventh years as much. Very easy to operate

Selective MIRACO Unity Collective MIRACO

Beauth of hand-chinet
Solid Mexico Radios set programs Const to Clark, also Cansolid Sada, Cuba and Mexico, loud and clear on speaker; cutperform \$100 to \$200 sate,
and sada, Cuba and Mexico, loud and clear on speaker; cutperform \$100 to \$200 sate,
and sada, Cuba and Mexico, loud and clear on speaker; cutperform \$100 to \$200 sate,
and sade to the constant of the

verified by Miraco users

Reports from users everywhere leave little for us to add. These are only a few of the many in our files and which we receive daily. Send coupon for plenty of additional proof, testimony of nearby users and SPECIAL OFFER

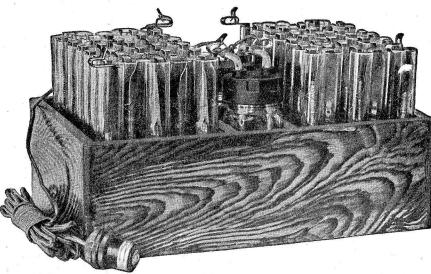
ONE DIAL CONTROL

MIRACO RADIO GETS'EM COAST &

COAST

nect 8-2 Eattery Cablest features (too numerous tomention) of hist-priced sets. Send for Amazing Low "Unitume" Prices of the send for the send fo

# 90 Volt "B" Power Unit \$12.75



HOWER LINE THE HAWLEY ADVANCED POWER UNIT was coming—and

here it is. Hawley Storage "B" batteries have been standard for over 5 years and the same quality—the same standard of workmanship comprise this unit with its new ingenious hook-up and built-in charger, giving the utmost in B-Eliminator simplicity. Positively guaranteed not to give the slightest kind or trace of a hum or line noises. Simply plugit into your electric socket—and forget it. Any inexperienced person can hook it up in two minutes, as all voltages, including those for any kind of detector, are all plainly marked. Operates any 1 to 10-tube set. Does not contain any acid.

It's so good—such true smashing value—that my 5-year-old 30-day trial offer refund applies. You've got to see it—hear its operation—to fully appreciate this statement.

The prices—only slightly more than ordinary dry cells—90 volts, \$12.75; 112½ volts, \$15.25; 135 volt; \$17.50. For 110 to 120 volts, 25 to 130 cycles alternating current only. Special sizes to order of any voltage. Knock-down kits at still greater savings. All complete as above—nothing to purchase extra. Further covered in my regular two-year guarantee. Ample stocks—all packed—same day shipments and your order is all I need to speed it on its way to you. Simply say—ship C.O.D.—pay expressman its cost plus small transportation charges, and you'll thank me later—or write for my free literature, testimonials, etc.

B. Hawley Smith, 325 Washington Ave., Danbury, Conn., U. S. A.

Mfr. of—"A" Power Units, "B" Power Units, "A" Storage Batteries,
"B" Storage Batteries and A & B Chargers, including Tricklers.

KOIL Council Bluffs, Iowa (305.9m-980kc) 7:03 p. m. Hotel Lassen program, Don Hill and his ukulele; 7:30, musicale; 8, program; 9, play; 10, Crosley lour; 11, program; MPRC Houston, Texas (299.8m-1000kc) 7:30 p. m. Houstonians; 8:30, concert; 9, studio concert, KSO Clarinda, Iowa (405.2m-740kc) 6:30 p. m. old-time music. time music. KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9-11:20 p. m. musicale. KVOO Bristow, Okla. (374.8m-800kc) 6-7 p. m. Warner trio; 7-8, quartette; 8-9, Luckey's orchestra; ROURC 9-11:20 p. m. musicale.
KVOO Bristow, Okla. (374.8m-800kc) 6-7 p. m. Warner trio; 7-8, quartette; 8-9. Luckey's orchestra; 12. Earl Thurston, organis: (475.9c.630kc) 7:30-8:30 p. m. Classical concert; 9:30-11, old time music; 11-12, midnight musicale.
WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 6:15 p. m. St. Paul hotel orchestra; 8, U. of Minn., 9, Vagabonds; 10:10, dance program; 11:30, organ. WCOA Pensacola, Fla. (252m-1190kc) 6:30 p. m. WCOA happiness period.
WEMC Berrien Springs, Mich. (315.6m-950kc) 8:15 p. m. Lighthouse Music Makers.
WFAA Dallas, Texas (475.9m-630kc) 6:30-7:30 orchestra; 8:30-9:30, Sears-Roebuck Agricultural Foundation program.
WGBF Evansville, Ind. (236m-1270kc) 7 p. m. radiograph; 7:20, children's program; 7:40, Gospel trio; 8. studio program; 9, orchestra.
WHAD Milwaukee, Wis. (275.1m-1090kc) 6-7 p. m. dance selections; 7, news; 10-11:30, dance music.
WHB Kansas City, Mo. (365.6m-820kc) 7 p. m. Sweeney Radio orchestra.
WHO Des Moines, Iowa (526m-570kc) 7:30-8 p. m. missic; 8-9, dance orchestra; 11-12, dance program.
WLS Chicago, Ill. (344.6m-870kc) 5:40 p. m. Al Melsard, Melona, Scollege Inn orchestra.
WHO Mephis, Fenn. (489,7m-600kc) 8:30 p. m. McLour Mephis, Fenn. (489,7m-600kc) 6:15 p. m. Unity Inn orchestra. (256m-570kc) 7:30 p. m. program.
WOS Jefferson City, Mo. (276m-1080kc) 6:15 p. m. program. WOS Jenerson City, Mo. (440.9m-680kc) 7:30 p. m. program.
WOW Omaha, Nebr. (526m-570kc) 6 p. m. Joe Bauer and his Highway Gardens orchestra; 6:50, classical; 9. Nash-Finch orchestra.
WRR Dallas, Tex. (245.8m-1220kc) 6 p. m. music; 8. band; 9:30, frolic.
WSB Atlanta, Ga. (428.3m-700kc) 8 p. m. Sears Roebuck program; 10:45, program.
WSMB New Orleans, La. (319m-940kc) 8:30 p. m. dance night; 11:30, Radio varieties.
WSOE Milwaukee, Wis. (245.8m-1220kc) 7 p. m. program; 8. Whozit,

WSDE Milwaukee, Wis. (245.8m-1220kc) 7 p. m. program; 8, Whozit.

Mountain Time Stations

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

KOB State College, N. M. (348.6m-860kc), 7:30 p. m. State College orchestra.

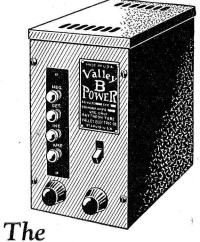
Pacific Time Stations

KFI Los Angeles, Calif. (467m-642kc) 7-8 p. m. Owen Fallon's Californians; 8-9, popular program; 9-10, program, Walter M. Murphy Motors Co.; KPO; 10-11, program by Meiklejohn Brothers. (5. KFO); 10-11, program by Meiklejohn Brothers. (6. KFO); 10-11, program by Meiklejohn Brothers. (7. p. m. Pontiae dinner hour; 7:50, news; 8-9, program; 9-10, Program; 10-11, Warner Brothers frolic.

KGO Oakland, Calif. (381.2m-830kc) 6-6:55 p. m. Stanislas Pem's Little symphony.

KGW Portland, Ore. (491.5m-610kc) 7:45-8 p. m. talk; 8-9, vaudeville; 9-10, orchestra, 10-12, dance music.

KJR Seattle, Wash. (384.4m-780kc) 6:30 p. m. dinner. music.
KJR Seattle, Wash. (384.4m-780kc) 6:30 p. m. dinner hour; 8-8:30, program; 8:30-10 program.
KLX Oakland, Calif. (508.2m-590kc) 8-9 p. m. Studio program, Piggly Wiggly company; 9-10, Lake Merritr Ducks. program, Piggly Wiggly company; 9-10, Lake Merritt Ducks. KMTR Hollywood, Calif (370.2m-810kc) 8-10, program; 10-12, Palais de Danse.



# Valley "B" Power Unit

# "B" Power For Any Set Of 12 Tubes Or Less

The Valley "B" Power Unit will operate radio receivers of any size up to 12 tube sets and will provide the extra plate voltage necessary for a power tube or other similar

Plugs in on your light socket; operates without hum or noise; and is entirely free from the troubles and dissatisfaction of B batteries.

Uses the Raytheon Tube because only that tube gives full wave rectification, has no filament to burn out, and delivers full current and voltage continuously over a long period of time. Maximum output: 50 milliamperes at 180

Mounted in handsome black metal case. Comes complete with Raytheon Tube, cord and plug.

RADIO DIVISION

Valley Electric Co., St. Louis, Mo. Makers of electrical equipment since 1914

KNX Hollywood, Calif. (336.9m-890kc) 7:30 p. m. playlet; 8, program; 9, feature; 10, Alexandria hetel orchestra; 11, frolic.
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; 8-79; music; 9-10, studio program; 10-11, Mandarin cafe orchestra; 11-12, variety hour.
KWSC Pullman, Wash. (348.6m-860kc) 7:30 p. m. students concert.

Monday, silent night for: CFCA, CKAC, KFDM, KFDY, KGO, KHJ, KLDS, KPSN, KYW, PWX, WBBM, WCBD, WCFL. WEBH, WEBJ, WENR, WFI, WGBF, WGBS, WGES, WGN, WGY, WAS, WHT, WIBO, WIP, WJAZ, WJJD, WLIB, WLS, WMAQ, WMBB, WOAI, WOC, WOK, WORD, WQJ, WSAI, WSWS.

### TUESDAY, JANUARY 18 Headliners

Central Mountain WQJ (447.5m-670kc) D. F. Abel, "What Is Hyp-WEAF (491.5m-610kc), Ray Porter Miller, colora-tura soprano.

WEAF (491.5m-610kc), Ray Forter Mints, observance, WEAF (491.5m-610kc), James E. Phillips, WFAA (475.5m-630kc) Joe Strother, planist. WIAW (422.3m-710kc) American composer. 7:30 5:30 4:30 KSO (405.2m-740kc) Mrs. Pauline Peterson. KSO (405.2m-740kc) Howard Boyden and bunch. WBAL (245.8m-1220kc) Edward Jendrek, tenor. WRNY (374m-802kc) Backstage at the Opera. WICK (475.9m-630kc) Howard Boyden and bunch. WBAL (288.3m-1040kc) Sanger 5:15 5:15 WSBC (288.3m-1040kc) Sanger 5:15 5:15 SNBC (288.3m-1040kc) Sanger 5:15 5:30 CNRA (322.4m-930kc) Sunny Brae Rink band. WOS (440.9m-680kc) Missouri state farmers week.

Organ.
WHB (365.6m-820kc) Glee club.
WHN (361.2m-830kc) Prince Piotti.
9:15 7:15 6:15
WBBM (226m-1330kc) Modern Masters of Music.
9:30 8:30 7:30 6:30
WHO (526m-570kc) Prof. Paul Stoye, pianist.
9:45 8:45 7:45 6:45
KPRC (299.8m-1000kc) George Parker, whistler.

WCBD (344.6m-870kc) Mandolin and guitar club,

Eastern Central Mountain Pacific 7:15 8:15 7:15 CNRR (312.3m-960kc) Verne's Revellers. 10:30 9:30 Children's CNRV Radio train. 11 10 9 8
KFI (467m-642kc) Gattone string quartet.
12 mid.
1 2 mid.
1 CNRV (291m-1030kc) Feature, Strand thear www.CA (340.7m-880kc) McAlpin entertainers.

### TUESDAY, JANUARY 25 Headliners

Central Mountain WEAF (491.5m-610kc) Irene Peckham, pianist. WFAA (475.9m-630kc) Southern Methodist University School of Music, WRNY (374m-802kc) Sampling in a Pastry Cook's Pantry. 8:15 7:15 6:15 5:15 CNRA (322.4m-930kc) Mount Allison ladies' college. CNRR (312.3m-960kc) Verne's Revellers. WSBC (288.3m-1040kc) "Touring Ireland." WTIC (475.9m-630kc) The Travelers symphonic ensemble. 9:30 8:30 7:30 6:30

KPRC (299.8m-1000kc) "Sweetheart of the Air."

WHB (365.6m-820kc) West Brothers Hawaiian 10 9 8
WHB (365.6m-820kc) Scottish program,
1 a, m. 12 11
KFI (467m-642kc) Azure music club,

### **Educational Features** Tuesday

Central Mountain | Central | Production | Facility | Central | Production | Central | Production | Central | Cent Eastern Central Mountain Pacific 7:30 p. m. 6:30 5:30 4:30 KSAC (340,7m-880kc) College of the Air. Sociology.

WEEI (348.6m-860kc) Jan. 18, representative of Simmons college; Jan. 25, A. O. Morse, U. of N. H. 7:45 KDKA (309.1m-970kc) U. of Pittsburgh. WEAO (293.9m-1020kc), travel talks. 8:30 (293.9m-1020kc), travel talks. 9:10 S(440.9m-680kc) "The New Generation—Tib Demands," Mr. Paulsen. 7:10 6:10 WMAO (447.5m-670kc) University of Chicago. WIZ (454.3m-660kc) WGY (379.5m-790kc) Cook's tours. tours, 10:30 9:30 8:30 7:30 KFMX (336.9m-890kc) Jan. 18, National Defenses against Bacteria"; Jan. 25, Toxins and Antitoxins.

### Regular Tuesday Features Eastern Time Stations

CKAC Montreal, Que., Can. (410.7m-730kc) 7:15 p. m. dinner concert; 8:15, hop; 9:30, bridge; 10:30, dance program.

KDKA Pittsburgh, Pa. (309.1m-970kc) 8 p. m sacred song concert; 8:45, gems from American literature; 9, musicale; 11:35, Grand theater.

PWX Havana, Cuba (399.8m-750kc) 8:30-11:30 p. m.

program, WBAL Baltimore, Md. (246m-1220kc) 6:30-7:30 p. m. dinner orchestra; 7:30-8, quartet; 8-9, trio; 9-9:30, Jubilee singers; 9:30-10, violin and piano recital; Michael Weiner, violinist; LeRoy Evans, pianis; 10-11, Municipal band of Baltimore; 11-12, dance orchestra

WBBR New York, N. Y. (416.4m-720kc) 8 p. m.

WBR New program.

WBZ Springfield, Mass, (333.1m-900kc) 7 p. m. organ; 7:30, features; 10:20, orchestra.

WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. dinner concert; 7:45, talks; 8, WEAF; 8:30, feature; 9, WEAF; 10, bridge; 10:30-1, orchestras.

WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg instrumental trio; 8:15, Gurnse Buttermaker; 8:30, recital; 9, Montbard Follies; 9:30, Robert Fraser, blind gospel singer; 10, Prof. Doolittle; 10:05, Chapman Elgart Syncopators; 10:15, tenor; 10:30, Cathay dance orchestra.

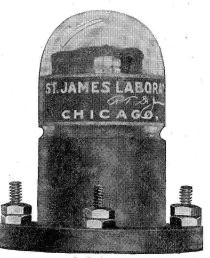
WCX Detroit, Mich, (516.9m-550kc) 6-7 p. m. dinner program, Goldkette ensemble; 10, Red Apple club.

WDBO Winter Park, Fla. (239.9m-1250kc) 8, program.

# The Heart Of



# The St. James **TWO-FORTY** Super Parts



PAT. PEND.

The St. James INTERMEDIATE TRANSFORMER

Chosen for the 1927 DeLuxe 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:

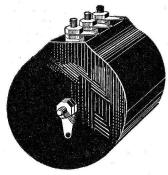
(1) Resistance factor in windings has been decreased, permitting greater stability and higher amplification per stage.

(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 occuring so they are not troublesome in tuning.

(5) A completely coordinated functioning from the loop to the speaker.



The St. James **OSCILLECTOR** 

# 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 oscillector, 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** 

WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7, headliner; 7:10, talk, Columbia University; 7:30, Great Moments in History; 8, The Vikings, WEEI, WFI, WCAE, WWJ, WGR, WTAM, WSAI, WJAR, WTAG, WOC, WCCO, WCSH, KSD, 8:30, Jolly Buckeye Bakers, WEAF, WTAG, WFI, WTAM, WWI, WSAI, KSD, WLB, WCG, WTAG, WFI, WTAM, WWI, WSAI, KSD, WLB, WCG, WTAG, WCAE, WTAM, WLB, WCGO, WCCO, KSD, WRC, WFI, WTAG, WJAR, WGR, WCAE, WTAM, WSH, WGA, WJAR, WGR, WCAE, WTAM, WFI, WWJ, WSAI, WGN, WOC, WCCO, KSD, WTAM, WFI, WWJ, WSAI, WGN, WOC, WCCO, KSD, WTAM, WGN, WCG, WCCO, KSD; 10:30, orchestra, WFI, WWJ, WCAE, WGR, WTAM, WCSH; I1:30, orchestra.

musicale.

WEEI Boston, Mass. (348.6m-860kc) 7:30 p. m. intercollegiate broadcast; 7:45, musicale; 8-8:30, WEAF;
8:30, musicale; 9-10:30, WEAF,
WFI Philadelphia, Pa. (394.5m-760kc) 6:45, Adelphia dance orchestra; 8, WEAF; 8:30, WEAF;
9, WEAF; 10, Moment Musicale; 10:30, orchestra.

WGBS New York, N. Y. (315.6m-950kc) 7:20 p. m.
Arrowhead Inn concert orchestra; 8:10, talk; 8:30,
musicale; 10:30, Arrowhead Inn dance orchestra.

WGHB Clearwater Ela (265.3m-1130kc) 7, p. m.

WGHB Clearwater, Fla. (265.3m-1130kc) 7 p. m. dinner music; 8:30, musicale; 10:30-12, dance pro-

miner music, 6.30, musically, 6.53 p. m. din-gram.

WGHP Detroit, Mich. (270.1m-1110kc), 6-8 p. m. din-ner concert; 8-8;30, campers' half hour; 8:30-9:30, band; 9:30-10, minstrels.

WGY Schenectady, N. Y. (379.5m-790kc) 6:30 p. m. dinner program, Ten Eyck hotel; 7:45, artist; 8. WJZ; 9, musicale; 10, WJZ; 10:30-11:30, WMAK.

WHK Cleveland, Ohio (272.6m-1100kc) 6-7:30 p. m. Hotel Statler orchestra; 7:30-8, program; 9-11, orchestra.

Hotel Statter orchestra, ...
WHN New York, N. Y. (361.2m-830kc) 7 p. m. Iceland orchestra; 7:30, music; 8, ensemble; 8:30, entertainers; 9, Prince Piotti; 9:30, orchestra; 11, Frivolity club; 11:30, Playground.
WICC Bridgeport, Conn. (232,4m-1290kc) 7:15 p. m.

program,
WIP Philadelphia, Pa. (508.2m-590kc) 6:10 p. m.
dinner music; 7, Uncle Wip; 8, dramatic reviews;
8:25, science talk; 8:30-10:05, evening program;
10:05, Emo's weekly broadcast; 10:30, orchestra.
WJAX Jacksonville, Fla. (336.9m-890kc) 7-7:30 p. m.
dinner music; 7:30-9, popular program; 10-11, Casa
de Bail

de Baile. W.R. Joseph Popular Joseph Joseph

program.

WLW Cincinnati, Ohio (422.3m-710kc) 7:30 p. m. music; 8, Castle Farm dance music; 8:30, Gay Nineties; 9, Formica orchestra.

WLWL New York, N. Y. (288.3m-1040kc) 9 p. m.

music

WMAK Buffalo, N. Y. (265.5m-1130kc) 6:15 p. m. dinmer music; 7:30 evening program; 10:30, musicale,
WGY, WHAM, WFBL; 12, Harold Rumsey, organist; 12, organ.

WMCA New York, N. Y. (340.7m-880kc) 7-11 p. m.
club; 12, entertainers.

WOO Philadelphia, Pa, (508.2m-590kc) 7:30 p. m.
dance orphestra. WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Bill Wathey in sports; 6:30, Hotel Bretton Hall string

quartet; 8:30, organ; 11, Wadsworth's Carlton Terrace orchestra. WPG Atlantic City, N. J. (299.8m-1000kc) 7:15 p. m. organ recital, Arthur Brook; 7:30, Hotel Morton dinner music; 8:05, Hotel Shelburne dinner music; 8:30, concert; 9, Dual concert tro; 10, bridge; 10:30, studio program; 11, dance orchestra; 11:30, orchestra.

orchestra, WRC Washington, D. C. (468.5m-640kc) 7 p. m. Raleigh hotel orchestra; 8:30, WEAF; 9, WEAF; 10, WEAF; 10:30-11:30, Meyer Davis' Swanee Syncopators, WSAI Cincinnati, Ohio (325.9m-920kc) 6 p. m. quartet; 7, quartet; 8, WEAF; 9-12, WEAF; 12, dance

orchestra.
WSOE Milwaukee, Wis. (245.8m-1220kc) 8 p. m. talk;
8:15. popular program; 9. Whozit.
WTAG Worcester, Mass. (545.1m-550kc) 8-10:30 p. m.

WEAF.

WTAM Cleveland, Ohio (389.4m-770kc) 6:15 p. m. vaudeville; 8-11, WEAF; 11, Jade Room orchestra.

WTIC Hartford, Conn. (475.9m-630kc) 6 p. m. Hotel Heublin trio; 7, evening program; 10, orchestra.

WWJ Detroit, Mich. (352.7m-850kc) 6 p. m. dinner concert; 8, WEAF.

# Central Time Stations

KFAB Lincoln, Nebr. (340.7m-880kc) 5:30-6:30 p. m. musicale; 8:05-10:30, University of Nebraska. KFDM Beaumont, Texas (315.6m-950kc) orchestra. KFNF Shenandoah, Ia. (461.3m-650kc) 7 p. m. pro-

KFNF Shenandoah, Ia. (461.3m-650kc) 7 p. m. program.

KLDS, Independence, Mo. (440.9m-680kc) 8 p. m. studio program.

KMA Shenandoah, Ia. (461.3m-650kc) 9-11 p. m. May's Mandolin Musicians, KMG. St. Louis, Mo. (280.2m-1070kc) 4 p. m. dinner music; 7, program; 8, quartet; 9, soloist; 9:30, soloists; 10:15, orchestra; 12-1, frolic.

KOIL Council Bluffs, Iowa (305.9m-980kc) 6 p. m. Warner Brothers' program; 7, studio program; 7:30, program; 8, program; 11, spark plugs.

KPRC Houston, Tex. (299.8m-1000kc) 7:30 p. m. concert; 9, bridge; 9:30, concert.

KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9-11 p. m. musicale.

KVOO Bristow, Okla, (374.8m-800kc) 7-8 p. m. KVOO orchestra; 8-8:30, mixed quartet; 8:30-9, Dinah; 12, Rough and Ready.

KYW Chicago, Ill. (535.4m-560kc) 6:30 p. m. Joska DeBabary and his orchestra; Johnny Hamp and his orchestra; 7, Family hour; 8, America. Tarm Bureau federation; 9-10:30, classical concert; 10:30-12, carnival.

WBAP Fort Worth. Tex. (475.9m-630kc) 7:30-8:30

rearnival.

WBAP Fort Worth, Tex. (475.9m-630kc) 7:30-8:30
p. m. musicale; 9:30-11, musicale.

WBBM Chicago, Ill. (226m-1330kc) 8 p. m. CoonSanders Night Hawks; 9-11, staff artists, orchestra; 11, Supper club.

WCBD Zion, Ill. (344.6m-870kc) 8 p. m. classica. pro-

gram. WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc) 7-9:30 p. m. WEAF; 9:30, musical comedy, Garrott's Chocolate Soldiers; 10:05, Izaak Walton

league.

WGFL Chicago, Ill. (491.5m-610kc) 6 p. m. talks; 7, Brevoort trio; 8, Spinning Wheel hour; 10, Alamo orchestra; 11-12, entertainers.

WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. school of the air; 11:45-1, Nighthawk frolic. WEBH Chicago, Ill. (370.2m-810kc) 7 p. m. classical hour; 9-11, Balaban and Katz Uptown theater musical hits. hour; 9-11, Baiauan and Sand (1988) hour; 9-11, Baiauan and Sand (1988) hours all hits.

WENR Chicago, III. (266m-1130ke) 6-7 p. m. organ; 8-9, trio; 9-10, frolic.

WFAA Dallas, Texas (475.9m-630kc) 6:30-7:30 p. m. musicale; 8:30-9:30, bridge game, selections; 11-12,

WGBF Evansville, Ind. (236.1m-1270kc) 8 p. m. musical program; 9, classic hour.
WGN Chicago, Ill. (302.8m-990kc) 6:35 p. m. dinner concert, Drake concert ensemble; 8-9, WEAF; 9, Auction Bridge game; 9:30-10, WGN male quartet; 10, Sam 'n' Henry; 10:10, The Music Box; 10:20, musical program; 10:40-11, songs, Correll and Gosden.
WHAD Milwaukee, Wis. (275.1m-1090kc) 6 p. m. dinner hour, orchestra selections; 8:30, theater review.

wiew. WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. wHB Kansas City, Mo. (365.6m-820kc) 7-7:30 p. m. organ concert; 7:30-8, Hawaiian team; 8, program;

organ concert; 7:30-8, Hawaiian team; 8, program; 9-10, concert,
WHO Des Moines, Ia. (526m-570kc) 7:30-8:30 p. m.
14th Cavalry band; 8:30-9, Paul Stoye, pianist; 11-12, dance program.
WHT Chicago, III. (399.8m-750kc) 6 p. m. Al Carney, organist, Bob York, Julie Juliens; 7:45 (238m-1260kc), Stuart Dawson, songs; 9:30 (399.8m-750kc), quartet; 10:30, variety program; 11, Al and Pat.
WJAZ Chicago, III. (329.5m-910kc) 6:30-8 p. m.
Shoreland hotel; 8-8:30, highlights; 8:30-9, Realty program; 9-12, diversified program.
WJID Mooseheart, III. (370.2m-310kc) 8-9 p. m. child artists; 11-1, Palmer House Victorians.
WLIB Chicago, III. (302.8m-980kc) 7-7:30 p. m. dinner concert; 7:30-8, WEAP; 1:1-21:5, Ruth Farley, organist; dance orchestra; songs.
WLS Chicago, III. (344.6m-870kc) 6 p. m. Supperbell;

WLS Chicago, Ill. (344,6m-870kc) 6 p. m. Supperbell; 6:40, Maurie Sherman's College Inn orchestra; 6:55, Tony's scrap book; 7, May and June; 10:30-12, organ; Maurie Sherman's College Inn orchestra; fack Chapman's orchestra.

fack Chapman's orchestra.

WMAQ Chicago, Ill. (447.5m-670kc) 6 p. m. organ; 0:30, orchestra; 8:10, U. of C. lecture; 8:45, radiograph; 9, talk; 9:15, musicale.

WMC Memphis, Tenn. (449.7m-600kc) 8:30 p. m. program; 11, midnight frolic.

WOAI San Antonio, Tex. (384.5m-760kc) 8:30-9:30 p. m. Gebhardt Mexican players.

WCD Davenport, Iowa (483.6m-620kc) 7-7:30 p. m. WEAF; 7:30-8, musicale; 8-9, WEAF; 9-9:30, WEAF; 9:30-1030, lecture; 11-12, dance music.

WMBB Chicago, Ill. (250m-1200kc) 7-8 p. m. ensemble; 8-8:30, recital; 8:30-11, frolic.

WOQ Kansas City, Mo. (278m-1080kc) 8-9:30 p. m. devotional music.



Everybody said it couldn't be done—but here it is. A real, long distance radio which will operate a loud speaker to retail for only \$25.00. Plenty of volume and satisfactory tone.

# ONE DIAL CONTROL

Just one dial to operate—so simple a child can tune it. All the latest modern improvements, operates on three ordinary dry cells—well made parts test of workmanship. Willequal results of many high priced radios.

# **AGENTS** WANTED

Sell what the public wants-a good radio, attractive in appearance, built to bring in long distance, selective, with a pleasing tone, and yet at a price within the reach of all.

# BIG COMMISSIONS

Even at the low retail price of \$25.00 without accessories our commission to salesmen is large—you can easily make \$50.00 to \$100.00 a week. A demonstration in a prospect's home means a sure sale—the results will do all the selling.

# SELLIN SPARE TIME

The time to sell radio is in the evening. You can give it your spare time and not interfere with your present employment, Increase your income—pleasant work, no experience in selling or radio necessary—we teach you.

# FREE-Page Book

Send for your copy today—fully describes a proven plan of selling which has been thoroughly tried for five years. Also shows full line of radios from \$25.00 to \$235.00. Read what others are doing—you can do the same.

C. Y. Fischer 122 Austin Ave., Chicago Send me your 100 page book on selling radio.

# At WGN

# SANGAMO

# Mica Condensers

# Prevent

Shifting of Frequency Bands



ECAUSE the Sangamo **D** condenser is solidly molded in bakelite, mechanical movement of dielectric or plates is impossible. This is one important factor in the permanent accuracy of the Sangamo.

No one has greater need for condenser accuracy than a great broadcasting station like WGN. Read Mr. Leverett's comment:

> "Last Tune I used Sangamo Mica Condensers in a multiple band pass filter. This has been in use for some time, and has given the best of results, showing no shifting of the frequency band. This permanency I believe is due entirely to the consistency of these condensers, there being no apparent change in capacity nor leakage across them. I cheerfully recommend them wherever a constant capacity is required. (Signed) Geo. H. Leverett.

Asst. Engineer" Station WGN Chicago

# Sangamo Condenser Blocks

American-made condensers, wound under uniform tension to eliminate air or ozone bubbles that cause breakdowns.



Handy sizes: 12 mfd. tapped 8, 2, 2 mfd. 14 mfd. tapped 8, 2, 2, 1, 1 mfd.

14 mfd. tapped 4 (high voltage), 4, 2, 1, 1, 1, 1 mfd.

Also separate condensers; special capacity blocks to order.

Sangamo Electric Company Springfield, Illinois

RADIO DIVISION 50 Church Street, New York

SALES OFFICES—PRINCIPAL CITIES



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 extention with the Steinite Interference are good to marvel at the performance of your set—make the simple test at eace at our risk.

**Eliminates Noises Within the Set** 

\$ 100 For Set of 5 Postpaid Gives
With 4 Cabinet Supports

Stops mechanical vibration; prevents microphonic feed back; gives extra added life to the tubes—worth several times 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 sweetness are improvement they make. They will give the true tone and sweetness are 10-Day Free Trial we welcome this simple test at our risk and guar-Money-Back Guarantee ance that performance of your set will convince they of the province of the p

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. ORDER Two Big Atchison Banks guarantee our reliability. Rush your order. We guarantee prompt shipment.

The New Steinite 7-Tube Radio uses no batteries of any kind—only \$125. Loud Speaker Built In. Complete with tubes \$150—nothing to buy. Operates from light socket 1c an hour. Write for descriptive literature before buying an expensive Battery Set. Steinite Long Distance Crystal Set \$6; 6-Tube Battery Set \$45; Acrial Eliminator \$1; Interference Eliminator \$1; Crystals 50 cents each, 3 for \$1. STEINITE LABORATORIES.

60 Radio Bldg., ATCHISON, KANSAS

# THE AMAZING, NEW UNDERGROUND ANTENNA SYSTEM Eliminates All Interference INCREASES DISTANCE—KILLS STATIC

set has failed you

—because of the
condition of the
air. And how often "man-made"
static, such as
leaky power lines,
or some other
nuisance has
spoiled your radio
evening.

spoiled your rand evening. Indeed, there has been a dire need for some means of overcoming these obstacles. SUBANTENNA is the answer, for it not only cleans up the reception before it reaches the set, but it actually gives greater distance, bigger volume to weak signals and finer selectivity. Send coupon for particulars and Trial offer.

2716-S South Canal St., CHICAGO Cloverleaf Mfg. Co.

SCIENCE
Now offers a
Positive Means
to Enjoyable
Long Distance
Reception
How often, when
for days you have
anticipated listening to a certain
program from some
distant station your
tet has failed you
because of the
condition of the
condition of the
complete of the
among program from some
distant station your
tet has failed you
because of the
condition of the
condition, or the weather, you get
and on that wire. It is a patented device
onsisting of a specially treated
device of the
among reception, free of the
among crackles that make distant reception an impossibility
with a regular antenna.

DISTANT MUSIC CLEAR AS
LOCAL
No longer need static, air noises,
arc lamps, leaky power lines, street
car trolleys and other disturbances spoil your radio enjoyment. Then even
get the results we promise, we
agree to promptly refund your
modery.

underground pickup system gets nothing but the pure radio waves.

USE FILTERED GROUND WAVES NOT NOISY AIR

Being buried in the ground and shielded, SUBANTENNA is sensitive only to the continuous broadcast wave.

Intermittent impulses of radio reception. Mail the coupon NOW intermittent impulses of radio reception. Mail the coupon NOW for special TRIAL offer. Clip at once the filtered distance because the radio signal is not held back by the interfering noise level.

6-5 South Canal St., Chicago.

# 1.ddress .....

WOW Omaha, Nebr. (526m-570kc) 6 p. m. Henry Thornton, organist; 6:30, Lillian Madsen, popular entertainer; 9, popular and old time music; 10, entertainer; 9, popular and old time music; 10, orchestra.

WJ Chicago, Ill. (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; vocal selections; 10-2 a. m. Rainbo Gardens orchestra; frolic.

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

WSAI Cincinnati, Ohio (325.9m-920kc) 6 p. m. quintet; 7, quartet; 8, WEAF; 9-10:30, WEAF; 10:30, program; 11, dance orchestra.

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

WSBC Chicago, Ill. (288.3m-1040kc) 6:30 p. m. dinner program; 7:15, travelog; 9-1, entertainers.

Mountain Time Stations

KOA Denver, Colo. (322.4m-930kc) 9 p. m. bridge.

Pacific Time Stations

KOA Denver, Colo. (322.4m-930kc) 9 p. m. bridge.

Pacific Time Stations

KFI Los Angeles, Calif. (467m-642kc) 7-8 p. m. serenaders; 8-9, program; 9-10, varied hour; 10-11, Azure Music club.

KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 8-9, studio program; 9-10 p. m. musicale; 10-11 p. m. Warner Brothers frolic.

KGW Portland, Ore. (491.5m-610kc) 8-10 p. m. educational program; 10-12, dance music.

KGO Oakland, Calif. (361.2m-830kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8-9, Pilgrims; 9, book talk. Stanislas Bem's Little symphony; 8-9, Pilgrims; 9, book talk.

KHJ Los Angeles, Calif. (405.2m-740kc) 6-6:30 p. m.

White King quartet; 6:30-7:30, children's hour; 8-10, program; 10-11, orchestra.

KJR Seattle, Wash. (384.4m-780kc) 8 p. m. studio program; 8:30-10, program.

KMTR Hollywood, Calif. (370.2m-810kc) 7 p. m.

Orthophonic records; 7:30-9, features; 9-10, dance orchestra; 10-12, dance music.

KNX Hollywood, Calif. (336.9m-890kc) 8 p. m. program; 9, musicale; 10, frolic.

KPO Los Angeles, Calif. (428.3m-700kc) 7-7:30 p. m. orchestra; 8-9, organ; 9-10, program; 10-11, orchestra; 11-12, Cabirians.

Tuesday, silent night for: CFCA, KFH, KFKX, KFUO, KLX, KOB, KSWC, KWWC, WABC, WAMD, WBBR, WCOA, WEMC, WGCP, WLIT, WOS, WRVA, WSMB, WSUI, WTAM, WTIC.

# WEDNESDAY, JANUARY 19 Headliners

Mountain Central Tastern M. (1998) 1 ( \( \text{WBZ} \) (333,1m-900kc) \( \text{Naomi Hewitt celio quarter.} \) \( \text{WOS} \) (440,9m-680kc) \( \text{Missouri state university.} \) \( \text{WCOA} \) (252m-1190kc) \( \text{General R. E. Lee's birthday program.} \) \( 8:15 \) \( \text{WBM} \) (226m-1330kc) \( ''\text{In Bermuda.''} \) \( 6:30 \) \( \text{KFAB} \) (340,7m-880kc) \( \text{Duraine Matlock.} \) \( \text{MISSOURD Ararat Shrine chanters.} \) \( \text{9:45} \) \( \text{WVA} \) (256m-170kc) \( \text{Ararat Shrine chanters.} \) \( \text{9:45} \) \( \text{WVA} \) (256m-170kc) \( \text{Stores artists.} \) \( \text{WLW} \) (422,3m-710kc) \( \text{Herman trio.} \) \( \text{WLW} \) (422,3m-710kc) \( \text{Herman trio.} \) \( \text{WRVA} \) (256m-170kc) \( \text{Herman trio.} \) \( \text{WRC} \) (461,3m-720kc) \( \text{WRC} \) \( \text{(461,3m-720kc)} \) \( \text{WRC} \) (462,5m-610kc) \( \text{WCAE} \) (461,3m-720kc) \( \text{WMO} \) (256m-570kc) \( ''\text{Manola.''} \) \( \text{WHO} \) (2526m-570kc) \( ''\text{WHO} \) (2024 \) \( \text{MS} \) \( \text{MS} \) (462,5m-760kc) \( \text{WHO} \) \( \text{Vartistation or hestra.} \) \( \text{MS} \) (422,3m-710kc) \( \text{Bearardi or chestra.} \) \( \text{MS} \) (422,3m-710kc) \( \text{Bearardi or chestra.} \) \( \text{MS} \) (422,3m-710kc) \( \text{Bearardi or chestra.} \) \( \text{MS} \) (422,3m-710kc) \( \text{Bearardi or chestra.} \) \( \text{MS} \) (422,3m-710kc) \( \text{Bearardi or chestra.} \) \( \text{MS} \) (422,3m-710kc) \( \text{Power or and Glenn.} \) \( \text{1:10} \) (416,4m-720kc) \( \text{The link trio.} \) \( \text{MCCO} \) (416,4m-720kc) \( \text{The link trio.} \)

# BASKETBALL GAMES

Saturday, January 15

8 p. m. 7 6 5
WEAO (293.9m-1020kc) Illinois-Ohio.
8:30 7:30 6:30 5:30
KFDY (299.8m-1000kc) Nebraska-South
Dakota State college.

Friday, January 21
8:30 p. m. 7:30 6:30
KUOA (299.8m-1000kc) Texas A. and M.-U. of Arkansas.

Saturday, January 22 8 p. m. 7 6 5 WEAO (293.9m-1020kc) Minnesota-Ohio. 8:30 7:30 6:30 5:30 KUOA (299.8m-1000kc) Texas A. and M.-U. of Arkansas. 9:30 9:30 8:30 7:30 6:30 KFDY (299.8m-1000kc) Des Moines-S. D. State College.

Saturday, January 29 8:30 7:30 6:30 5:30 WTAW (270.1m-1110kc) Texas-A. and M.

HOCKEY, JANUARY 18

Eastern Central Mountain Pacific
8:15 p. m. 7:15
WBZ (333.1m-900kc) Boston Bruins-N. Y.

WRESTLING, JANUARY 22
stern Central Mountain Pacific
4 3 2 5 p. m. 4 WOI (270.1m-1110kc) Univ. Mo.-Ames.

 Eastern
 Central
 Mountain
 Pac

 10 p. m.
 9
 8
 7

 11:30
 9:30
 8:3

 CNRW
 (384.4m-780kc)
 The Radio Movie.
 10

 1 a. m.
 21
 11
 10

 CNRE
 (516.9m-580kc)
 Old Time dance program.

# WEDNESDAY, JANUARY 26

Headliners 

### **Educational Features** Wednesday

| Central | Mountain | Pacific | Ap. m. | Central | Mountain | Pacific | Ap. m. | Si30 | Sciology lecture. | 3:30 | WNYC (526m-570kc) | Elementary Spanish | lessons | KVOO (374.8m-800kc) | Law | lecture, U. of T. | WDAF (365.6m-520kc) | School of the Air. | WNYC (526m-570kc) | Advanced Spanish | lessons | Si30 | KSAC (340.7m-880kc) | School of the Air. | WNYC (526m-570kc) | Advanced Spanish | lessons | Si30 | KSAC (340.7m-880kc) | Sociology a maxion | 4:30 | KSAC (340.7m-880kc) | Sociology a maxion | 4:30 | KSAC (340.7m-880kc) | Sociology a maxion | 4:45 | KDKA (309.1m-970kc) | University of Pittsburgh | 6:55 | WDBO (239.9m-1250kc) | Rollins college | 5 | WSR (405.2m-740kc) | N. Y. University | 5:30 | WBAO (393.9m-1020kc) | Jan | 19 | "The Trend of Business." | Jan | 26, place of the motor truck | WS (440.9m-680kc) | Jan | 19 | "The Trend of Business." | Jan | 26, place of the motor truck | Sido | S Eastern Central

Regular Wednesday Features Eastern Time Stations
CFCA Toronto, Can. (356.9m-840kc) 7-8 p. m. Canada Dry Ginger Ale orchestra; 10:45, dance

ada Dry Ginger Ale orcnestra; 10:49., uance orchestra; burgh, Pa. (309.1m-970kc) 6:15 p. m. diuner music; 8, concert; 9, WIZ; 10, R. V. B. trio. PWX Havana, Cuba (399.8m-750kc) 8-10 p. m. Band concert; 10-12, orchestra.
WABC New York, N. Y. (315.6m-950kc) 7:30-10 p. m. pregram; 10, dance music.
WBZ Springfield, Mass. (333.1m-900kc) 7:30 p. m. nature league; 8, musicale; 9, WIZ; 97:30, musicale. WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. orchestra; 8, recital; 8:30-11:30, WEAF
WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg recital; 8, popular program; 10, Cheersup, Club. up club. WCX Detroit, Mich. (516.9m-580kc) 6-7 p. m. Dinner program, Goldkette ensemble; 8-9 studio program. WDBO Winter Park, Fla. (239.9m-1250kc) 9 p. m. Chamber of Commerce.

WDBO Winter Park, Fla. (239.5m-1250kc) 9 p. m. Chamber of Commerce.

WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7. Synagogue Services by the United Synagogue of America; 7:30, United States Army band; WIAR, WTAM, WSAI, WRC; 8. Salon concert, WSAI, WJAR; 8:30, Davis Saxophone octet, WJAR, WRC, WCAE, WEEI, WLIT, WTAG, WSAI; 9, Ipana Troubadours, WEEI, WGR, WRC, WCAE, WWJ, KSD, WCCO, WLIB, WSAI; 9:30, Moment musicale, WGR, KSD, WWJ; 10, Smith Bros., WTAG, WGR, WRC, WCAE, WWJ, KSD, WCC, WSAI, WCCO, WDAF; 10:30, WEAF Light Opera company, WCAE, WRC, WCAE, WWJ; 10; Smith Bros., WTAG, WGR, WRC, WCAE, WWJ, KSD, WCC, WSAI, WCCO, WDAF; 10:30, WEAF Light Opera company, WCAE, WRC, WCAE, WBC, WSAI, WCCO, WDAF; 10:30, orderstra; 11:30, Ben Bernie orchestra from the Hotel Roosevelt. WEEI Boston, Mass. (334.5m-760kc) 6:45 p. m. Mdelphia dance orchestra.

WGHB Clearwater, Fla. (265.3m-1130kc) 7 p. m. dinner music; 8:30, program; 9, program; 10:30-12, dance music.

WGHP Detroit, Mich, (270.1m-1110kc) 6 p. m. dinner

WGHP Detroit, Mich. (270.1m-1110kc) 6 p. m. dinner

concert, Hotel Tuller; 8-10, concert.
WGR Buffalo, N Y (319m-940kc) 8:30-10:30 WEAF.
WGY Schenetady, N. Y. (379.5m-790kc) 7:30 p. m.
Eastman theater; 8:15, musicale, WHAM; 10,
WFBL program.
WHK Cleveland, Ohio (272.6m-1100kc) 7 p. m. orchestra; 8, studio concert; 9, quartet; 10, Whozit; 10:15, music.

WHN New York, N. Y. (361.2m-830kc) 7:30 p. m. Loew's Lexington Theater organ recital; 9:30, Loew's 7th Ave. Theater concert; 10, songs; 10:30, Roseland dance orchestra; 11, orchestra; 11:30, Silver Slipper orchestra; 12, Cotton club orchestra. WICC Bridgeport, Conn. (232.4m-1290kc) 8 p. m. program; 8:30. musicale club; 9, music. WIP Philadelphia, Pa. (508.2m-590kc) 6:10 p. m. Benjamin Franklin concert orchestra; 7, Uncle Wip's bedtime stories. WJAX Jacksonville, Fla. (336.9m-890kc) 8-8:30 p. m. Popular program; 8:30-9:30 classical program; 9:30-10, studio program.

10, studio program.

WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean Goldkette's Petite symphony orchestra; soloists;

# Build a 3 ft. Cone Speaker as fine as any you can buy



A3ft.ConeSpeaker, which you can build in one evening at home, with PENN Cone Speaker Unit will give as fine TONE QUALITY as a factory-built speaker costing 5 times as much.

"Received material and have completed speaker. Sure is fine. Thank you," writes R. Hanson, Joliet, Ill.

"Never have heard its equal." "Have built 6 and they are simply wonderful."

"Really enjoyed reception for the first time," are other comments.

Complete, detailed, easy-to-follow instructions will let you get same satisfactory results. It takes just as long to build a 3 ft. speaker using a less satisfactory unit as it does to build one using the

# Penn CONE UNIT

which costs very little more. A marvel of design and construction; adjustable to the audio output of set with which speaker is used; so sensitive it works with any set that will operate a loud speaker. Magnet, pole pieces and armature are plated to prevent rust, preserve magnetism; shortest, strongest drive rod on any unit; full 16 oz. horse-shoe magnet; will take all volume the tubes will pass. Unit only, \$9.50. Complete parts—including 2 sheets Alhambra FONOTEX, Back Rings, Unit Mountings, Ambroid Cement and Unit—only \$14.15.

Ask your dealer for the genuine PENN Cone Speaker Unit and complete parts. It he cannot or will not supply you, we will ship on receipt of price. Pamphlet, "How to Build a 3 tt. Cone Speaker" sent for 10c, coin or stamps. Write iday.

PENN RADIO SALES COMPANY 104 FIFTH AVE. Suite 2194 NEW YORK CITY Exclusive Selling Agents for G. R. PENN MFG. CO., N. Y. C.

# SPECIAL OFFER

To RADIO DIGEST Readers for limited time only

# BETTER TUNING

Sent free to any address

"RETTER TUNING" is a booklet published by Bremer-Tully from time to time to tell their readers many things about Radio they won't find elsewhere. The 11th Edition contains timely information on B-Eliminators, Power-Six, Counterphase Sets, etc.

You cannot afford to miss it.

# Bremer-Tully Mfg. Co.

CHICAGO, ILL. 520 South Canal Street,



Free Photogravures of Your Favorite Artists
By special arrangement Radio Digest is now able to offer its readers a great opportunity to
secure a selection of twelve fine photogravures of their favorite Radio stars. These photogravures
can only be compared with the finest photos obtainable. See coupon below.

# Select Your Favorites From the Gallery of Radio Stars

- Select Your Favorites From

  1 Wendell Hall, king of ukulele dittles
  2 Graham McNamee, 1925 Gold Cup announcer
  3 Jack Little, popular wandering balladist
  4 Billy B. Van, the Sunshine Man
  5 Coon-Sanders' Original "Nighthawks"
  6 George Hay, 1924 Gold Cup announcer
  8 Ford and Glenn, Lullaby Boys of WLS
  9 "Roxy" Rothafel of WEAF chain fame
  9 The Hired Hand, famous "Substitute Announcer" of WBAP
  1 Jerry Sullivan, of Chi-CAW-go fame.
  2 Bob Emery, Big Brother of WEEI
  3 "Bill" W. G. Hay, ex-KFKX, now of WLIB
  4 Happiness Boys, jovial singers of WEAF
  5 Lambdin Kay, "Little Colonel" of WSB
  6 Leo Fitzpatrick, "Merry Old Chief," WJR
  7 Henry Field, 1925 Gold Cup runner-up
  8 Al Carney, organ favorite at WHT
  9 Earl E. May, 1926 Gold Cup Announcer.

  Suitable for Framing or Placing

Suitable for Framing or Placing in Your Album

# Send Coupon Now

Your Radio set gives you their voices.
Their pictures add very much to your complete entertainment.

ACT TODAY RADIO DIGEST PUBLISHING CO. 510 N. Dearborn St., Chicago, Ill. the Gallery of Radio Stars
20 Vincent Lopez, No. 1 Pennsylvania orchestra
21 E. L. Tyson, pleasing voice at WWJ
22 Bert Davis, "Clown of the Air."
24 The Sunflower Girl of WIAP
25 Harry Ehrhart, "Dream Daddy" of WLIT
26 Correll and Gosden of "Kinky Kids Parade"
fame, at WEBH and other stations,
27 Norman Brokenshire, popular at WRC, WJZ
29 Jane Novak, Blues Singer of Twin Cities,
WCO
30 Jean Sargent, the original, now at WHT
31 Ralph Emerson, popular organist at WLS
32 Edna Adams, of KPRC
33 Pat Barnes, vaudeville amnouncer at WHT
38 Walter Wilson, "Uncle Bob" of KYW
40 Ray-O-Vac Twins, known country-wide
41 Art Linick, KYW's Mrs. Schlägenhauer
42 Fred Hamm of WTAS, now WLIB, fame

Radio Digest, 510 N. Dearborn St., 1-1-27
Chicago, III.
I am enclosing Three Dollars for a One Year's
Subscription to Radio Digest. I Am to Receive Free the Selection of Twelve Photogravures Listed Below. This Offer Good Only
on Subscriptions Sent Direct.
Name

Name Address State State State In order to insure prompt shipment, please give us fourteen numbers, the last two of which we may substitute if necessary. Order by Number.

7:45, Good Will Oakland and Chief Pontiac; 9, studio program; 11, Murphy Brothers, organist, tenor, baritone; 12, Merry Old Chief and his tribe.
WJZ New York, N. Y. (454.3m-660kc) only tentative program listed, 7 p. m. Hotel Commodore dinner orchestra; 8, Imperial Imps; 8:30, Dueber Hampden Watchmakers; 9, Maxwell hour; KOYA, WBZ; 10:30, Hotel Astor dance orchestra.
WKRC Cincinnati, Ohio (422.3m-710kc) 8:15 p. m. Hotel Alms orchestra; 9, Everfresh program; 12, dance music.

Hotel Aims orchestra, 7, Eventesa program, 2, dance music.

WLIT Philadelphia, Pa. (394.5m-760kc) 8 p. m. Concert orchestra; 8:30, WEAF; 9, Stanley theater hour; 10, dance orchestra.

WLW Cincinnati, Ohio (422.3m-710kc) 7 p. m. Robert Visconti's orchestra; 8, special program; 10, Heerman trio; 10:40, Ford and Glenn; 11, organ recital; Johanna Grosse, WLWL, New York, N. Y. (288.3m-1040kc) 9 p. m. musicale.

musicale.
WMAK Buffalo, N. Y. (265.5m-1130kc) 7:30 p. m.
Eastman theater, WGY; 8:15, WHAM program; 9,
musicale; 10, frolic.
WMCA New York, N. Y. (340.7m-880kc) 6:30 p. m.
orchestra; 7:15, orchestra; 7:30, Finkenberg's Radio
Franks; 9, Altshul's quartet; 12, McAlpin entertainers.

WNYC New York, N. Y. (526m-570kc) 6:10 p. m. Piano selections. WOO Philadelphia, Pa. (508.2m-590kc) 7:30 p. m. orchestra; 8, lecture; 8:50, concert; 10:30, dance

orchestra; 8, lecture; 6:30, concert, 10.30, dance music.

WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Jacques Jacobs Hotel Shelton ensemble; 6:45, Bill Wathey in sports; 7, Jacques Jacobs Hotel Shelton ensemble; 7:30, orchestra; 8, N. Y. University; 8:15, orchestra; 9, Studio Guild hour; 11, dance orchestra; WRC Washington, D. C. (468.5m-640kc) 7 p. m. Lee House trio; 7:30, U. S. Army band; 8:30-9, WEAF; 9, WEAF; 9:30, staff program; 10, WEAF.

WRVA Richmond, Va. (256.3m-1170kc) 8 p. m. Headliners.

MSAI Cincinnati, Ohio (325.9m-920kc) 6:45 p. m. piano; 7:15, chimes; 7:30, Bosworth artist series; 10, WEAF; 10:30, studio; 11, dance orchestra.

WSKC Bay City, Mich. (260.7m-1150kc) 9-11 p. m.

WSMB New Orleans, La. (319m-940kc) 8:30 p. m. classics.
WTAG Worcester, Mass. (545.1m-550kc) 7 p. m.
Powers Coal Miners; 7:30, program; 8, Bancroft
hotel orchestra; 8:30, WEAF; 9, program; 10,

WTAM Cleveland, Ohio (389.4m-770kc) 6 p. m. Collegian serenaders; 7:15, talks; 7:30, WEAF; 8, studio recital; 8:30, WEAF; 9, program; 11, orches-

WWJ Detroit, Mich. (352.7m-820kc) 6 p. m. Dinner concert; 8, Detroit News orchestra; 9, WEAF; 10,

### Central Time Stations

Central lime Stations
CKY Winnipeg, Can. (384.4m-780kc) 9-10 p. m. Prof. Gregori Gorbovitsky, violinist.
KFAB Lincoln, Nebr. (340.7m-880kc) 5:30-6:30 p. m. Hotel Lincoln orchestra; 8:30-10:30, request program.
KFNF Shenandoah, 10wa (461.3m-650kc) 7 p. m. Concert, Henry Field Seed company.
KMA Shenandoah, 10wa (461.3m-650kc) 9-11 p. m. Two piano concert, Peregrin Brothers.
KMOX St. Louis, Mo. (280.2m-1070kc) 6 p. m. dinner organ recital; 6:30, quartet; 73.0, quartet; 8, quartet; 9, soloists; 10:15, orchestra; 12-1, dance music.

quartet; 9, soloists; 10:15, orchestra; 12-1, dance music.

KPRC Houston, Texas (299.8m-1000kc) 7:30 p. m. Jack Willrich's orchestra; 8:15, evening concert; 9-12, Frank Tilton.

KSO Clarinda, Iowa (405.2m-740kc) 6:30 p. m. songs.

KTHS Hot Springs National Park, Ark. (374.8m-800kc) 99:9:45 p. m. music; 9:45-11:05, 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-560kc) 6:30 p. m. Joska DeBabary and his orchestra; 7, Family hour; 9-10:30, Edison classical concert; 10:30-12, Congress carnival.

Total Characteristics Confest, 2000 Con-Sanders; carnival.

WBBM Chicago, Ill. (226m-1330kc) 8, Coon-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, musicale; 9, WEAF; 10:30, orchestra; 11:30, organ recital, Eddie Dunstedter.

WCFL Chicago, Ill. (491.5m-610kc) 6 p. m. talks; 7, Brevoort trio; 8, variety hour; 10, Alamo orchestra; 12, entertainers.

Brevoort trio; 8, variety hour; 10, Alamo orchestra; 12, entertainers, WCOA Pensacola, Fla. (252m-1190kc) 6:30 p. m. Evening program.
WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. School of the air; 8-9, musicale; 9-9:30, WEAF; 11:45-1, Nighthawk frolic.
WEBH Chicago, Ill. (370.2m-810kc) 7 p. m. Edgewater Beach hotel orchestra; 9-11, orchestra, artists; 12-12:30, revue.

water Beach hotel orchestra; 9-11, orchestra, acusts, 12-12:30, revue.
WEMC Berrien Springs, Mich. (315.6m-950kc) 8:15 p. m. recital. WENR Chicago, Ill. (265.3m-1130kc) 6-7 p. m. Rau-land trio; 8-9, trio; 9-10, Samovar orchestra; 12-2,

frolic
WGN Chicago, Ill. (302.8m-990kc) 6:10 p. m. music;
6:15, Punch and Judy; 6:35, Drake concert ensemble; 6:50-7, Old Fashioned almanack; 7:15, Paul
Ash; 8:30, Adventures of Oney Fred Sweet; 8:40, songs; 8:45-10, Arabian Nights' entertainment;

# 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.

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, also by wave lengths. UNIQUE BROADCASTING SCHEDULE. LOG shows location; difference in time; power, meters and kilocycles; spaces to list dial settings; time heard, distance, signal strength. Whether you use outdoor aerial or loop.

At your dealers, or sent nactuald.

At your dealers, or sent postpaid. Dealers and Jobbers Write at once. MULTIVIDER CO. 713 Baltimore Ave. KANSAS CITY, MO.

10. Sam 'n' Henry; 10:10, Music Box; 10:20, songs, Tommy Coates; 10:30-12, The Pepper Party, WHAD Milwaukee, Wis. (275,1m-1090kc) 6, orchestra; 10:33, dance program; 11-12:30, organ, WHAS coutsville, Ky. (399,8m-790kc) 7:30-9 p. m. Artists.

WHB Kansas City, Mo. (365.6m-820kc) 7-8 p. m. program; 10:30-11:30, midweek musicale.

WHO Des Moines, Iowa (526m-570kc) 6-7 p. m. Little symphony; 7-9:30, program; 9:30-11:30, dance

music, WHT Chicago, III, (399.8m-750kc) 6 p. m. Al Carney; 7:45 (238m-1260kc), orchestra, Stuart Dawson; 9:30 (399.8m-750kc), program; 10, variety program; 11, Al and Det Al and Pat. WIBO Chicago, III. (225.4m-1330kc) 6-8 p. m. dinner concert: 10-12, dance music.

Al and Pat. WiBo Chicago, III. (225.4m-1330kc) 6-8 p. m. dinner concert; 10-12, dance music. WJAZ Chicago, III. (329.5m-910kc) 6:30 p. m. Shoreland hotel; 8, highlights; 9, diversified program. WJJD Mooseheart, III. (370.2m-810kc) 8-9 p. m. child artists; 11-12, Palmer House Victorians. WLIB Chicago, III. (302.8m-990kc) 8-8:30 p. m. WEAF; 12-12:45, opera club orchestra. WLS Chicago, III. (302.8m-990kc) 8-8:30 p. m. WEAF; 12-12:45, opera club orchestra. WLS Chicago, III. (344.6m-870kc) 6 p. m. Supperbell; 6:40, Maurie Sherman's College Inn orchestra; 6:55, Tony's scrap book; 7, May and June; 7:15, duo, Old Town Coffee room; 8, program; 8:30, musicale; 9:30-12, dance night. WMAQ Chicago, III. (447.5m-670kc) 6 p. m. Chicago theater organ; 8, Gus Edwards orchestra; 8-10, Northwestern U.; 9, music; 9:30, musicale. WMBB Chicago, III. (249.m-1200kc) 7-8:30 p. m. Trianon duo; Bessie Beelman, contralto; Monte Blunn, tenor; 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. musicale; 9-9:30, WEAF; 9:30-10:30, musicale. WOK Chicago, III. (238m-1260kc) 6-7:45 p. m. string ensemble; 8-9 (217.3m-1380kc), theater program; 9:30-12 (238m-1260kc), syncopators. WOC Kansas City, Mo. (278m-1080kc) 6:15 p. m. orchestra.

WOU Kansas City, Mo. (27011-1909kc) 7 p. m. North Chicago, III. (275.1m-1999kc) 7 p. m. North Shore line; 7:45, ten minutes of good reading; 9, I. B. S. A. choral singers; 9:15, Bible lecture. WOS Jefferson City, Mo. (440.9m-680kc) 7:30 p. m. address; 8:05, talk; 8:20, musicale. WQJ Chicago, III. (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; concert; 10-2 a, m. Rainbo frolic. WSB Atlanta, Ga. (428.3m-700kc) 10:45 p m. entertainers.

tainers.

WSBC Chicago, III. (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.

WSWS Chicago, III. (275.8m-1290kc) 6 p. m. Dinchour program; Terrace Garden orchestra; 8, Terrace Garden orchestra; 8, Terrace Garden orchestra; 10, popular program; 12 midnight, Witching hour.

### Mountain Time Stations

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

### Pacific Time Stations

KFI Los Angeles, Calif. (467m-642kc) 7 p. m. Virginia ballroom orchestra; 7:30, Nick Harris; 8-9, program, California Petroleum corp.; 9-10, semiclassical hour; 10-11, Sunset instrumental quartet. KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 7:50, news; 8-9, features; 9-10, Bill Hatch and his orchestra; 10-11, Warner Brothers frolic. ers frolic. KGO Oakland, Calif. (361.2m-830kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8, farm program; 9, trio, KGW Portland, Ore. (491.5m-610kc) 8-9 p. m. concert; 9-10, entertainment, KHJ Los Angeles, Calif. (405.2m-740kc) 6:30-7:30 p. m. children's hour; 8-10, features; 10-11, Varsity KJR Seattle, Wash. (384.4m-780kc) 10 p. m. dance

musica, program, vision, of color, prolice, program, kmtrk Hollywood, Calif. (370.2m-810kc) 7-7:50 p. m. musical program; 7:50-8, feature; 9-10, dance; 10-12, frolic, Palais de Danse.



CENTRALAB Modu-Plug gives old receivers the improved tone volume of latest, best sets. Replaces present speaker plug. Tune in on the set, then modulate with the small knob on the

### Centralab Modu pluU

Transfers the final tuning from the dials to the Modu-Plug between the speaker and the set. Reduces interfering noises. Attaches instantly without tools.

12 Keefe Ave., Milwaukee, Wis.

Makers of a full line of variable resistances for 69 makes of leading standard sets.

A Centralab Radiohm is used in the popular Bruno Circuit, as well as the Infradyne, Henry Lyford, Varion, and many others

KNX Hollywood, Calif. (336.9m-890kc) 7 p. m. musicale; 8, musicale; 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 arrists; 9-10, music; 10-11, States Restaurant orchestra; 11-12, Trianon ballroom.

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

Wednesday, silent night for: CKAC, KFDM, KFDY LDS, KMMJ, KMOX, KOB, KOIL, KPSN, KUOA KWWG, WABQ, WBAL, WBAP, WBBR, WCBD VFAA, WFI, WGBF, WGBS, WGCP, WHAR, WIP VJAZ, WMC, WOAI, WOW, WPG, WRR, WSUI VTIC.

### THURSDAY, JANUARY 20 Headliners

KSO (405.2m-740kc) Jack Mosbarger and orchestra.
WBAL (245.8m-1220kc) Knights of Columbus choir.
WOJ (447.5m-670kc) "Sea Songs."
8:15 7:15
WRVA (256m-1170kc) A radio trip through Vir-7:30 6:30 5:30 (411m-730kc) "The Mikado," (CNRO

CNRM (411m-700kc) (434.5m-690kc) Metropolitan Mandolin trio, KFH (268m-1120kc) Metropolitan Mandolin trio, WOS (440,9m-680kc) Hon, Frank O. Lowden, for-mer Governor of Illinois,

| Castern | Section | Sect 9:30 8:30 7:30 6:30 OAI (394.5m-760kc) Excerpts from "Mounte-banks." banks."

10
KPRC (299.8m-1000kc) Southern Pacific lines band,
WBZ (333.1m-900kc) Vitall Podolosky,
WHB (365.6m-820kc) Martin and Taylor,
WHN (361.2m-830kc) Cookie. 7:45
WOR (405.2m-740kc) "Mr. and Mrs. Newlywed."

11
10
S
KGO (361.2m-830kc) KGO Little symphony,
WOC (483.6m-920kc) Old Fashioned orchestra music. music, 11:30 9:30 8:30 CNRC (434.8m-690kc) "A Visit to Spain." 12 mid. 11 10 9 CNRV (291m-1030kc) Murray Cameron's old time orchestra.

# THURSDAY, JANUARY 27 Headliners

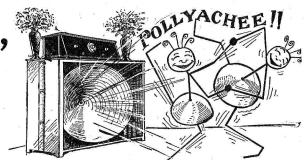
Central 7 p. m. 6 5 4 WENR (266m-1130kc) Organ, Edward Benedict. 8:15 7:15 6:15 5:15 WRVA (256m-1170kc) "A day at a military academy." emy,'' 9:30 7:30 6:30 WFAA (475,9m-630kc) Wednesday Morning Choral club recital, WOAI (394,5m-760kc) Excerpts from "Mikado."

# WORLD'S FINEST LOUD SPEAKER



3 FOOT CONE KIT ONLY

**\$10** 



Complete parts furnished in kit 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 Fonotex for big cone, with brass apex, two Sepia Prints showing several types of cone and wall 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

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

Address.....

Engineers' Service Co. 25 Church St. (Desk D) New York City.

# "A" Battery and Charger

in One

No more dead A batteries on your radio, no more recharging, no storage bat-tery troubles, no dry cell re-newals. Major Unit "A" Batnewais. Major Unit "A" Battery operates from your electric light socket. "A" Battery and Trickle Charger in one compact unit. Gives constant, dependable "A" current. No noise. No adjustments.



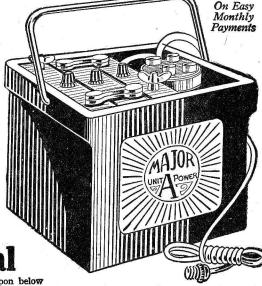
Free Trial

Only \$1.00 deposit with coupon below brings this Major Unit "A" Battery on 30 days free trial. Just attach to any electric light socket. Operates from 110-115 volt A. C., 50-60 cycle house current and on radio sets using 5 to 6 volt tubes. Costs only one-tenth of a cent per hour for current. Improves reception. Requires no attention except adding water occasionally. Guaranteed: Any Major Unit "A" Battery will be replaced without cost within 90 days from date of sale if defective in workmanship or material. defective in workmanship or material. If not satisfied after 30 days trial, return at our expense and your \$1.00 plus transportation will be refunded at once.

\$400 a Month If satisfied, p a y our special sale price at the rate of only \$4.00 a month. Total rock bottom price only \$23.80.

Order by No. Y8918A; \$1.00 with coupon; \$4.00 monthly; sale price, \$23.80.

Straus & Schram Chicago, III.



Attach to Your Light Socket STRAUS & SCHRAM, Dept. R9411 Chicago

Enclosed find \$1.00. Ship special advertised Light Socket Major Unit "A" Battery. I am to have 30 days free trial. If I keep it, I will pay you \$4,00 monthly. If not satisfied, I am to return it within 30 days and you are to refund my money and any freight or express charges I paid. Main Black MARS

	- <u>- 1</u>		
Name			
Street, R. F. I	D.		
Shipping Point			
Post Office		State	

**Educational Features** 

Thursday Central Mountain 7 p. m. 6 5 4 KVOO (374.8m-890kc) U. of Tulsa, WDAF (365.6m-820kc) School of the Air. 8:15 5 5:15 WDBO (239.9m-1250kc) Literary Appreciation services

ries, 8:30 7:30 6:30 5:30 5:30 KUOA (299,8m-1000kc) Jan. 20, "The King of the Skies." Jan. 27, "The Little Theater." "Democ-racy and Education." Education with the Conference of the WEAO (293,9m-1020kc) Engineering. WOI (270.1m-1110kc) liwa State Radio courses.

Regular Thursday Features Eastern Time Stations
Toronto, Can. (356.9m-840kc) 8:15 p. m.
cal program, Luigi Romanelli and his orchestra.

KDKA Pittsburgh, Pa. (309.1m-970kc) 6:15 p. m. KDKA Little symphony orchestra; 8, program; 9, symphony; 11, dance.
PWX Havana, Cuba (399.8m-750kc) 8:30 p. m. Cuban program

program. WBAL Baltimore, Md. (246m-1220kc) 6:30-7:30 p. m. dinner orchestra; 7:30-8, organ recital; 8-9, musical program, instrumental and vocal selections; 9-10, ensemble; 10-11, staff concert; 11-12, dance

WBBR New York, N. Y. (416.4m-720kc) 8 p. m. program.

WBZ Springfield, Mass. (333.1m-900kc) 6:15 p. m. organ; 6:30, orchestra; 8, musicale; 9, WJZ; 10, program; 10:30, orchestra.

WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. orchestra; 7:45, talks; 8:30, musicale; 9-11, WEAF; 11, dance music.

WCAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg recital; 8. Saddler's Serenaders; 8:30. Getz Go-Getters; 9:30, Musical Chefs; 10, frolic: 10:30, Parodians' dance orchestra; 11, Club Cadix recus

WCX Detroit, Mich. (516.9m-580kc) 6-7 p. m. dinner program, Goldkette ensemble; 8-9, studio program. WDBO Winter Park, Fla. (239.9m-1250kc) 9 p. m.

orchestra. WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7, mid-week hymn sing, auspices of the WEAF New JORK, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7, mid-week hymn sing, auspices of the Greater New York Federation of churches; 7:30, famous characters in literature, WOC; 8, Coward Comfort hour; 8:30, program, WEEI, WGR, WFI, WYJ, WCAE; 9, Cliquot Club Eskimos, WEEI, WJAR, WTAG, WFI, WCAE, WSAI, WTAM, WGR, WWJ, WOC, WCCO, KSD, WGN; 10, Goodrich Zippers, WEEI, WFI, WCAE, WWJ, WGR, WOC, WCCO, WTAG, KSD, WSAI, WJAR, WGN, WADC, WCSH, WTAM; 11, Vincent Lopez and his orchestra from Casa Lopez.

WEAO Columbus, Ohio (293.9m-1020kc) 8:15 p. m. headliners.

headliners. **WEEI Boston, Mass. (348.6m-860kč)** 6:10 p. m. Palais Royal orchestra <u>7:50</u> Boston Globe broadcast; 8,

Royal orchestra; 7:50. Boston Globe broadcast; 8, musicale; 9-11. WEAF, WFI Philadelphia, Pa. (394.5m-760kc) 8 p. m. The Serenaders; 8:30, recital; 9, WEAF; 10, WEAF, WGBS New York, N. Y. (315.6m-950kc) 6 p. m. progress gram. **WGHB Clearwater, Fla. (265.3m-1130kc)** 7 p. m. din-ner music; 8:30, Euphemia Kavassa; 9, band; 10,

dance music, WGHP Detroit, Mich. (270.1m-1110kc) 6 p. m. dinner concert, Hotel Tuller; 10-11, WGHP Frolickers; 11-12, dance orchestra.

WGR Buffalo, N. Y. (319m-940kc) 6:30-7:30 p. m. Vincent Lopez Hotel Statler orchestra; 8-11, WEAF.

WGY Schenectady, N. Y. (379.5m-790kc) 6:30 p. m. Ten Eyck hotel; 7:45, musicale; 9, WJZ; 10-11:30, program; 11:30, organ.

WHK Cleveland, Ohio (272.6m-1100kc) 6 p. m. orches-

WHN Cleveland, Ohio (272.6m-1100kc) 6 p. m. orchestra; 10, sacred hour.
WHN New York, N. Y. (361.2m-830kc) 7 p. m. lceland dance orchestra; 8, Will Oakland's Chateau; 9:30, Loew's theater; 12, The Playground.
WICC Bridgeport, Conn. (232.4m-1290kc) 7 p. m. studio program.
WIP Philadelphia, Pa. (508.2m-590kc) 6:10 p. m. Benjamin Franklin concert orchestra; 7, Uncle Wip's bedtime stories; 8, evening program; 10:05, dance orchestra; 10:30, orchestra.

WJR Detroit, Mich. (516.9m-580kc) 7 p. m. Jean Goldkette's Petite symphony orchestra; soloists; 7:30, Ide and Meginnity, entertainers; 9, studio

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

WLIT Philadelphia, Pa. (394.5m-760kc) 7:30 p. m. concert orchestra.
WLW Cincinnati, Ohio (422.3m-710kc) 7:40 p. m. orchestra; 10, light opera; Melody Boys; 12:15 a. m. Night Howls.
WLWL New York, N. Y. (288.3m-1040kc) 9 p. m. Ouestion box; 9:30, trio.
WMAK Buffalo, N. Y. (288.3m-1040kc) 9 p. m. Hotel Lafayette trio; 7:45, Syracuse University; 9, musicale; 10, dance; 11:30, WGY,
WMCA New York, N. Y. (340.7m-880kc) 7 p. m. orchestra; 7:30, Grel-Meister's Hungarian orchestra; 9, Solow soloists; 9:30, Nutry half hour; 11, Ernie Golden and his Hotel McAlpin orchestra; 12, Broadway Nite.
WNYC New York, N. Y. (526m-570kc) 6:40 p. m. piano selections; 7:20, piano selections.
WOO Philadelphia, Pa. (508.2m-590kc) 11 a. m. organ recital; 12:02 p. m. Tea Room orchestra; 4:45, organ recital; 7:30, dance orchestra.
WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Jac-

WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Jacques Jacobs' Hotel Shelton ensemble; 6:45, Bill Wathey in sports; 7. Jacques Jacobs' Hotel Shelton ensemble; 10:45, entertainers; 11, orchestra; 11:35 orchestra

ton ensemble; 10:45, entertainers; 11, orchestra; 11:35, orchestra.

WPG Atlantic City, N. J. (299.8m-1000kc) 7:15 p. m. organ recital, Arthur Brook; 7:30, Hotel Morton dinner music; 8, world wonder excursions; 8:15, studio concert; 9:45, program; 10, movie broadcast; 10:20, organ recital; 11:20, Silver Slipper Supper club dance orchestra.

WRC Washington, D. C. (468.5m-640kc), 7 p. m. dinner music; 8, to be announced; 10-11, band.

WRVA Richmond, Va. (256.3m-1170kc) 8:20 p. m. evening program; 11, Carry me back to Old Virginny.

eyening program, 17, car; more specified by the serious program; 10, WEAF; 11, musicale; 7:30, request program; 10, WEAF; 11, music.

WTAG Worcester, Mass. (545.1m-550kc) 8 p. m. program; 8:30, Standardyne trio; 9, WEAF; 10, WEAF; 10, WEAF, 10, WEAF, 11, WIAM Cleveland, Ohio (389.4m-770kc) 6 p. m. Hollenden hotel orchestra; 7:30, studio program; 10, tridic program; 11, Collegian sergnaders.

lenden hotel orchestra; 7:30, studio program; 10, studio program; 11, Collegian serenaders, WTIC Hartford, Conn. (475.9m-630kc) 6 p. m. Hotel Heublein trio; 7, midweek religious sing; 7:30, staff artists; 8, Outlet Owlets; 8:30, Capitol theater presentation, WWJ Detroit, Mich. (352.7m-820kc) 6 p. m. dinner concert; 8, WEAF.

Central Time Stations
CKY Winnipeg, Can. (384.4m-780kc) 8:30-9 p. m. studio program; 9-10, J. A. Banfield company's studio program, concert.

KFAB Lincoln, Nebr. (340.7m-880kc) 8:30-10:30 p. m. concert from program. out of town program. KFNF Shenandoah, Iowa (461.3m-650kc) 7 p. m. concert.
KLDS Independence, Mo. (440.9m-680kc) 8 p. m. studio program.
KOIL Council Bluffs, Ia. (305.9m-980kc) 6 p. m. program; 7, program; 7, 30, oil burner; 8, music hour; 11, orchestra.

Malestic Master-B

For Radiola 25, 28, 30 and Super heterodynes. Operates power tubes. 60 mils at 150 volts.

\$31.50

KPRC Houston, Texas (299.8m-1000kc) 8 p. m. evening program; 9, band. KSO Clarinda, Iowa (405.2m-740kc) 6:30 p. m. con-

cert.
KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9-10:15 p. m. program; 10:15, specialties.
KVOO Bristow, Okla. (374.8m-800kc) 7-7:30 p. m. Hawaiian music; 7:30-8, Irene Buchner; 8-9, music lovers hour; 12, American Legion frolic.

KYW Chicago, III. (535.4m-560kc) 6:30 p. m. Joska DeBabary and his orchestra; 7, family hour; 8. "Twenty Minutes of Good Reading," Rev. C. J. Pernin; 9-10:30, classical concert; 10:30-12, Congress carrival

Pernn; 9-10-30, cmasses, gress carnival.

WBAP Fort Worth, Tex. (475.9m-630kc) 7:30-8:30
p. m. musicale; 9:30-11, program; 11-12, frolic. p. m. musicate, 7.00-11, program, 1 A., and WBBM Chicago, III. (226m-1330kc) 8 p. m. Coon-Sanders Night Hawks; 9-11, orchestra, piano; 11, Coon-Sanders Night Hawks; WCBD Zion, III. (344.6m-870kc) 8 p. m. musicale.

WCBD Zion, Ill. (344.6m-870kc) 8 p. m. musicale.

WCCO Minneapolis-St. Paul., Minn. (416.4m-720kc)
8 p. m. WEAF; 10:05, talk.

WCFL Chicago, Ill. (491.5m-610kc) 6 p. m. talks; 7,
Brayort trio; 8, classical hour; 10, Alamo orchestra; 11-12, Alamo entertainers.

WDAF Kansas City, Mo. (395.6m-820kc) 6-7 p. m. school of the air; 11:45-1, Nighthawk frolic,
WEBH Chicago, Ill. (370.2m-810kc) 7-8 p. m. Uptown theater; 9:30-11, musicale.

WENN Chicago, Ill. (265.3m-1130kc) 6-7 p. m. Rauland trio; 8-9, trio; 9-10, popular program.

WFAA Dallas, Texas (475.9m-630kc) 6:30-7:30 p. m. Baker hotel orchestra; 8:30-9:30, concert.

WGN Chicago, Ill. (302.8m-980kc) 6:35 p. m. Drake

Baker hotel orchestra; 8:30-9:30, concert.

WGN Chicago, III. (302.8m-990kc) 6:35 p. m. Drake concert ensemble; Blackstone string quartet; 8-10, WEAR; 10, Sam 'n' Henry; 10:10, The Music Box; 10:20, Mark Love, bass; Bobby Meeker's Drake hotel orchestra; 10:30-11, songs, Correll and Gosden.

Gosden.
WHAD Milwaukee, Wis. (275.1m-1090kc) 6:15 p. m. orchestra and vocal selections, Wisconsin hotel orchestra; 7, talk; 8:30, studio program.

WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. concert. WHB Kansas City, Mo. (365.6m-820kc) 7-7:30 p. m. organ concert; 7:30-9, talks; 9-10, songsters. WHO Des Moines, Ia. (526m-570kc) 7:30-8 p. m. dinner concert; 8-9, music; 11-12, dance program.

WHT Chicago, III. (399.8m-750kc) 6 p. m. Al Carney, organist, violin; 7:45 (238m-1260kc), orchestra, songs; 10:30, quartet; 11, Al and Pat.

WIBO Chicago, III. (225.4m-1330kc) 6-8 p. m. dinner concert; 12-2, Aragon minstrels, WJAZ Chicago, III. (329.5m-910kc) 7 p. m. diversified program; 9, Shoreland, WJJD Mooseheart, III. (370.2m-810kc) 8-9 p. m. child artists; 11-1 a. m. Palmer House Victorians, WLIB Chicago, III. (302.8m-990kc) 7-8 p. m. dinner concert; 11-12:30, organ, orchestras, WLS Chicago, III. (344.6m-870kc) 6-30 p. m. sports;

WLS Chicago, Ill. (344.6m-870kc) 6:30 p. m. sports; 6:40-7:55, artists; 10:30, organist; 10:45-12, orches-

tras.

WMAQ Chicago, Ill. (447.5m-670kc) 6 p. m. Chicago theater organ; 6:30, Gus Edwards' orchestra; 7, orchestra; 8, program; 8:05, U. of Chicago; 8:30, trio; 9, players. trio; 9, players.

WMBB Chicago, Ill. (249.9m-1200kc) 7-8:30 p. m.
Trianon ensemble; 8:30-11, orchestra; Arthur Trues-

dale.

WMC Memphis, Tenn. (499.7m-600kc) 8 p. m. talk on Memphis commerce; 8:30, program.

WOAI San Antonio, Tex. (394.5m-760kc) 8:30-9:30 p. m. Radiola Super-Heterodyne hour.

WOC Davenport, Lowa (483.6m-620kc) 7:30-8 p. m. Moline Plowboys; 8-9, WEAF; 9-10, WEAF; 10-11, purchale.

musicale.

WOK Chicago, III. (238m-1260kc) 6-7:45 p. m. string ensemble; 8-9 (217.3m-1380kc), theater program; 9:30-12 (238m-1260kc), syncopators.

WORD Chicago, III. (275.1m-1090kc) 7 p. m. Webster Hotel duo orchestra; 9, musicale. WOW Omaha, Nebr. (526m-570kc) 6 p. m. Vag-abonds; 9, classical program; 10, Roseland Gardens.

WOJ Chicago, Ill. (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; specialty; 10-2 a. m. Rainbo frolic

Gardens Orchestra; specialty; 10-2 a. m. Kainno frolic.

WRR Dallas Tex. (245.8m-1220kc) 6 p. m. music; 8, band; 9, Bible class; 11-12, old-time music.

WSB Atlanta, Ga. (428.3m-700kc) 8 p. m. concert; 10:45, Charles A. Sheldon Jr., organist.

WSBC Chicago, Ill. (288.3m-1040kc) 6-7 p. m. dinner program; 9-1 entertainers.

WSMB New Orleans, La. (319m-940kc) 8:30 p. m. dance program.

WSOE Milwaukee, Wis. (245.8m-1220kc) 6 p. m. children's hour; 7, popular music; 9, bridge; 9:30, community band.

wsus Children's hour; 7, popular music; 9, bridge; 93, m. community band.

Wsws Chicago, III. (275.8m-1090kc) 6 p. m. dinner hour program; Terrace Garden orchestra; 8, production, the Magic Crystal; 10, popular airs; 12, Witching hour program.

They Laughed When I Sat Down At the Piano But When I Started to Play!~

AN he really play?" I heard a girl whisper to Arthur, as I sat down at the piano.
"Heavens, no," Arthur exclaimed. "He never played a note in all his life."
Then I gave them the surprise of their lives. I started to play. Instantly a tense silence fell on the guests. I played the first few bars of Liszt's immortal Liebestraume. I heard gasps of amazement. My friends sat breathless—spellbound! I played on.

A Complete Triumph!

A Complete Triumph!

As the last notes of the Liebestraume died away, the room resounded with a sudden roar of applause. Everybody was plying me with questions . . 'Jack! Why didn't you tell us you could play like that?'

"Where did you learn?' . . . "Who was your teacher?' Then I told them the whole story.

"Then I told them the whole story.

"It seems just a short while ago that I saw an ad of the U. S. School of Music mentioning a new method of learning to play which only cost a few cents a day! Without a teacher! And no laborious scales or exercises. I sent for the Free Demonstration Lesson, and was amazed to see how easy it was to play this new way. I sent for the course and found it as easy as A.B.C.! Before I knew it I was playing all the pieces Piano Harmony and Organ Sight Singing Drums and Ukulele Lieb and Composition Wholm and Ukulele Lieb and Composition Sight Singing Drums and Ukulele Lieb and Composition S

Play Any Instrument

You, too, can now learn music—right at home—in half the usual time. You can't go wrong with this simple new method which has already shown almost half a million people

how to play their favorite instruments. Just read the list of instruments in the panel, decide which one you want to play and the U. S. School will do the rest.

Free Demonstration Lesson

Thousands of successful students never dreamed they possessed musical ability until it was revealed to them by a remarkable "Musical Ability Test" which we send entirely without cost with our interesting free booklet and Demonstration Lesson.

Right now we are making a Special offer for a limited number of new students. Mail coupon now. Instruments supplied when needed, cash or credit. U. S. School of Music, 1831 Brunswick Bldg., New York City.

U. S. School of Music
1831 Brunswick Bldg., New York City
Please send me your free book. "Music Lessons in

Please send me your free book, "Music Lessons in Your Own Home," with introduction by Dr. Frank Crane, Demonstration Lesson and particulars of your Special Offer. I am interested in the following course:

The time that the times that the time that the stripe ;		
Have you above instrument?		
Name		
Address		
C:-	2784001 202	



Pick Your Course
Piano
Organ
Violin
Drums and
Traps
Tell
Cello
Guitar
Harp
Mandolin
Clarinet
Flute
Saxophone
Voice and Speech Culture
Automatic Finger Control
Piano Accordion

Out of CHAOS in the AIR No more scrambled reception! No more fuming while you try to tune in one good program from the swarm of songs, tunes, stories, speeches and reports that dozens of stations are throwing on the air at the same time. Get the program you want, strong and clear, with

anvwhere Greater Selectivity Better Ione i kess Siatio Use Indoors on Outeloons



REG. U. S. TRADE MARK
PATENT PERDING
Can be hung anywhere. Don't risk your life erecting an outside aerial on already crowded roofs, when you can hang an Effarsee Antennae in your attic, cellar, spare-room or a closet—under carpets or behind pictures, drapes or furniture, in less time than it takes to tell. Special parchment covering keeps wires properly spaced, and insulated from moisture and electrical losses. Fixed condensers acach end provide the sharp tuning of a short aerial and the range and volume of a long one. Gives improved selectivity and tone and reduces static.

SEND NO MONEY

Just mail the coupon. We will send antennae complete with full instructions. Pay the postman \$4.00 on delivery. A Binghamton, N. Y., user writes, "Have never heard as good reception as is given on your Antennae." A Detroit user says, "Got Denver, San Antonio and others with locals going full blast." We guarantee you complete satisfaction, too, or your money will be refunded.

13 West Central Parkway, Cincinnati, Ohio Please send me Effarsee Antennae complete. I will pay postman \$4.00, plus a few cemplete. I will pay postman \$4.00, plus

MONEY BACK!

if not Delighted

FISHWICK RADIO CO.

133 West Central Parkway,

Cincinnati, Ohio

See your dealer today. Insist on a demonstration on YOUR set immediately (Can be purchased on deferred payments) GRIGSBY ~ GRUNOW ~ HINDS ~ CO. 4576 ARMITAGE AVE. CHICAGO-ILL.

Majestic "B" Current Supply

delivers pure direct current-from your light socket

Majestic Super-B

Capacity one to twelve tubes,

including the use of power tubes. 45 mils \$29.00 at 150 volts.

West of Rocky Mts., \$31.50

No acid or DEPENDABLE, ECONOMICAL. Will post-tively give you Better Reception.

Majestic Standard-B

Capacity seven tubes or plus I powertube. 45

\$26.50

eres at 135 volts

Raytheon Tube \$6.00 extra. liquid. No filament to burn out.

Better Reception

Signature of the second of

Pacific Time Stations
KFI Los Angeles, Calif. (467m-642kc) 7-8 p. m. program by students of U. S. C.; 8-9, KFI drama hour; 9-10, yaried hour; 10-11, Johnston and Farrell's music box revue.

KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 7:50, news; 8-9, features; 9-10, program; 10-11, Warner Brothers frolic. KGO Oakland, Calif. (361.2m-830kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8, program; 9-12,

Stanislas Bem's Little sympnony; 6, program, 7-20, orchestra;

KGW Portland, Ore, (491.5m-610kc) 6-7 p. m. dinner concert; 7:45-8, lecture; 8-10, vaudeville,

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

KMTR Hollywood, Calif. (370.2m-810kc) 8-9 p. m. program; 9-10, semi-classical hour; 10-11, dance music, 11-12, Palais de Danse.

KNX Hollywood, Calif. (336.9m-890kc) 7 p. m. records; 7:30-8, trio; 9-10, Sierra singers; 11, Hotel Ambassador.

ords; 7:30-8, trio; 9-10, Siella Singer, 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, program; 9-10, music; 10-11, music; 11-12, frolic. KPSN Pasadena, Calif. (315.6m-950kc) 8-9 p. m. musical program.

Thursday, silent night for: CFCA, KFAB, KFDM, KFOA, KTVA, KTX, KMA, KMOX, KOA, KOB, KSWC, PWX, WABC, WAMD, WCOA, WEAO, WEBJ, WEMC, WGBF, WHAD, WJAX, WLIT. WMAK, WOS, WSM, WSUI, WTAM.

### FRIDAY, JANUARY 21 Headliners

| WBBM (526m-570kc) | Salvator Gusenza, mando-linist. | WBZ (333.1m-900kc) | Dorothy Sylvester Foley, contralto. | WTIC (475.9m-630kc) | Colonial male quartet. | 8:05 | 7:05 | 6:05 | 5:05 | WRVA (256m-1170kc) "The Drum Major." | S:15 | S:15

white (19.5). The control of the con

11 KGO (361.2m-830kc) Parisians.

# FRIDAY, JANUARY 28 Headliners

Eastern Central Mountain Pacific 7:15 p. m. 6:15 5:15 4:15 WTIC (475.9m-630kc) Piano selections, Laura C. Caudet,

Eastern Central Mountain 7:30 5:30 4:30 WFAA (475.9m-630kc) Texas Ramblers orchestra. WTIC (475.9m-630kc) Robert Burns anniversary

WTIC (475.9m-630kc) Robert Burns anniversary program. 7:05

WRVA (256m-1170kc) Edgeworth Lobster Review. 8:30

CNRA (322.4m-930kc) Old Time contest.
WBAP (475.9m-630kc) Fine Arts Department, Texas Woman's college. 9

CNRT (356.9m-840kc) The Radio Raiders.
WCOA (252m-1190kc) Study in classics. 9:20

WOS (440.9m-680kc) Daniel Boone Jones, Interstate old fiddling champion. 10:15

KOA (322.4m-930kc) Denver College of Music. 11:30

WHN (361.2m-830kc) Melody bandbox.

# **Educational Features**

Educational Features
Friday
Eastern Central Mountain 9:30 p. m. 5:30 4:30 4:30 12:50

Regular Friday Features

Eastern Time Stations
KDKA Pittsburgh, Pa. (309.1m-970kc) 6:15 p. m.
string ensemble; 8, concert; 9, Teaberry time,
WABC New York, N. Y. (315.6m-950kc) 7:30-1 a. m. WABC New York, N. Y. (315.6m-950kc) 7:30-1 a. in. program.

WBAL Baltimore, Md. (246m-1220kc) 6:30-7:30 p. m. dinner orchestra; 7:30-8, quartet; 8-9, trio: John Wilbourn, 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-900kc) 6:15 p. m. ensemble; 6:30, orchestra; 7:03, concert; 8, program; 8:30, program; 10 musicale.

WBBR New York, N. Y. (416.4m-720kc) 8 p. m. Watchtower concert trio; 8:20, Fred Twaroschk, tenor.

Watchtower Concert tito, 6.20, Freu Thadosun, tenor, WCAE Pittsburgh, Pa. (461.3m-650kc) 6 p. m. dinner music; 8, Sunday school lesson; 8:30, Burt McMurtrie's hour; 9:30, WEAF; 10, WEAF; 10, WEAF; McAU Philadelphia, Pa. (277.6m-1080kc) 7:30 p. m. Snellenburg recital; 8, Barry O'Moore, Irish tenor; 8:30, Cohen's Jewels; 8:45, Curlox Grirs; 9, Melody Makers; 9:30, Murmuring Baritone; 10, recital; 10:30, Myers' Musical Architects. WCX Detroit, Mich. (516.9m-580kc) 6-7 p. m. din-ner concert, Goldkette ensemble; 8-9, studio pro-

wDBO Winter Park, Fla. (239.9m-1250kc) 9 p. m. popular program; 10, Jubilee singers.

WEAF New York, N. Y. (491.5m-610kc) 6 p. m. dinner music; 7:30, Fairyland; 8. Happiness Candy Boys; 8:30, Hohner hour, WGR, WLIT, WRC, WLIB, WWI, WTAM, WCAE; 9. South Sea Islanders, WLIT, KSD, WTAG; 9:30, La France orchestra, WEEI, WGR, WDAF, WLIT, WCAE,

WTAM, WWJ, KSD, WOC; 10, Whittail Anglo-Persians, WRC, WJAR, WTAM, KSD, WWJ, WCCO, WDAF, WGR, WGN, WEEL, WTAG, WCAE, WOC, WLIT; 10:30, orchestra; 11:30,

wcAE, wcc, orchestra, west, wcs, west, west, west, west, west, ws, ws, with company; 8, musicale; 8:30, weAF; 9, quintet; 9:30-10:30, weAF; 10:30, orchestra; 11:30, program. WFI Philadelphia, Pa. (394.5m-760kc) 6:45 p. m. Adelphia dance orchestra.

WGBS New York, N. Y. (315.6m-950kc) 6:30 p. m. orchestra; 7:15, music. WGHB Clearwater, Fla. (265.3m-1130kc) 7 p. m. dinner music; 8:30, pipe organ, program; 9:15, band;

ner music; o:30, pipe WGK Burlaio, N. et al. (1991) 1-90 No. 7, 13 p. m. even-ming program; 9:30-10:30, WEAF; 11-1, supper-music. WGY Schenectady, N. Y. (379.5m-790kc) 7 p. m. Hotel Van Curler dinner music; 7:35, staff program; 8, musicale; 9, WGY players; 10, WJZ; 11, WJZ. WHK Cleveland, Ohio (272.6m-1100kc) 6 p. m. orches-tra; 7:30, Whozit; 7:40, novelties; 10-11, orches-tra; 7:30, Whozit; 7:40, novelties; 10-11, orches-WICC Bridgeport, Conn. (232.4m-1290kc) 7 p. m. orches-tra; 8, entertainers; 9, hour of music.

WIP Philadelphia, Pa. (506.2m-590km) 6:10 p. m. Benjamin Franklin concert orchestra; 7, Uncle Wip's bedtime stories.

WJAX Jacksonville, Fla. (336.9m-890kc) 7-7:30 p. m. Carling hotel dinner music; 8-9, studio popular program; 9-10, Casa de Baile.
WJR Detroit, Mich. (516.9m-580kc) 7 p. m. symphony; 8, Arctic flavors.
WJZ New York City, N. Y. (454.3m-680kc) 7 p. m.

Santa Clause; 7:30, Hotel Commodore dinner orchestra; 8, Sundial Shoe Serendares & Bonnie Laddies; 9, Breyer Ice Cream hour, WRC will also broadcast; 10, Baldwin piano hour, WGY; 11, Paul Specht's Twin Oaks orchestra, WLIT Philadelphia, Pa. (334.5m-760kc) 8:15 p. m., concert orchestra; 8:30, WEAF; 10:30, Arcadia cate dance orchestra.

WMAK Buffalo, N. Y. (265.5m-1130kc) 7:30 p. 382, weather; 7:30, WGY; 7:35, WGY; 8, musicale; 9, WGY.

weather; 7:30, WGY; 7:35, WGY; 8, musicale; 9, WGY.
WMCA New York, N. Y. (340.7m-880kc) 6:30 p. m.
Ernie Golden and his Hotel McAlpin orchestra; 12, McAlpin entertainers.
WNYC New York, N. Y. (526m-570kc) 6:30 p. m. piano selections.

selections.

WOO Philadelphia, Pa. (508.2m-590kc) 11 a, m. organ recital; 12:02 p. m. Tea Room orchestra; 4:45, organ recital; 7:30, Hotel Sylvania dance orchestra; 8:10, hygiene talk; 9, tourists; 10, vaudeville; 10:30, Sylvania dance orchestra.

Sylvania dance orchestra.

WOR Newark, N. J. (405.2m-740kc) 6:15 p. m. Bill Wathey 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) 7:15 p. m. organ recital, Arthur Brook; 7:30, Hotel Shelburne dinner music; 8, orchestra; 9, Hotel Chelsea evening concert; 9:30, Hotel Ambassador concert orchestra; 10, Garden Pier dance orchestra; 11:30, Sulver Slipper, WRC Washington, D. C. (468.5m-640kc) 7 p. m. orchestra; 8, musicale; 9, WlZ; 10, dance music; 11:12, orchestra.

orchestra; 8, musicale; 9, WJZ; 10, dance music; 11-12, orchestra.
WRVA Richmond, Va. (256.3m-1170kc) 7 p. m. evening

WTAG Worcester, Mass. (545.1m-550kc) 8:30 p. m. program; 9:30 Belco entertainers; 10, WEAF.

# Televocal QUA

# Dependable and a Technical Triumph



A RADIO TOBE dime - short. RADIO TUBE that is non-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.

Deale	r's	Name	
City	·····		State
Your	N:	ıme	

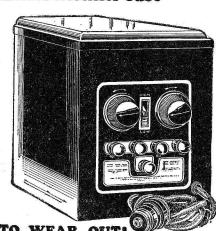
# Genuine "B" Battery Eliminator

Using Famous Q.R.S.

Full Wave No Filament Rectifier Tube

Capacity 85 mills: Operates 1 to 15 tube \$2295 sets up to 220 volts

While the regular market price of the Genuine is around \$50.00, our factory-to-you price is only \$22.95. A "B" eliminator enables you to draw your B current from the light socket. 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, your "B" eliminator pays for itself.



NOTHING TO WEAR OUT:

Contains no materials or parts which are subject to wear. Employs the use of the famous Q.R.S. Full Wave Tube, to rectify the current. There is no filament to burn out, sag, or wear, therefore lasts forever; full Wave rectification. Uses but a few cents worth of current a week. No liquids or chemicals. This is a genuine high capacity eliminator.

# POSITIVELY THE GREATEST VALUE IN "B" ELIMINATORS

Materials used in the Genuine "B" Eliminator are the finest unit parts; the case a Brewster Green Duco finish; the metal fittings of polished nickel; and the genuine Q.R.S. Full Wave Rectifier Tube. Comes completely wired and ready to use from 60-cycle, 110-volt alternating current. The filtering system with its extra capacity, 1,000-volt test condensers, and oversize 40-Henry chokes smooth out every ripple and hum from the alternating current. Is good for a Lifetime of service, and fully guaranteed.

direct to factory NOW, and ship-ment will be made at once, or order C. O. D. if you wish, and pay charges on deliv-ery. Write today —NOW—while this —NOW—while the offer is in force.

**Belmont Scientific** Laboratories Wilson Ave. Chicago, Ill.

Send money or-er for \$22.95 Belmont Scientific Laboratories, 1303 Wilson Ave., Dept. Q, Chicago, Ill. Send me Genuine "B" Eliminator. (Include Q.R.S. No Filament Tube Free) ☐ I enclose check for \$22.95 herewith. ☐ Send C. O. D. I will pay \$22.95 and charges.





WTAM Cleveland, Ohio (389.4m-770kc) 6 p. m. Emerson Gill's orchestra; 7, talk, Arthur Haas; 7:30, studio program; 9:30, WEAF; 10. WEAF; 10:30, studio program; 11, Jade Room orchestra.

WTIC Hartford, Conn. (475.9m-630kc) 6:20 p. m. Hotel Bond Trio; 7:15. Laura C. Gaudet, organist; 8, program; 10, Emil Heimberger's Hotel Bond orchestra.

WWJ Detroit, Mich. (352.7m-820kc) 6 p. m. dinner concert; 8 Michigan life; 9, WEAF; 9:30, WEAF; concert; 8, 10, WEAF.

Central Time Stations
KFAB Lincoln, Nebr. (340.7m-880kc) 8:30-10:30 p. m.
kFDM Beaumont, Texas (315.6m-950kc) band.

KMA Shenandoah, Iowa (461.3m-650kc) 9-11 p. m

KMOX St. Louis, Mo. (280.2m-1070kc) 6:30 p. m. dinner program; 8, program; 12-1, dance music. KOIL Council Bluffs, Iowa (305.9m-980kc) 7:30 p. m. program; 8, artists; 8:30, Dresher Brothers, Inc.; 11, frolic.

KSO Clarinda, Iowa (405.2m-740kc) 6:30 p. m. popu-

KTHS Hot Springs National Park, Ark. (374.8m-800kc) 9:10-10:45 p. m. features.

KYOO Bristow, Okla. (374.8m.s00kc) 7-7:30 p. m. Walter Schoggen, 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, III. (535.4m.560kc) 6:30 p. m. Joska DeBabary and his orchestra; 7, family hour; 9-10:30, classical concert; 10:30-12, Congress carnival.

classical concert; 10:30-12, Congress carnival,
WBAP Fort Worth, Texas (475.9m-630kc) 7:30-8:30
p. m. concert; 9:30-12, evening program,
WBBM Chicago, III. (226m-1330kc) 8, p. m. CoonSanders Night Hawks; 9-10, popular music,
WCCO Minneapolis-St. Paul, Minn. (416.4m-720kc)
6:30 p. m. St. Paul Association; 8, popular orchestra program, Nash-Finch orchestra; 9, WEAF; 9:30,
program; 10:05, dance program, Nankin Cafe orchestra.

WCFL Chicago, Ill. (491.5m-610kc) 7 p. m. Breovort concert trio; 8, popular; 10, Alamo orchestra; 11-12,

WCOA Pensacola, Fla. (252m-1190kc) 6:30 p. m. musicale.

WDAF Kansas City, Mo. (365.6m-820kc) 6-7 p. m. school of the air: 8-8:30, varied musicale; 8:30-9, WEAF; 9-9:30, WEAF; 11:45-1, Nighthawk frolic.

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

WEMC Berrien Springs, Mich. (315.6m-950kc) 9 p. m.

WENR Chicago, Ill. (265.3m-1130kc) 6-7 p. m. Rauland lyric trio; 8-10, program; 12-2, midnight frolic, WFAA Dallas, Tex. (475.9m-630kc) 6:30-7:30 p. m. orchestra; 8:30, program.

WGBF Evansville, Ind. (236.1m-1270kc) 7 p. m. Exide entertainers; 8, orchestra.

WGN Chicago, III. (302.8m-990kc) 6:10 p. m. Punch and Judy; 6:35, ensemble; 6:50, old-fashioned almanack; 8, musical program; 9, WEAF; 9:30, The Phantom violin; 10, Sam 'n' Henry; 10:10, The Music Box; 10:20, Bible readings; 10:30, musicale. WHAD Milwaukee, Wis. (275.1m-1090kc) 6:15 p. m

WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m.

WHAS Louisville, Ky. (399.8m-750kc) 7:30-9 p. m. concert.
WHB Kansas City, Mo. (365.6m-820kc) 7-8 p. m. Sweeney orchestra; Songsters.
WHO Des Moines, Ia. (526m-570kc) 7:30-8 p. m. program; 8-9, Headliner; II-12, dance program.
WHT Chicago, Ill. (399.8m-750kc) 6 p. m. Al Carney; Eleanor Gilmore; Helen Rauh; 7:45 (238m-1260kc), Stuart Dawson; 9:30 (399.8m-750kc) program; II, Al and Pat.
WHO Chicago, Ill. (225.4m-1330kc) 6-8 p. m. evening musicale; 10-1, dance program.
WJAZ Chicago, Ill. (329.5m-910kc) 7 p. m. popular program; 8, highlights; 9, Shoreland; 10:30, Club Chez Pierre.
WJD Mooseheart, Ill. (370.2m-810kc) 8-9 p. m. child artists; Il-1 a. m. Palmer House Victorians; Jack

WLIB Chicago, III. (302.8m-990kc) 7-7:30 p. m. dinner concert; 7:30-8, WEAF; 11-12:30, organ, or-

chestras.

WLS Chicago, Ill. (344.6m-870kc) 7 p. m. May and June; 7:15, trio; 9, orchestra; 9:15, trio; 10-12,

WLS Chicago, III. (344.6m-870kc) / p. m. may and June; 7:15, trio; 9, orchestra; 9:15, trio; 10-12, Show Boat, WMAQ Chicago, III. (447.5m-670kc) 6 p. m. chimes; 6:30, Wide Awake club; 8, musicale; 9, musicale. WMBB Chicago, III. (249.5m-1200kc) 7-8:30 p. m. old home songs; 8:30-11, frolic. WMC Memphis, Tenn. (499.7m-600kc) 7:30 p. m. syncopators; 8:30, Cooper Cord entertainers; 11, frolic. WOAI 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. Moorman Melody Mixers; 8:30-9, WEAF; 9-9:30, WEAF 9:30-10:30, lecture; 11-12, orchestra. WOK Chicago, III. (235.5m-1260kc) 6-7:45 p. m. string enscuble; 8-9 (217.5m-1380kc) theater program; 200.12 (238m-1260kc) syncopators. VOAI Chicago, III. (275.1m-1090kc) 7 p. m. North Shore Inc. 7:43, World News digest; 9, station program: 7:43, World News digest; 9, station program.

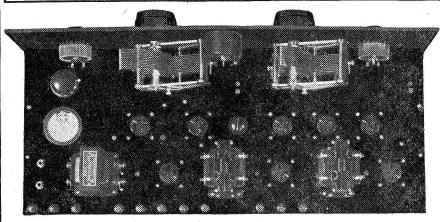
program.
WOS Jefferson City, Mo. (440.9m-680kc) 7:15 p. m.
Radio Bible class, talks; 8:20, musicale.
WOW Omaha, Nebr. (526m-570kc) 7 p. m. talks;
7:30, educational period; 9, classical; 10, Oklaho-

mans.

WOJ Chicago, Ill. (447.5m-670kc) 7-8 p. m. Rainbo Gardens orchestra; 10-2 a. m. Rainbo frolic.

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

# 1927 DELUXE: THE FINEST SUPER



-Top View of Assembled Receiver, Showing All Parts in Place

deluxe receiver we will use the 0-8 volt-meter and 0-25 milliammeter. This range in favor of the former, and I hate to dis-milliammeter is recommended as most turb the potentiometer. That is the chief builders will put a 371 power tube in the last stage and, when checking distortion with this meter, it must carry the load of the 371. the 371.

Frost Parts of Quality

Just how the Frost organization does it is not known to me, but they turn out astonishingly good apparatus at most fair prices. Their Bakelite frame rheostats and potentiometers are both well designed and plainly carefully made. So is the 500,000-ohm variable modulator for con-

trolling volume.

Now right there I'm going to get a lot of argument as to why have a volume control on a super which has a potentiometer. As a rule one controls volume with the latter instrument. From long experience with supers I've found that quite frequently one gets balance of adjustments, including that of the potentiometer and intermediate tubes' rheostat, where

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

WSBC Chicago, Ill. (288.3m-1040kc) 6:30-7 p. m. dinner program; 9-1, entertainers

WSOE Milwaukee, Wis. (245.8m-1220kc) 7 p. m. popular program; 8, Library review; 8:15, Whozit. WSWS Chicago, III. (275.8m-1090kc) 6 p. m. dinner hour program; Terrace Garden orchestra; 8, recital; 10, Mildred Colucio, blues singer; Terrace Garden orchestra; 12, Witching hour program; Terrace Garden orchestra.

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.

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

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, Packard ballad hour;

KFWB Hollywood, Calif. (252m-1190kc) 6-7 p. m. Pontiac dinner hour; 7:50, news; 9-10, Bill Hatch and his orchestra; 10-11, Warner Brothers frolic.

KGO Gakland, Calif. (361.2m-830kc) 6-6:55 p. m. Stanislas Bem's Little symphony; 8-9, program.

KGW Portland, Ore. (491.5m-610kc) 6-7 p. m. dinner concert; 8-8:30, KGW movie club; 8:30-10:30, dance music; 10:30-12; frolic, Hoot Owls.

KHJ Los Angeles, Calif. (405.2m-740kc) 6-6:30 p. m. White King male quartet; 6:30-7:30, children's hour; 8-10, feature program; 10-11, Marigold Gardens dance orchestra.

KLX Oakland, Calif. (508.2m-590kc) 8-9:30 p. m. spe-

o-10, leature program; 10-11, Marigold Gardens dance orchestra.

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

cial 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. (336.9m-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; 8-9, orchestra; 10-11,
orchestra; 11-12, dance orchestra.
KWSC Pullman, Wash. (348.6m-860kc) 7:30 p. m.
concert, talks.

Friday, silent night for: CFCA, CKAC, CKNC, KFDY, KFNF, KLDS, KPRC, KPSN, KUOA, KWWG, WBBR, WCAD, WCBD, WFI, WGBS, WIF, WJAZ, WKRC, WLIT, WLW, WREO, WSAI, WSMB, WSUI, WTAM.

using a 500,000-01m resistance across the first Ferranti. The power of the Ferranti's is another reason.

The object in the two Frost push-pull switches will be apparent later.

Dependable Sangamo Condensers While only two small fixed condensers are used in my design they are both in important points where it is essential that they do not vary. A .006 mfd. size is used in the St. James oscillator hook-up and the usual .00025 mfd. is placed in the grid the usual .00025 mfd. is placed in the grid lead to the second detector. Sangamo gets the choice because they are entirely enclosed in sturdy Bakelite casings which not only protects the material within from mechanical injury but keeps out moisture, the greatest enemy of consistent condenser operation. Sangamo are the only condensers made in this way. Getting into the large by-pass sizes, we will also use Sangamo because not only my own experience, but that of many of my engineer friends, shows that they do

my engineer friends, shows that they do not break down and their claims for a special winding operation must be well founded. These units will take anything we can give them in a super, with or without power tube.

Getting Down to Layout
It requires quite a bit of "playing

checkers" with the parts to secure a super-heterodyne layout that gives symmetry on the front panel without loss of efficiency. The tuning elements are working entirely in conjunction with the first two tubes and, if the set is built as a straight eight, this puts the condenser dials at one end and only a knob or two at the other end.

When moving parts around on the drawing board in designing this receiver, it was at once apparent that everything could not stay on top of the sub base uncould not stay on top of the sub base un-less a straight eight arrangement were used and, since that was not what I wanted, considerable thought was immedi-ately put on the subject of what could be put underneath. The St. James trans-formers and oscillator were the only units small enough and the result is shown in the photographs. the photographs.

From then on the problem was comparatively simple since the second detector and audio amplification went across the back, the intermediate amplification went in at the left end and the first detector and oscillator dropped into the center where wanted. They had to be close to the center so as not to get too far away from center so as not to get too far away from their tuning condensers. The poten-tiometer, volume control and intermediate tubes' rheostat are, naturally, front of panel controls but the oscillator rheostat is placed within on the sub base where it can be adjusted occasionally and left.

Oscillator Control

"It has been my experience that an oscillator should have at least one variable lator should have at least one variable feature; that is, either the grid bias, plate voltage or filament brilliancy should be under control. The last named is most easily varied, hence the rheostat on the sub base. A point in its adjustment will always be found where reproduction is both loud and clearest. both loud and clearest.

An output transformer is essential in these days of high B voltages and cone speakers so it is placed at the right end where its input terminals are adjacent to while its input terminals are adjacent to the P terminal of the last tube socket while its output posts are close to the right edge of the sub base and a pair of cord tip jacks. The location of all binding posts will be clear on wiring although at first glance the reasoning behind their placing may not seem clear. Complete constructional details will ap-

Complete constructional details will appear in the next issue of Radio Digest which will give time for those builders who live in small communities and on farms to write to a larger city and have the parts all ready for work. Construction is not hard if you'll just follow directions to the letter, although this is a large set.

# Warren "B" Supply



150 Volts

COMPLETE

Note these points

1. 150, 90, 67½, 45 and 22½-volt taps give correct voltage with no variable trouble some resistance. Full wave rectification. Delivers 150 volts at 50 milliamperes—the most efficient type of Eliminator ever built.

2. Gives constant unvarying power to any set up to 10 tubes using resistance, transformer or impedance coupling. Also works efficiently with power tube sets.

3. No expensive tubes to

power tube sets.

3. No expensive tubes to burn out. No dangerous acids.

4. Costs less than \$1 a

year to use.

5. Full tone reception without fuss, worry or "B" Battery replacement expense.

expense.
6. Easier to hook up than a set of "B's."
7. Cannot blow out receiver tubes on short circuit.
8. Needs little more attention than your loud speaker.
9. Simple, compact, absolutely free from hum.
10. Wonderfully we 11 made of finest materials, beautifully finished in old gold. A real quality product at the right price.

# Here is

# the "B" Eliminator you've been waiting for

Just think, \$24.75 puts an end to your "B" Battery troubles. The Warren 150-Volt Outfit does the work of others costing twice as much. Guaranteed to do all that is claimed for it or money refunded. Approved by leading Radio Magazines.

# WARREN "B" Eliminator

Enclose your check for \$24.75 with order and we'll pay the express charges to your address—or—we'll ship C.O.D. and you pay the express costs. Send in your order NOW—you'll never regret it. The Warren is not only very attractive in appearance, but it is made from the finest materials and assembled and tested by experienced workers. Just try the War-ren—you'll find that it makes your set work far better and that it will give you more genuine radio satisfaction than you thought possible. ORDER NOW.

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

# 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 eny tube or crystal set. If you don't find it improves your set wonderfully, get refund at once.

Postpaid 10-Day Free Trial Money-Back Guarantee

No More Outside Aerial, Once You Install It

no more corrosion from the weather. Free from nearness of neighboring aerials 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

ATCHISON, KANSAS

 $\bigcirc \bigcirc \bigcirc \bigcirc$ 

present aerial at

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 Ic an hour. Write for descriptive literature before buying an expensive Battery Set. Also Steinite Long Distance Crystal Set \$6-6-Tube Battery Set \$45. WRITE TODAY.

# "GOODY GOODY" GIRL

(Continued from page 8)

She noted that he locked it, too, before he came and stood beside the creaking rocker in which she had seated herself.

"Herbie Coles, I saw you smash that window down the street," she said.
He started, then he shrugged and laughed shortly. "You didn't see me a moment ago, wolfing down that bit of food

"What's brought you to such a pass—a place like this, starvation? I thought Vic-

place like this, starvation? I thought victor Jermin—"

"Jermin washed his hands of me, for bungling that night the copper got you. Seems like I bungle everything. I've had a job or two since then. Lost them all. I'm no good. I can't do anything right. I was never taught to do anything. For the last two days I've had nothing to eat. Tonight I was desperate and—now I am a thief."

HE started to open her purse. "I've only a few dollars between me and the streets, too. But I can spare—"
"No." He spoke sharply. "I haven't gotten that low yet. I may be an addle-pated incompetent, as one of my temporary bosses informed me in no uncertain terms; I may be a cad, as you are in position to I may be a cad, as you are in position to testify; I may be starving and tomorrow, when my rent's up, I'll be thrown out of even this hole, but—I can't take your money I—" money.

He broke off as steps sounded in the hallway. Then there was a knock upon the door. He stood biting his lips, his eyes darting from side to side as a trapped animal's eyes might dart, seeking

a way of escape.

"It's the police, no doubt, looking for me," he whispered. "Come. You mustn't be found here or they'll take you, too."

He whipped off the soiled coverlet from

He whipped off the soiled coverlet from the bed, snatched the sheet that lay beneath it, knotted their ends together and beckoned her to the window.

"Hang on to this—tight," he said, thrusting one end of the improvised rope into her hands. "Let yourself over the edge slowly, carefully. I'll play out the thing and let you down gradually. Once you're on the ground—run like hell."

The knocking upon the door was re-

The knocking upon the door was resumed. "Hurry," said Herbie and gave her a little push. "They'll probably batter the door in next. I'll answer them now, so they won't send someone around to watch under here." He faced the door. "Hello. I'll be there in just a minute," he called.

Hea.
Then he turned back to the window and elbed her over the edge. "All right?" helped her over the edge.

he asked.
"Yes," she gasped and felt herself being

lowered away.

Then there was a sharp jerk upon the improvised rope, she glanced fearfully upward to see the knot that held sheet and

Bradley-Amplifier

Resistance-Coupled

PERFECT AUDIO AMPLIFIER

coverlet together come apart, caught a glimpse of Herbie Coles' horrified face in the window, felt herself falling, landed with a thud and unconsciousness blotted out everything.

Lois came to, she did not know how much later, to find herself in a cool, white bed, with a plainly recognizable nurse and a bewhiskered individual standing beside

her.
"I'm in a hospital?" she asked faintly. the nurse replied, "and this is the doctor.'

"Am I hurt badly?"

"Oh, no." It was the doctor who spoke now. "Your leg's broken, that's all. You'll be out again in two or three weeks."

He turned to the nurse. "Give her a hypodermic and let her go to sleep," he ordered and started out of the room. Beyond the door she heard him speaking again: "She's alright now. Conscious and not in any pain. No, you can't see her. Tomorrow, perhaps, but not tonight."

In the next and final chapter you will see what destiny brings to the Goody Goody Girl of Paradise. Will she marry, and

# PEOPLE VOICE OPINIONS

not publish them, began to write in praising one or both stations highly. Other readers, favoring the criticisms, sent in new complaints against Shenandoah.

"Please do not send me any more of your literature as I would not subscribe for the Radio Digest under any consideration. The majority of the American public are not in sympathy with your ideas and your way of writing of such fine stations as KFNF and KMA. KTNT is a fine station and the owner, Norman Baker, a wonderful speaker and one who is doing a great deal for the Americans who love their country."—B. K. M., Webster, Ia. ster, Ia.

very poor in selectivity, as KFNF and KMA are very easily tuned out with my machine. . . Listen to some of these Shenandoah talks, Brother, and it will do you good. If you can't tune them out, shorten your aerial or fix your machine."

—C.P.D. St. Paul Minn. -C. P. D., St. Paul, Minn.

"KFNF Sells to Unsuspecting Farmers"
"KFNF, Shenandoah, persists in using the air from seven a. m. until midnight (dividing time with KMA) on a prominent wave, selling dress goods, shoes, batteries, automobile tires and clover seed to un-suspecting farmers who hear his prayers, then remit their checks for merchandise to him, forgetting all about their local retail establishments who have millions retail establishments who have millions invested and often carry the farmer on credit. These farmers could often do better by reading their mail order catalogues."—A. B. L., Council Bluffs, Ia. "As regards the two Shenandoah stations, the trouble is mostly their long schedules of nothing but 'hot air.' We appreciate your efforts in behalf of better things."—E. O., Parkersburg, Ia. "KMA and KTNT interfere seriously with WJZ, New York, and the two stations should certainly be put on a different wave length."—R. J., Kansas City, Mo. "Neutral" Letter to Henry Field

"Neutral" Letter to Henry Field

The following is excerpted from a letter from Dalhart, Texas, to Mr. Field, a copy of which was sent Radio Digest for publication:

"Tadmire your stand on prohibition . . . enjoy your religious services . . , but deplore the fact that you jumped from the wave length originally assigned you to one which causes serious interference down here (Dalhart, Texas) with KFI. Los Angeles, which was on the air long before your station was put into service. KFI has consistently furnished splendid programs ever since it started . . I also deplore the language used by some of your critics in a recent issue of Radio Digest, and a copy of this letter is going to Radio Digest as a protest against that "I admire your stand on prohibition to Radio Digest as a protest against that method of criticism . . . I do not believe you had the moral right to leave your originally assigned wave length when by so doing, you impaired the splendid service being represented. ice being rendered by broadcasting sta-tions that were on the air before you

Munk-You

for your Program

Heard About 5. P. M. on 1/10. 1/1926
Remarks Orogram Clear

Empress the quartette

The world appreciate hearing Costs of

Quartery or Humorisque

CHESTER A. WHILER, 640 E. 47th St. N. Portle

and FREE LOG Extra

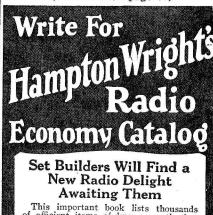
Applause Cards
Your Name & Address
on each Card FREE

were . . . You referred to your critics as a 'small but noisy minority' in your remarks this morning, and I hope this is true of those who are guilty of offensive criticism; but I am sure that the majority of listeners who are bothered by inter-ference from your station, sincerely feel that you made a mistake when you changed to your present wave length."— A. C. J., Dalhart, Texas.

For Shenandoah, but Against Selling
"I think the Shenandoah stations send
out very good programs, just as good as
WJZ. My complaint is that WJZ is messing up KFNF and KMA. . . I do not
think that it is a good policy, however, to
advertise directly over the Radio, as music
and sones are more enjoyed then the price and songs are more enjoyed than the price

and songs are more enjoyed than the price of tires, Radios, seeds, plants etc."—A. E. A., Fullerton, N. D.
"Those who listen to KMA and KFNF help feed the world. Some of those stiff necks who haven't energy to feed themselves, let them have their highbrow stuff after the backbone of our country has gone to bed."—C. H. W., Fulton, Ark.
"We like the Henry Field station and KMA best of all the stations on the air.

We don't get much interference only at (Continued on page 30)



This important book lists thousands of efficient items of known worth that will be a keen delight to every radio fan. To be without this book is to not have a great aid in radio set building.

SPECIFY CATALOG NO. C8

Hampton Wright P.O. Box 181 Indianapolis, Ind.



# New One Dial Radio

NOW! Westingale offers the last word in Radio. One Dial control—lowest factory prices—30 Days' Trial—Money Back Guarantee. Why not have the NEWEST Radio? Why pay high prices? Why take chances when you can put a New!927 WESTINGALE in your home for 30 Days' Trial on the absolute guarantee that if you don't find it the biggest and best value you have ever seen—You Don't Have to Keep It.

Westingale 5 tube sets—One or Two-Dial Models are most beautiful and powerful sets made—and easiest to operate. Music, Sports—market reports from Coast to Coast on loud speaker. Newest two-tone period style cabinets with Renaissance design on front panel embossed in dull gold.

5 Tube-2 Dial\$47.00 5 Tube-1 Dial 57.00

Agents-Dealers own Radio
Get demonr set and make
week easy.
r spare time,
scount on first
aced in each

Unbeatable for appearance, performance or price. Don't buy any radio until you send for our FREE 1927 Catalog which pictures and describes these two last minute models, and get our liberal 30 Days' Trial Offer.

Westingale Electric Co.,

1751 Belmont Ave., Chicago

# Yale GROUND HOG Perfect DOUBLES DISTANCE NO

Marve.ous newly-invented ground gives 100% improved reception. Doubles power and distance. Stops leakage. Reduces static. Stops jangling even in midsummer. Results never before equalled, users say. Satisfaction guaranteed.

before equalled, users say. Satisfaction guaranteed.
Proven absolutely essential to clear, powerful distance reception. Draws and holds moisture indefinitely. Highly sensitive to adio energy. SEND NO MONEY—To introduce offer to those who act at once, regular \$5.00 size for only \$2.00. Send name today and pay \$2.00 plus 17c postage on delivery. Or send only \$2.00 with order and save postage. FREE—Full description of Ground FAPE—Full description of Ground Hog and amazing special low priced battery offer on request—write today. Yale Specialty Supply Co.

(Continued from page 3)

sympathy with the letters, else it would

To bring the discussion to a head, Radio Digest, without taking sides, is herewith presenting excerpts from many of the best letters on the Shenandoah issue. Needless to say, the arguments could probably go on forever without coming to a conclusion.

For KFNF, KMA and KTNT

ster, Ia.

"Leave KMA on the same wave length,
461. If you do anything, change some of
those Chicago stations. They give us more
interference than any other stations on
the air."—R. W., Arnold, Kans.

"The 'Brickbat for Shenandoah' almost
makes me laugh. J. P. must have a Radio

ARTER

Parts as usual—used in

B-T Power Six

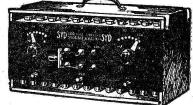
as in all other popular circuits

Any dealer can show you why.

In Canada: Carter Radio Co., Limited, Toronto

ARTER RADIO CO. **CHICAGO** B. CO

FE LONG



100 VOLTS Complete Charger. \$15.50
145 VOLTS With a Complete Charger. \$21.50

Manufactured and Sold by

SYD STORAGE "B" BATTERY CO.
Dant S 1450/4 South Wabash Ave Chicago Dept S, 1452½ South Wabash Ave., Chicago Opposite Coliseum Calumet 4911 Open till 8 P. M. Sunday Till 2 P. M. Mail Orders Filled

Lowest EriceS

TO INTRODUCE these individual applause cards we cut our regular price right in two and include a free log on first order for limited time only. Postcard backs, Quality cards and printing. Special radio design. Stations gladly put on numbers you request. Our appeal individual cards get immediate ATTENTION. Applaud your favorites. Artist and stations request and appreciate applause cards. All The Rage.

PREPIOG historical introductory half price for 100 cards, \$1.45:200, \$1.95;300, \$2.45;500, \$3.45. Money refunded if not delighted. Tust pay postman when

\$1.45;200, \$1.95;300, \$2.45;500, \$3.45. Money refinited if not delighted Send No Money

Just pay postman when you get cards and FREE

log. Prepaid if pay with order. Write today—NOW—while introductory ofer lasts. Postal will do; but write at once. RADIO PRINTERS, Dept. 8911A, MARENGO, ILL.

LR-4 KITS
NOW READY FOR DELIVERY
Madison Multi-Chokes, Cockaday LC-27,
Hammarfund-Roberts, Alden Truphonic,
AmerTran Power Pack, Ultimax, Infradyne,
Benjamin Controlladyne Kits in stock.

JOBBERS—DEALERS
PROFESSIONAL SET BUILDERS
Before buying, get our quotations on our

Before buying, get our quotations on our GUARANTEED KITS. 3-Hour Shipping

1927 BUYING GUIDE A few copies left for Dealers and Professional Set Builders. Send for yours today.

Address Dept. R.D.
We are the exclusive direct representatives of the Committee of 21 Manufacturers.
ALLEN-ROGERS Incorporated
"Kit Headquarters"

118 East 28th St., New York, N. Y.

Allen-Rogers

Incorpor ate dKit Headquarters 118 East 284 St. New York NY

A&B Battery \$2 Charger ONLY SATISFACTION GUARANTEED

Allen-Bradley Co.

Electric Controlling Apparatus

290 Greenfield Avenue Milwaukee, Wis.



Charges any type of storage A or B battery, using a few cents worth of ordinary house current, either alternating or direct. Cannot injure battery. Complete directions enclosed. Anyone can operate. No expensive "extras" to rections enclosed.

expensive "extras" to buy.

Why pay \$10.00 to \$15.00 for a charger when you can get this splendid GUAR-ANTEED R.B. Charger by mailing us two dollars (bills, money-order, check or stamps) plus ten cents in stamps or coin to pay mailing costs. Charger will be sent postpaid. If not satisfied return within five days and we will refund your money. Order at once—TODAY.

R. B. SPECIALTY COMPANY

308 East Third Street CINCINNATI, OHIO

# HOW TO FIX SETS FOR BEST RESULTS

# By "King Milo" Gurney

Part II.

The tuning of a Radio appears to be either a lost art or one which has not been mastered by many operators. What not to do rather than what to do, appears as pertinent to the subject. I shall therefore describe the method I would use for the tuning of a receiver and as the major portion of sets up to this season comprise three dials, this type shall be used as an example.

After plugging in the loud speaker and lighting the tubes, tune in a nearby sta-tion using any method which may suit

your fancy. Then proceed as follows:
You may or may not know which one
of the little knobs regulate the detector
tube. If you do, with the station still tuned in, turn this control knob to the left as far as it will go without decreasing the signal strength. Once you have determined this point, mark it and promise that forever after it will not be moved from this position. Why? Because this is the this position. Why? Because this is the point where the detector tube operates best. If your receiver fails to function satisfactorily at a later date without readjusting this control knob, you may rest assured that either your A battery needs recharging, your B battery needs replacing or the detector tube requires renewal. renewal.

The next step—with the station still tuned in—is in a like manner that of ad--with the station still tuned in—is in a like manner that of adjusting the knob which controls the tubes preceding the detector. Again you may not know what knob controls those tubes but this can readily be determined if you will consult the direction booklet which came with the receiver. We still have another adjustment to make. It concerns the knob which controls the remaining tubes which are known as the "output" or "audio."

Very often one will find that a decided

Very often one will find that a decided improvement in quality will be secured by adjusting each of the control knobs mentioned, and it is most important that once they are adjusted, that they be left

Readjusting these knobs just because a station doesn't come in to suit you is as dangerous as the continued tinkering with the carburetor of your car. Leave them alone, Neighbor. Fooling with them merely scrambles your results.

Next in line, if your antenna system is longer than 75 feet, you have a fine job of antenna shortening next spring. Not now, it's too cold.

# How to "Twist" Dials

Now detune the set, starting with the three dials at zero and we will see if we cannot tune in again the station we were just hearing—with much less effort.

Set the center dial at 50. This applies irrespective of the station you desire to receive. The first and third dials should now be slowly rotated through the scale until you hear a whistle. This whistling will vary from a high to a low pitch. With the whistle sounding carefully turn the the whistle sounding, carefully turn the dial furthest to your right, a few degrees both to the right and left. In doing this it will be noticed that the whistle at some setting of the third dial will arrive at a low pitch. Once you have reached this point, forget any further tuning of this

Repeat with the first or left dial.

Your next procedure is that of adjustrour next procedure is that of adjusting the middle or second dial which will be found as very closely approximating the setting of the third. There will now be music in the air. In general, a slight further adjustment of the first dial will be all that is required.

There you are, Brother! This method



Lasts Inachmetry—Pays for fisety

Dependable, Quiet"B" power, clear without "hum."

Economy you have never before thought possible.

Convenience. Outstanding performance, Recharged

or almost nothing. Solid rubber case insures against
leakage or acid. Extra heavy glass jars. Heavy rugged plates. Approved and listed as standard by Pop.

Radio Laboratories, Pop. Sci. Inst. Standards, Radio News Lab.,

Lefax, Inc., and other Hadio authorities.

Extra Offer: 4 Batteries in series (96 Volts) \$10.50.

SEND NO MONEY! wanted and we will ship same
day order is received. Pay expressman after examining batteries, 6

per cent discount for cash with order. Send your order today—NOW!

WORLD BATTERY COMPANY

1219 So. Wabash Ave. Dept. 76 Chicago, Ill.

Makers of the Famous World Radio "4" Storage Battery

Prices: 6-ools, 100 Amp. \$15.50; 120 Amp. \$15.50; 140 Amp. \$15.50;

All equipped with Solid Rubber Case.

World Stronge Battery Station, WSBC, Chicago, Always something interesting.

naturally does not hold for each type of receiver, but will be found effective eight times out of ten. It at least has the advantage of preventing your doing your darndest to mess up the air.

Why Tune This Way?
Many may wonder why I suggest leaving the middle or second dial at fifty while tuning the other two. Well, neighbor, you shall know. In truth the second or center dial could possibly as well be left at zero. If the antenna, with its associated coil which is tuned with a condenser, is tuned to a station, the wave length to which it is tuned will dominate the second coil sufficiently to pass through it as though it were not tuned at all. Therefore with the exception of delicately balanced receivers, the tuning of the second dial may be left to the last.

The day is not distant when manufac-

turers of Radio receivers will install automatic filament controls for the regulation of each tube in one's receiver. When this day arrives—a heap of poor recep-tion, interference complaints and what not will disappear, because your mania for twisting dials will then have been denied you.

Remember, patience is just as great a virtue in tuning as in other enterprises. If you don't like a station, tune it out. If you can't, learn which one of your neighbors can, and take his good advice.

# SHE IS CHILD PRODIGY

(Continued from page 5)

carries on a conversation with her play carries on a conversation with her playmates and elders with precise English and a vocabulary that is little less than astounding. Recently she passed some screen tests for one of the largest American producers and was pronounced a "find." She has a vivid imagination. The director tells her the situation and she goes through the "business" with the fidelity of reality.

Called upon to entertain. Phyllis evolves

Called upon to entertain, Phyllis evolves her own presentation. She has been introduced to several Radio audiences in troduced to several Radio audiences in Atlantic City and New York. For such occasions she generally sings. If she does not remember the right word she substitutes another that serves just as well. Psychologists have taken a keen interest in this unusual little person. She is rated as a fourteen-year-old. Her mother and her father are both of cultured families, and Phyllis seems to have tured families, and Phyllis seems to have inherited the best of the two races.



# FROST-RADIO

SUPER-VARIABLE RESISTANCES Are Specified in the

1927 DE LUXE Super

HERBERT H. FROST, INC.

160 North La Salle Street
CHICAGO Lo Los Angeles

Herbert H. Frost, Inc. 160 North La Salle Street, Chicago, Illinois Please send me free of charge your booklet de-scribing and illustrating your new Super Variable High Resistance Unit, as advertised in Radio Digest.

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

# KHJ CHILDREN'S HOUR

(Continued from page 5)

these three well-known artists have appeared for the past several years that they were recently compiled into book form beautifully illustrated and met with great popularity among the admiring friends of Radioland.

Queen Titania Elflike
Queen Titania, whose sweet voice has carried many a youngster into the realm of fairy castles and fairy folks, is herself a most elflike little lady to meet, with her fair fragile beauty and head of blonde curls.

Another attraction of the children's hour is the impromptu talk between Uncle John and little Richard Headrick whose photograph accompanies this story. The picture shown here is reproduced from a beautiful oil painting which hangs in the broadcasting studio as the gift of appre-ciation from an artist friend of Radioland.

Nor must we forget the sweet contralto singer of beautiful lullabies and children's songs, Lenore Killian, known as the Lullaby Girl.

Even Dogs Have Hour

Then, too, little boys who are lovers of dogs also come in for their share of attention. For there is the nightly interesting talk by H. M. Robertson, the dog man or "dog fancier," as he is called, who tells the boys and girls about the latest style in canines and how to feed and

The lessons in history by the Radio Historian, Professor Silvester Hertzog, have likewise become a feature of the children's hour which is conducted daily from 6:30 to 8 P. M. Pacific time.

# Again Specified

for Perfect
Filament Control 4 AMPERITES are specified in the ST. JAMES SUPERHETERODYNE described in this issue

Radiall Company Dept. R.D.-9, 50 Franklin Street, New York City Dealers MPERITE

The "SELF-ADJUSTING" Rheostat

KHJ is the only broadcasting station in Los Angeles which has inaugurated with such success this pleasant custom and thousands of little ones in the course of a year make pilgrimages to the Radio home of Uncle John and KHJ on the top floor of the big Times Building to pay their respects, as evidence of sincere appreciation.

Dials which will not hold their settings but turn of their own accord, may be conditioned by glueing felt on their rear surfaces. The friction of the felt against the panel prevents the dial from slipping.



To introduce our new 64 page automatic loose leaf Log and Data Book into more communities, for a limitime, we make the special free offer below to 1 person in each neighborhood.

This log is truly revisable and can be kept up to date. 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 in a moment. Permanently accurate.

Log pages contain 468 stations, 4 dial settlings, remarks, etc., Chock full of information absolutely essential to radio enjoyment, Tuning Susgesstions. Station lists numerical by wave lengths—alphabetical full of information absolutely essential to radio enjoyment, Tuning Susgesstions. Station lists numerical by wave lengths—alphabetical plagram and description for ideal aerial. Trouble prevention and aids. Care of batteries, etc., etc. Chart showing dial settling for each station included FREE. Beautiful flexible cover (gold letters). So convenient, You'n and your children will enjoy it. Doubles radio seach station included FREE. Beautiful flexible cover (gold letters).

# Send No Money—See Coupon

Radio Printers, Dept. 9911S

Marengo, Illinois
Send 64 page Log Book absolutely FREE. I will pay postman \$1 for revision service and few cents postal charges on book after it be sole judge. If \$1 bill or check is enclosed, postal charges will be prepaid.

City......State.....Send Coupon NOW—while offer lasts.



# Karas Orthometric Variable Condensers

.0005 Mfd. Price, \$7.00 were chosen for the new, powerful 1927 DE LUXE 8-Tube Super because they have the lowest losses of any condensers made—have absolutely straight frequency line characteristics—have no measurable resistance—and because they are the finest variable condensers on the market. Two 0005 mfd. Karas Orthometric Variable Condensers are specified in the list of DE LUXE parts. To insure best results be certain to use these marvelous condensers in building your super. Karas Orthometrics separate ALL adjoining wave-lengths by equal divisions on the dial. There is no crowding or bunching of stations. This results from the scientific eccentric form and position of Karas Orthometric rotor and stator plates.

tions. This results from the scientific eccentric form and position of and stator plates.

Karas Orthomethics are as finely made as a high grade watch. We use only the finest quality brass throughout in making these condensers. Plates and frame are die stamped and braced so as to give permanent, unvarying alignment. All stator and rotor plates are soldered at every point of contact. Body capacity effect is eliminated by grounded rotor plates and frame. Cone bearings give wonderfully smooth operation, and hard rubber dielectrics eliminate all absorption losses. To get BEST results from your DE LUXE Super be sure to use Karas Orthometric Variable Condensers. Your dealer has them or can get them for you. Price, .0005 mfd. capacity, each, \$7.00.



### 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. 1071-S Association Bldg. CHICAGO

# Karas Micrometric Vernier Dials

were found by the DE LUXE designers to give most remarkable results in close tuning, so they selected them for this great super. The 63 to 1 vernier ratio (1-1,000th of an inch precision) enables super owners to tune as close as a split hair—bring in stations never before heard—achieve results utterly impossible with any other dial made.

made.

These remarkable dials are made entirely of Bakelite, with the exception of gearing. They have a special non-slip, antibacklash gear train that we developed after a year's research. Micrometrics cannot slip, nor can any backlash ever develop. You'll like them—you'll recommend them to your super owning friends—when once you experience their tremendous value for close tuning. You can get Karas Micrometrics at your dealers for \$3.50 each. Order two for your DE LUXE Super today.

- 8	KARAS ELECTRIC CO.,
	1071-S Association Building, Chicago
	Please send me 2 Karas .0005 mfd. Orthometric Variable Condensers, price \$7.00 each, and 2 Karas Micrometric
	Vernier Dials, price \$3.50 each. I agree to pay postman \$21.00, plus postage, upon delivery. It is understood that if I am not entirely satisfied within 30 days you will refund purchase price upon return of these parts to you.
1	Name
-	Address
١	City

# PEOPLE VOICE OPINIONS

(Continued from page 28)

night, and then we hook onto our inside aerial and cut out those high-powered stations. They don't please farmers anyhow."
—W. N., Greentop, Mo.

### KFNF Asks for Opinion! Here It Is

you call that bettering Radio?"—A. E. W., Iowa Falls, Ia.

Who Won't Print This?

"There's room on the air for someone besides those high-powered stations of the east, and all they think about is jazz and opera singers. . . . I know you won't print this for you are afraid. It's the truth that hurts. I say three cheers for Henry Field and all of our other good western and middle-western stations."—G. T., Denison, Ia.

and middle-western stations."—G. T., Denison, Ia.

'Their reverent morning worship at KFNF enables many to start the day right... Ours is supposedly a free country where we enjoy freedom of worship and speech. Let us have freedom of the air."—I. E. M., Edina, Mo.

"They (KMA and KFNF) give us many things we like and would not get from stations further east... We like the friendly talks, good old songs, readings, etc., that our western stations give us.

# CLASSIFIED **ADVERTISEMENTS**

# DOGS

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

# HELP WANTED

Earn \$25 weekly, spare time, writing for newspapers, magazines. Experience un-necessary. Details FREE. Press Syndi-cate, 1269, St. Louis, Mo.

We pay \$48 a week, furnish auto and expenses to introduce our Soap and Washing Powder. BUSS-BEACH COMPANY, Dept. A-186; Chippewa Falls, Wis.

# PATENT ATTORNEYS

PATENT ATTORNEYS

PATENTS. Booklet free. Highest references. Best results. WATSON E. COLEMAN, Patent Lawyer, 724 Ninth St., N. W., 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.

Headphones and Loud speakers repaired. Sam T. Sherrill, Smithville, Texas.

1,000-mile crystal hookup. Prepaid, \$1.00. Distance, 224 Conger St., Waterloo, Iowa.

Radio Consoles. Booklet sent upon application. J. A. Kelly Co., Clinton, Iowa.

For Sale: Sacrifice standard five tube receiver, \$20.00. Free trial. Write. F. Meek, Rockbridge, Ill.

Chokes and transformers for eliminators, \$1.00 up. Write for list. Radio Parts Sales Co., Box 24-A, Orange, N. J.

Ninety-Ampere Hour Storage Battery, \$7.77. Guaranteed one year. Chickasaw Battery Co., P. O. Box 2551, Memphis,

Prove your reception by the most practical and convenient method: Proof of Reception Cards. Contains spaces for complete reception record, dial settings and signature of announcer. Handy size, 3x5 inches. Send 25 cents for sample package. Radio, 2617 Hollywood Ave, Chicago.

. . . Is changing to another wave any worse than adopting superpower by eastern stations, when these stations were not supposed to go above 5,000 watts?"—W. J. L., Freeman, Mo.

Space Frohibits Further Views
Light of space prohibits ruphicking more

Space Prohibits Further Views
Lack of space prohibits publishing more
of the interesting views for and against
one or both of the Shenandoah stations,
KMA and KFNF. Radio Digest would
have liked to have published all of these,
especially those letters supporting Shenandoah, for evidently many listeners and
readers have obtained the idea that "The
Reader's View" column of this publication
reflects the sentiments and policies of the
publication.

**NEW INFRADYNE KIT** radio sets, at prices that save you money. Write for your copy now, it's free. Dept. 6, THE HARCO CO., 1255 S. Wabash Ave., Chicago, Ill.





Dealers, Agents, Set Builders—get our big 1927 Catalog—225 nationally advertised lines, Lowest prices in America! Largest, most complete stock, Radio's latest develop-ments. It's FREE—send for your copy now. AMERICAN AUTO & RADIO MFG. CO., Inc. 1444-B McGeo Street, Kansas City, Mo.



# Amazing New 5-Tube Radio At Very Small Cost Improves Reception 100%

New York City, N. Y., Jan. 15.—Lieut. Sterling G. Sears of the U. S. Naval Reserves has perfected a marvelous new 5-tube Radio that improves average home reception about 100%. Due to special features, this Radio is extraordinarily selective and powerful, easy to operate, very economical on Battery consumption—and costs only about one-third of the usual price of 5-tube machines. Perfect satisfaction absolutely guaranteed, and a 10-day Free Trial offered to all who wish to try it. Full information together with reports of tests made by experts will be sent FREE to all who write at once to Geo. W. Naylor, Jr., Dept. 157K, 161 Chambers St., New York City. Write today—no obligation!

# THE PERFECT POTENTIOMETER

Uses graphite disc resistors which are

noiseless and not affected by atmospheric conditions. Metalparts are nickel plated. One hole mounting. Finish and knob match Bradleystat. Made in 200 and 400 ohm ratings.

Alen-Bradley Co.

Electric Controlling Apparatus
290 Greenfield Avenue Milwaukee, Wis. noiseless and not ■affected by atmosplated. One hole mounting. Finish and knob match Bradleystat. Made in 200 and 400 ohm ratings.



This is not true. The column is edited, but letters from readers seeming to voice the opinions of the majority are given

space, which is always at a premium.

For the policy of the paper—read the editorial column. "The Reader's View" is, as the title indicates, purely the sentiment of the reader.

of the reader.

Letters supporting and favoring the Shenandoah broadcasters, but which were more or less like those appearing above and therefore were not printed, came from Eureka Springs, Ark.; Churchan, Clarion, Decorah and Griswold, Ia.; Abilene, Antelope and Humboldt, Kans.; Eggleston, Minn.; Worth, Mo.; Falls City, Omaha, Ravenna and Sargent, Nebr.

Let Us Show You How to Get a Complete

# 4, 5 or 6 TUBE KIT FREE

Send Postal For Particulars

B. C. L. RADIO SERVICE CO., Inc. 221-D Fulton St., N. Y. City

# Radio Reception MELCH-INF **Improved** 10% to 50%\$ 100 for ONLY Send for it TODAY

MONEY BACK GUARANTEE

Easily installed in place of your present ground. No Radio Set complete without it. Indorsed by Radio listeners everywhere.

YOU TAKE NO RISK-ACT NOW PEEDIN RUBBER & RADIO CO. SHERIDAN, WYOMING

# Do They Like "Radex?"

"It has proved invaluable; have nearly worn it out, but am still tuning in stations by it."—Mrs. S. M. Nuttall, Prospect, Ky.
"Unquestionably the best tuning device published More convenient to handle, to record stations, to find its contents than any other I have seen and I have seen a few,"—John Milward, Lexington, Ky.
"Sincerely believe RADEX best logging method I have ever used or seen. I am fortunate to own a book so well arranged."—A. B. Cameron, Bucyrus, Ohio.
"I have used iour systems of logging, but your wonderful little RADEX is far superior to any of them. I've located many elusive stations by using RADEX."—Fred'k J. Davenport, Detroit, Mich.
"It is the greatest help I ever had in locating stations, In fact, most of my stations have been logged directly from RADEX."—N. E. Naldrett, Middleton, Mich.
"With RADEX I get more stations."—Ethel Simmons, Perrysburg, Ohio.
"Alter using RADEX two seasons, I find it to be the most complete radio index I have ever seen."—H. C. Dukes, Memphis, Tenn.
SEND 25c, coin or U. S. stamps, and make tuning a real pleasure,
The Radex Press, P. O. Box 143-CX, Cleveland, Ohio



WORLD BAFFERY COMPANY

MONEY-BACK GUARANTEE more worry with "B" Batteries! Hook or "B" Battery Elminator and forge roubles forever. This wonderful new means better reception, sharper to you more real pleasure from rows or well more real pleasure from rows.



# Your New Radio Set

Get Your Money's Worth of Local and Distant Programs Beldenomel Aerial



DISTANCE! That is the real test of your new set.

Butdon't forget that you cannot get the finest results unless you have a good aerial. Many good sets are permanently crippled because set owners mistakenly believe that corroded, soot-covered aerials are "good enough."

A corroded aerial reduces the volume and distance of even the finest radio set. That is why a Beldenamel Aerial should always be used. Each strand of a Beldenamel Aerial is coated with weatherproof, fume-proof baked enamel. Even after years of service, a Beldenamel Aerial is still as good as new. It cannot corrode. It always assures maximum distance and greatest volume.

A Belden Superadio Antenna Kit includes a Beldenamel Aerial and in addition sufficient material to build an efficient aerial and ground that can be relied upon to remain permanently efficient.

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



Ask your nearest radio dealer for a Beldenamel Fused Radio Battery Cord



"I give you all this apparatus so you can learn quickly at home the Practical Way

FREE OF EXTRA COST

You Get

All of This

All instruments shown here and others sent to all my students free of

extra cost under short time special offer. Clip coupon now—find out all about this big unequalled offer while you still have

time to take advantage of it. This training is intensely practical—these instruments help you do the practical work. You learn work-

If you're earning a penny less than \$50 a week, clip coupon now. Send for AMAZING FREE BOOK, "Rich Rewards in Radio." Why go along at \$25 or \$35 or \$45 a week, when you could earn \$50 to \$250 in the same six days, as a Radio Expert? Hundreds of N. R. I. trained men are doing it—why can't you?

Earn \$50 to \$250 a Week—Radio Experts in Big Demand

Radio needs trained men. Get into this new livewire profession of quick success. It's the trained men, the Radio Expert, who gets the big jobs of this profession—paying \$75, \$100, \$200 a week and up. Every day N. R. I. trained men are taking good places in the Radio field—men just like you—their only advantage is TRAINING. You can prepare just as they did by new practical methods. Our tested clear training makes it easy for you. Big Free Book contains all the proof.

You Learn Quickly In Spare Time

So sure am I that I can train you successfully for a better future in this new Big-Pay profession that I guarantee your training with a money-back bond. Lack of experience or education won't hold you back—common schooling all you need to start. You can stay home, hold your job, and learn quickly and pleasantly in your spare time. My practical, helpful methods enable you to start RIGHT AWAY toward one of the bigger Radio jobs paying \$50 to \$250 a week. No delay, no losing time from work—no scrimping or scraping to get your training.



Most amazing book on Radio ever written—full of facts and pictures—tells all about the great new Radio field, how we prepare you and help you start. You can do what others have done — GET THIS BOOK. Send coupon today—no obligation.



Operates WMAQ

"Accepted a position with the
Chicago Daily News Station
WMAQ. MY INCOME PRACTICALLY DOUBLED. I handle all
consultation, also do operating.
Your course taught me the theoretical and practical knowledge
that makes my work easy."
Keith Kimball, Station WMAQ,
Chicago, Ill.



Gets Big Job

"Just been made Sales Manager
of this Radio firm—received a
very good increase in pay. Up to
present have been getting salary
which in 3 months enabled me to
purchase a new car." R. Jones,
Bay City, Michigan.

RICH REWARDS in RADIO

J. E. Smith. President

National Radio Institute Dept. AA-96, Washington, D. C.



\$70 in one Day for T.M. Wilcox

"In business for myself—RECENTLY MADE \$70 in ONE DAY. I was an electrician of rich experience, occupying a splendid position as telephone superintendent when I enrolled with you, believing it would open up greater opportunities. Estimate Radio worth tens of thousands of dollars to me in next few years." T. M. Wilcox, Belle Island, Newfoundland.

World Famous Training That "Pays for Itself"

manship and get add-

ed confidence in your

My Radio course World-Famous as the training that "pays for itself."
Make more money QUICK when you take up this practical course. Work on millions of antennae, receiving sets, offers you big chance to make spare time cash while you're learning. I'll show you how. My students don't wait a year to increase their income—they report QUICK INCREASES as a result of this course—often two or three weeks after starting. Howard Luce, Friedens, Pa., made \$320 in 7 weeks during spare time. D. H. Suitt, Newport, Ark., writes. "While taking the course I earned in spare time work about \$900." These records not unusual—these men a few of hundreds.

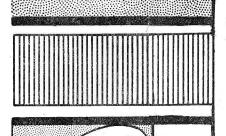
Your Satisfaction Guaranteed

We who know the results this practical tested training gets; stand behind it all the way with a signed guarantee bond that we give you when you enroll. Get started today! It's your big chance for one of the bigger Radio jobs—mail coupon NOW for my Big FREE BOOK and proof! No obligation.

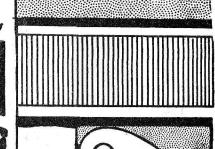
J. E. SMITH, President, NATIONAL RADIO INSTITUTE Dept. AA-96, Washington, D. C.

Originators of Radio Home-Study Training

Oldest and Largest Radio Home-Study School in the World Employment Service to All Graduates

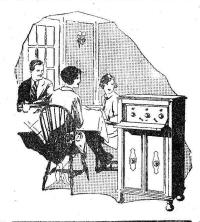


# New and Improved ERESHMAN STERPIECE





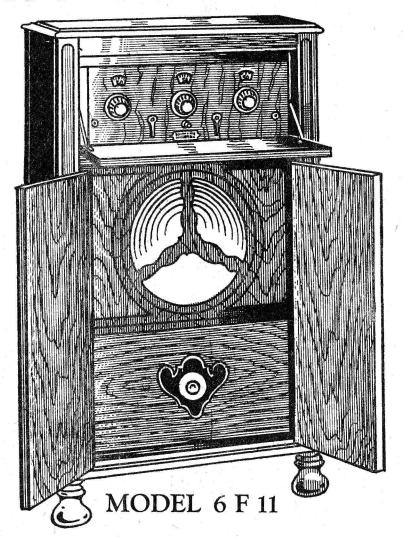
Uses C-Battery and Power Tube



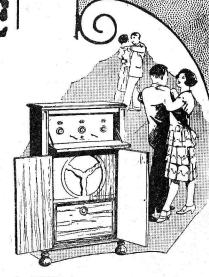
Operates by Electricty
if you prefer

This new QUALITY set is so designed to operate from your light socket by installing the new Freshman "ABC"

Power Supply.



\$11950



Shielded all metal Front and Sub-panel



# Genuine R.C. A Radiotrons

are recommended for use with Freshman Masterpiece Receivers.
A special package containing—1 UX 112 power tube, 1UX 200A detector tube and 3 UX 201A amplifying tubes—matched and tested for the set in which they are shipped, is sold by Authorized Freshman Dealers.

# Makes Life More Pleasant

—it is massive—it is beautiful—an article of furniture you will be proud to own. This "masterpiece of masterpieces" surpasses all expectations—the most perfect radio ever designed.

—takes you on mysterious journeys; miles and miles—North, South, East and West; comfort and rest in your easy chair.

—the world's finest entertainment yours—opera, dance music, concerts, lectures, sports; just take your pick.

-easy to tune with its three distinct controls;-brings in the

stations wanted day after day at the same dial points—eliminates overlapping of wave lengths which assures distinct separation of one broadcasting station from all others.

—its tone quality makes it wonderful—the large cone-speaker has been designed to exactly match the new Freshman Receiver. This special cone-speaker easily handles the full power that the new set delivers.

-make life more pleasant-with a Freshman Masterpiece Radio.

Sold on Convenient Terms by Authorized Freshman Dealer

CHAS. FRESHMAN CO., Inc., 2626 W. WASHINGTON BLVD., CHICAGO

4 World's Greatest Radio