© CI B650202 How to Make New Push Pull Resistance Coupled Amplifier; Story of WNAC; Instructions for Operating Hetduogen Set; Winding Low Loss Inductances



Vol. XII ( Copyright 1925 By Radio Digest Publishing Co.

# FADING IN NEW SET

## **MC CORMACK SONGS HELP RECORD SALES**

JAN 30 1323

### BUSINESS PICKUP ASSURED BY VICTOR COMPANY

Famous Irish Tenor Satisfied with Re-sults-Madame Bori Also Flat-tered by Response

NEW YORK.—Direct evidence that the McCormack-Bori broadcast on New Year's night caused a tremendous increase in the sales of Victor records, especially those of John McCormack, comes in the form of an announcement by the Victor Talking Machine company. While no official figures have as yet been compiled, the recording company is happy in the very encouraging results of the broadcasting experiments and will continue indefinitely with the semi-monthly concert.

of the broadcasting continue indefinitely with the monthly concert. One of the leading retail music shops here reported a large increase in the sale of records by both Victor artists. Particu-larly noticeable was the increased popu-larity of "All Alone," a McCormack record which had sold poorly since listening in became popular and until the New Year's Radio concert. (Continued on page 7)



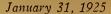
# **NON-CARRIER BROADCASTS**

## **Room for More Stations**

H. A. Brown and C. A. Keener Perfect New Transmission Sys-tem Giving Improved Radio

CHAMPAIGN, Ill. — Broadcasting without the use of a carrier wave has been accomplished at Station WRM of the University of Illinois in this city. By eliminating the carrier wave, the men responsible for the development of this system claim that all traces of fading are abolished. The non-carrier system was perfected in the university laboratories by Hugh A. (Continued on page 2)

Polly Willis, incomparable soprano KYW, Chicago, entertainer. Above, e Beshinska, soprano, who is heard great regularity from Station R, Cleveland. Right, Phyllis Haver, Sennett star, recently heard from Station WOR, Newark.





## FORTY-NINE SETS WAITING JUDGES' DECISION

## Many Manufacturers Have Requested Opportunity to Inspect Sets Sub-mitted—Winners Notified Soon

mitted-Winners Notified Soon The Gold Award Set contest is now closed-receivers of all kinds and sizes are lined up for inspection-the judges are studying diagrams and letters. Few contests of interest to the Radio fratern-ity have created the interest that did this one. Many letters, accompanied by diagrams, came in with the request for an opinion as to whether the idea was worth submitting in set form. Some of the writers were asked to re-frain from going to the expense of send-ing their sets as nothing seemed to be em-bodied in their outfits. Others were ad-vised to try for a patent on their appa-ratus before giving it to the Radio field. Still others wanted more money for divul-ging their developments and suggested a conference to settle a price. Those that had something that seemed to con-tain improvements were wired to send their sets immediately. Forty-nine Receivers on Trial Forty-nine receivers on Trial

tain improvements were wired to send their sets immediately. Forty-nine Receivers on Trial Forty-nine receivers are therefore awaiting trial. Missouri, Kansas, New Jersey, Tennessee, Virginia, Montreal, Quebec, Pennsylvania—in fact, nearly every state in the Union and province of Canada—are represented in the collection. Whether anything that will warrant the attention of Radio engineers is among the ideas submitted, remains to be seen. If, somewhere between Alaska and the Canal Zone, there is a new departure in Radio receivers by an amateur, Radio Di-gest has done its best to bring it out. There have been requests from manu-tacturers for an opportunity to inspect the sets now in. This matter now awaits decision by the owners of this publication. In all probability representatives from these concerns will be invited to a demon-stration of sets at which time all sets can be seen at once by all. It is hoped that winners can be an-nounced next week. Receivers are com-plicated, and testing them fairly, under varying conditions, takes time. Winners will, however, be notified by wire when a decision is reached.

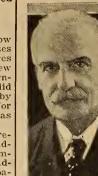
## NO FADING IN NEW SET

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same intensity of signed ceiver. It was found, for instance, in tests over a considerable distance, that about one-third the power needed for a given signal using constant current modulation was necessary for the same signal strength using the non-carrier system.

necessariy for the same same sight steaged using the non-carrier system. **Carrier Produces Interference** In the constant current system of modulation now in general use in broad-casting work, the practical limit of modu-lation is reached before the carrier wave is completely modulated, and consequent-ly a listener may pick up the carrier or the carrier may produce interference even though the program may be audible. With the non-carrier system the program may be heard if the station can be heard at all. In other words, if your receiver can reach the station, the program can be heard. heard. In this regard it may be said that the

## DR. F. H. VIZETELLY **HELPS VOCABULARY**



sible.'

"A WORD a day" is Dr. Vizetelly's idea of increasing the vocabulary of the Radiophans. Station WJZ is the proud dispatcher of this stimulating educational feature, and Dr. Vizetelly has many hundreds of thousands of days ahead of him with h is inexahustible supply of words. Another feature that Dr. Vizetelly finds very valuable as an education dis-penser is the WOR

talks on the origin of the English lan-

have been used to be the set of the length of the English language. There is only one grievance I nurse against the 25-minute talk," said Dr. Vizetelly. "Not enough time. I want to hold my audience, magnetize them. In order to do this, Fve got to this, Fve got to the time. My mail response has been very flattering, however, and I intend to continue with these talks as long as possible."

# WENDELL HALL NOW ON WAY TO LONDON

H AVANA, Cuba. — Wendell Hall, "Red Headed Music Maker," and his wife are here now on their honeymoon tour. They have just com-pleted their trip around the United States and to Hawaii, and will go to London next. The man who made "It Ain't Gonna Rain No Mo'," famous ex-tends his best wishes for the New Year to all of his many friends.

### **Detroit News Replaces Its** Luncheon Musical Program

DETROIT.—The Detroit News station, WWJ, is again broadcasting a luncheon musical program. This was dropped about a year ago, but owing to the many re-quests from the Radio audience of De-troit, it had to be placed on the schedule again.

troit, it had to be placed on the schedule again. The orchestra consists of five pleces. The News now employs three orchestras— Jean Goldkette's Victor recording orches-tra, considered as one of the leading or-chestras in the Middle West; The Detroit News orchestra, composed of members of the symphony orchestra, and the one named above. WWJ broadcasts on 516 meters.

### Burr McIntosh at WAAM

NEWARK, N. J.—Burr McIntosh, the cheerful philosopher, whose voice and splendid stories have won for him a high regard from the Radio audience, is booked for an indefinite period at the I. R. Nelson company station here. Beginning January 9 at 9 o'clock Eastern time, he was on the air for forty-five minutes. He will con-tinue to be on over WAAM every Friday evening at the same hour. tuning will be much sharper, and fading eliminated. Fading, according to the developers of the idea, can be traced directly to the carrier wave. The additional selectivity of this new type of transmission might permit a closer spacing of stations in the broad-casting band without introducing addi-tional heterodyning on account of the greater selectivity or sharpness of tuning possible with the receivers when the non-carrier system is used. However, 'no positive statement to this effect would be made by either Mr. Brown or Mr. Keener.

## CONTENTS

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## Looking Ahead

Another Series for Newcomers in Radio will start in the next issue. Edward T. Jones will start with the simpler apparatus and circuits, and take the beginner week by week to the long range, strong volume multi-tube outfits. The advice of one of the "old timers" is always worth getting, so fans, both novice and advanced should read this series carefuly.

- More Detailed Information on the Radio-Theater Controversy. With the numer-ous artists taking the stand pro and con, this little war may mean the ultimate decision as to whether or not plays may be broadcast. The English pro-ducers are now having the same trouble across the Atlantic. Next week we will give the information from both "fronts."
- The Do's and Don'ts of Home Construction are gone into in detail by W. S Stan-diford. There are so many things that the home builder can do wrong, which are hard to find later, that suggestions by Mr. Standiford should be remem-bered. The manufacturer can give you high quality parts, but the construction depends on you.
- The Knox Reflex Utilizes Plate Tuning and Reverse Feedback, which makes it one of the most selective long range "two tubers" that reflex adherents have yet known. W. H. Knox, the designer, lives in Los Angeles, where conditions are exceptionally trying, and a set that will give one "what you want when you want it" out there, is worth building.

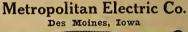




Then they standardized on **Meco** Tubes. The trouble stopped.

A radical improvement in the construction of **Meco** Tubes gives greater volume without impairing its clear, distinct re-ceptive tone.

All genuine Meco Tubes have Meco stamped on the base. Look for it. Your dealer has them in both 3 and 5 volt sizes or can get **Meco** Tubes for you from recognized radio jobbers.





22 23

finest loop ever designed finest loop ever designed Collapsible Loop Aerials. That is the reason for their remarkable efficiency. They are electrically and mechanically correct. They combine with greater selectivity—volume— and clearness of reception—a grace-ful beauty which is the result of nainstaking manufacturing. The center-tapped loop can be vired on any sets employing radio frequency amplification — particu-heterodynes requiring a center-tap. The 4-point tapped-loop—for any circuit where it is desired to vary the inductance of the loop—most super-heterodynes — neutrodyne re-ceivers where outside aerial is impractical.

## A better loop-for less money

Lincoln Loops cost less—and do more. Volume production—engin-eering efficiency—are the reasons, Fully guaranteed—sold by leading dealers.



### RADIO DIGEST-Illustrated

## NEGRO REVIVAL CAN **BE HEARD VIA WBAP**

## ENTIRE CEREMONY WILL BE BROADCAST

## Whole Scale of Human Emotions to Be Run While Awaiting Coming of Holy Ghost

Holy Ghost FT. WORTH, Texas.—Did you ever at-tend a "nigger camp-meeting?" More than likely if your home is way down in Dixie, you have witnessed one of these events in the church life of certain sects of the pic-turesque colored folk of the sunny South. Just dial WBAP, the Star-Telegram station at midnight, Central time, on Wednesday, February 4, and hear the en-tire services of the Holiness Church of God in Christ (negro), broadcast direct from the church on the outskirts of the city of Fort Worth. A short time ago, WBAP broadcast a semon from a negro church and Radio-phans who had never before heard the characteristic singing and fervent "amens" set generous applause and requested WBAP to again put the church services on the air.

sent generous applause and requested WBAP to again put the church services on the air. **Expect One Thousand Negroes Present** Worship will commence with approxi-mately one thousand negroes present, many of whom come from great distances and at great personal sacrifices. This number is expected to be greatly de-creased by 4 a. m., at which time pos-sibly only four hundred worshipers will be present, the rest having become ex-hausted and carried out, "under the power of the Spirit." The Hired Hand will forego his duties in the boiler room and will be in attend-ance as announcer. Overlooking no detail, WBAP has made provision for a second announcer to be present, as it is expected that the Hired Hand will "get religion" before many hours have elapsed. W. E. Branch will be on hand to make announcer of WBAP "falls under the power of the Spirit" and is carried out. **Defactant Entire Service** The entire ceremonials will be broad-fast. And while visual communication by Radio is not yet a possibility, listeners may hear the reverent shouting, sermons chantings, orchestra music, groanings, voriferous hand-clappings and songs of praise—outbursts of fervid worshipers in the whole scale of human emotions is frun while the coming of the Holy Ghost is awaited. His coming—or rather the feeling of His presenc—is the sign for lusty paens; songs of triumph straight from the hearts of the worshipers. Under the influence of His power, manifestations are made known by the resonant shouting the cleansed. Collections are taken up under the watchful eye of the deacons, and the accompaniment of hand-clapping."

## SHENANDOAH CREW **HEARS SHENANDOAH**

Shenandoah listening to Shenan-doah when Aviation Chief Machin-ist Walter Johnson, of the giant dirigi-ble U. S. S. Shenandoah, tunes in KFNF of this city. Mr. Johnson has written the Henry Field Seed company station from Lakehurst, N. J., naval air station that he listens in regularly to the broadcasts from Shenandoah.

## MADAME ALDA MAKES **BROADCASTING DEBUT**

Heard from WEAF on Victor Talking Machine Program

Talking Machine Program NEW YORK.—The Radio public had its introduction to another of the world's famous operatic stars, January 15, when Madame Frances Alda, prima donna of the Metropolitan opera, appeared before the microphone for the first time in her career. Madame Alda's recital, given under the auspices of the Victor Talking Machine company, was broadcast from the studio of WEAF, New York, and relayed by tele-phone lines through seven other stations, WCAP, WJAR, WFI. WDBH, WGR, WCAE and WEEI. The practice of sending reproductions of autographed photographs of the principals of the recitals to those who wrote in would be continued, it was stated, and it was announced that reproductions of Madame Alda's autographed photo would be sent upon request to the listeners in. The recital included selections by Frank La Forge, pianist; the Victor Concert or-chestra. Rosario Bourdon, conducting, and the Florentine quartet. Victor officials say letters are still com-ing into the office praising the McCor-mack-Bori broadcasting and that nearly 60,000 such communications have been re-ceived by the company and the two artists.

## WSB Organist Honored by Fan; Boy Named After Him

**Fan; Boy Named After Him** ATLANTA.—Dr. Charles A. Sheldon. Atlantic City organist, whose regular Thursday night organ recitals relayed by WSB from the First Presbyterian church are one of the Journal's most popular at-tractions, was recently accorded a unique honor by a family of his admirers. A letter from Mr. and Mrs. Carey N. Shearer, of Alapaha, Ga., tells Dr. Sheldon that they have a new Radiowl in their home and in appreciation of Dr. Sheldon Shearer. This is the first time any member out-side WSB's staff has been so honored.

B UFFALO, N. Y.—Here are a bunch of wild waves! One of those eases where they said it with "Scotch." Cases is right. Federal dry agents in Buffalo recently seized thirty-six cases of Scotch whiskey, so-labeled, at the American Express company's ware-house. It came from Newark, N. J., and was consigned under the billing of "Radio Supplies" and "Dry Goods." NOTED PRODUCER WRITES Says He Will Treat New Art of Com-munication as Useful Ally to Theater

RADIO SUPPLIES ARE

LISTED AS "SCOTCH"

High Prices Secret of Theater Failures

Boston Showman Lauds Radio and Criticises Shows

BOSTON, MASS.—"The American thea-ter will be saved, and Radio and the motion picture are working for its preser-vation." Thus speaks E. E. Clive, manager of the

vation.' Thus speaks E. E. Clive, manager of the Copley theater, at a time when managers are sitting in conclave, in despair over the meagre houses New. York successes are experiencing on tour, as well as over the great list of productions Broadway has failed\_to support this season. "Lower prices and crowded theaters; that's the answer," says Mr. Clive, "The fault is not with the people; it is with the managers. The majoriy of our pro-fessional classes cannot afford to pay \$5.50 for two seats, and the result is they stay away. (In New York the aver-age price for a good seat has been \$5 per head.) "They are blaming Radio for the poor attendance on New Year's night at the New York theaters. But why not blame the high prices, too? Radio is no menace to the theater. It is the high prices."

## Station KSAC Puts College Into 9,000 Rural Schools

Into 9,000 Kural Schools MANHATTAN, Kans.—Opening exer-cises by Radio for the 9,000 rural country schools in Kansas and a rural Radio Sun-day service for the hundreds of communi-ties without pastors are two innovations in Radio activity to be introduced by the extension service of the Kansas State Agricultural college, Sunday, February 1. An unrivalled popularity for service is the mark of distinction accorded Station KSAC, judging the barometer of public opinion as expressed by a deluge of con-gratulatory communications received since its dedication December 1.

The British Radio association has in-stituted a fellowship for the members showing during the year the greatest technical knowledge of the science of Radio.

PENN STATE THESPIANS ON AIR

<text><text><text>

JOHN GOLDEN SEES

**RADIO AS SHOW AID** 

ABOUT BROADCASTING

By John Golden

John Golden Tainy night, for instance, or for that matter, petting parties, cross-word urzylcs, the cook's night out and the crowded subways. Possibly Radio keeps a few persons away from the theater. But so also do these other things I have mentioned. If your show is not doing business and you are looking for an ex-cuse-cuss the Radio! Sees Radio as Reveal

Sees Radio as Benefit On the other hand, why should I not use Radio for the BENEFIT of the theater? In the first instance, Radio is not essen-tially a means of entertainment, but a means of communication. We must re-member that the present free broad-casting may not continue always—in all probability it will not. But Radio, con-ceived as a means of communication, is here to stay. So the theater manager, who heretofore has reached his audiences solely by the mails and by the printed page, now has another means of communi-cation. There is a reading public and a Radio public, so dramatic reviewers for the broadcasting stations (around New York, at least) will be on my first night lists in the same manner as the reviewers for the newspapers. It is my present belief that the Amer-ican theater public is much larger than even we theatrical people imagine. I think the Radio audiences will be deeply interested in the personalities of the the-ater, the news of the theater, the legends and lore of the theater and even the tech-nique of the theater and even the pays. It is the actual physical presence which will always guarantee the existence of the spoken drama. Everyone thought the motion picture, twenty years ago, meant the doo

### Coal Miners Hear Program

MINNEAPOLIS.—Two hundred twenty-five feet below the surface of the earth, coal miners at Lincolu, Ill., recently heard the Gold Medal station, Saint Paul-Minne-apolis, WCCO.



Canary, "Radio Joy," Wins Prize on Coast

## Gets Practice Listening to Artists at Station KHJ

LOS ANGELES.—Who now can gainsay the fact that Radio is educating all of us to a better appreciation of fine music? Many listeners in have appreciated the fact that "Uncle John" at KHJ occasion-ally stops a program in the middle in order to allow one or more of the trium-virate of canaries, Radio Kindness, Radio Happiness, Radio Joy, to render solos, duets and trios as only well-trained canar-ies can sing.

luets and trios as only ies can sing. Radio Joy, one of the birds, was en-tered in competition with a brilliant field at the Annual Los Angeles Roller show and received a special prize for an ex-traordinary fine exhibition of singing what is known as the "water roll."



"Wooden Shoes," given by the Penn State college Thespians, was broadcast recently by WDAR—and is scheduled to be broad-cast from five or six more éas ter n stations. The famous organization is made up entirely of men. The play may be pre-sented during Easter week at KDKA. Right, "Martha Berry" in the play is really H. A. Pisey —a male student. Below, J. E. Kennedy in a sailor hat, Dutch chorus and C. E. Megargle.

January 31, 1925

## **THEATER MANAGERS ALARMED AT RADIO**

## BLAME NEW SCIENCE FOR HURTING BOX OFFICE

## Madge Kennedy Anticipates Change in Theatricals Toward Psychological Element—Makes Radio Debut

NEW YORK.—Theatrical producers are alarmed at the position Radio has taken in the amusement field. Certain pro-ducers here blame the failures of this season on Radio, while it is a definitely ascertained fact that several good shows died on the road this year for this reason, the road refusing to accept even a Barry-more.

the road refusing to accept even a Barry-more. A leading Radio man has estimated the Radio audiences in New York city alone as more than a million. This represents very nearly the capacity attendance of the leading Broadway movie houses and theaters, and managers of these houses while refusing to comment upon the sit-uation admit that Radio does affect the box office considerably. With improvement in Radio programs, represented especially in the appearance before the microphone New Year's night of John McCormack and Lucrezia Bori from WEAF, Radio seriously threatens to encroach upon the solid position the thea-ter has held. One of those who expresses a frank oplnion in the matter is Miss Madge Kennedy, stage and screen star, who is at present co-starring with Gregory Kelly in "Badges" on Broadway. She anticipates a change in theatricals toward the psychological element. Miss Kennedy will make her Radio de-but Saturday, January 31, at 7:00 p. m., Eastern standard time, from WEAF. At that time, she will sing a group of songs, including the Vienese waltz.

## **Chickering Piano Program at WOR**

## Famous Planists Play Recitals at Newark Station—One Given Each Wednesday

NEWARK, N. J.—The deferred concert program in the "Chickering Artists Series," which is the first of a stellar group of famed musicians who will broadcast through WOR, was given Wednesday eve-ning, January 21. The series promises to develop into one of the outstanding events of broadcasting. Extensive plans are at the point of completion by the WOR management working in collaboration with the Chick-ering firm, which will provide the Radio audience with the highest grade musical talent as a regular feature of the Wednesday evening programs. The broad-casting is done from the Chickering hall studio of WOR. No definite announcement of the names

No definite announcement of the names of the participating artists has come from WOR, but a statement is made to the effect that "the quality of the<sup>®</sup> mate-rial to be sent over the air has never been excelled."

## Ft. Worth Rotary Club Is Host at Big Celebration

FT. WORTH, Texas.—Fans throughout the country heard the special Rotary club program broadcast from Station WBAP on January 6. The program in-cluded music, monologue, dialogue and entertainment typical of the popular Rotarians. Rotarians

Amon G. Carter, president and publisher of the Fort Worth Star-Telegram, was acting as chief announcer. A. C. Farmer, local manager of the Western Union, wired every Western Union Rotarian in the United States pre-viously about the program. These men in turn passed the good word along to their cities in the manner of true Rotari-ans. That many of the clubs listened in "100 per cent" was the natural result. WBAP was deluged with telegrams and messages during and following the pro-gram.

#### Movie Criticism Popular

Movie Criticism Popular NEW YORK.—Where to see the best pictures in town and what makes them worth seeing is embodied in the weekly advice to movie fans broadcast every Wednesday afternoon and evening from Station WHN here. Judging from the mail received from listeners in, this service is proving very satisfactory to the countless number of people who are anxious to follow up the screen output. Movie gossip from the coast about the leading stars and players in the picture world is also included in the WHN talk.



AT ONE time or another there have probably been hundreds of Uncle Remus impersonators traveling about the country since the original B'rer Rabbit stories came into being, but so far as California is concerned, and particularly so far as California's listening public is concerned, there is one, and only one Uncle Remus.

as California is concerned, and particularly so far as California's listening public is concerned, there is one, and only one Uncle Remus. Say "Uncle Remus" to a Los Angeles Radiophan and he will probably shout back, "KHJI" Likewise, mention KHJ to the same bug and he will think at once of Uncle John, peerless announcer of that station, and in the next instant of Uncle Remus, for it is only when Uncle John and Uncle Remus get together before the "mike" at KHJ that the fun really starts. Uncle John together with Uncle Remus spent a couple of weeks last summer in the high Sierras on a fishing trip. Upon their return Uncle John spent the last day of his vacation at Catalina island, off the southern California coast. Major Mott, known to Radio experimenters everywhere, undertook to take Uncle John tuna fishing and it happened that John hooked a whale of a tuna, and after battling with it for nine hours and twenty-five minutes (so the story goes) lost the fish. It was a terrible blow, and in true sportsman's spirit Uncle John confided to Uncle Remus of the loss of the magnifi-cent tuna. It was too much for Uncle Remus to withstand and for days after-ward Radioland rocked with laughter whenever Uncle Remus got Uncle John in front of the microphone to tell his story of the tuna. Uncle Remus comes by his title hon-estly. For over twenty years he traveled with a minstrel show as blackface come-dian, later going into the musical busi-ness. To hear Uncle Remus play old plantation melodies on the celeste from KHJ is enough to make a Connecticut Yankee vote bonds to erect a statue of Jefferson Davis.

## Broadcast Series of Talks on Income Tax Preparation

on Income Tax Preparation SPRINGFIELD, Mass. — A series of talks on the preparation of individual Federal income tax returns by Thomas McCarry, public accountant, will be broadcast from Station WGY. The first talk was on January 15. The last will be on March 12. These talks should be of special interest to the public in view of the fact that the correct preparation of a return this year will require the interpretation of a new tax law. Mr. McCarry is well known to many

new tax law. Mr. McCarry is well known to many Radiophans as he gave a similiar series of talks from this station in 1923 and last year. He is well qualified to explain the tax law, having been employed for five years by the bureau of internal revenue, preparing and auditing the Federal in-come tax returns.

#### Lafayette Offers Radio Course

EASTON, Pa.—Radio will be added next semester to the curriculum at Lafayette college here. A. W. Parkes, instructor in physics, who served as a Radio operator with the aviation division of the Navy during the war, will instruct.



# Amazing Simplicity The SetThat Is Already Logged

CAN you imagine anything more simple\_\_\_\_\_ more practical—than a radio set with all the dial settings exactly identical for any station-regardless of where you live or what antenna you use?

The entire DAY-FAN line, comprising six models ranging in price from \$90 to \$285, is distinguished by this feature.

APPEARANCE. Every DAY-FAN set is a splendid example of the cabinet maker's art. Made of the finest materials, they have a finish and design which harmonize with the surroundings of the most tastefully furnished homes.

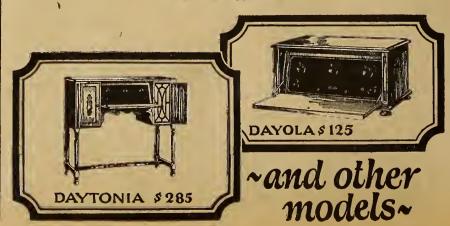
VALUE. In everything that you want-long range, selectivity, purity of tone, volume-there is no greater value.

PERFORMANCE. The age of technical discussion and experimenting in radio is past. Today a set must do certain definite things. You may want entertainment, business information, or an educational program. Whatever your desires, a DAY-FAN will get it for you, quickly and easily.

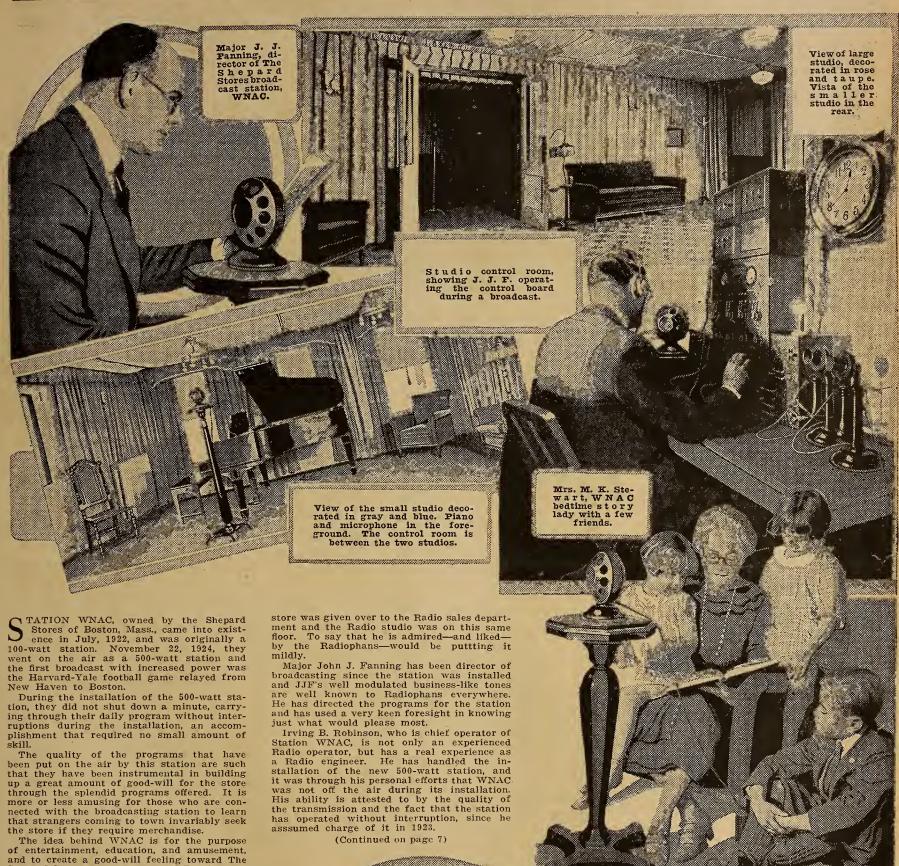
Sold by Leading Radio Dealers Almost Everywhere

## The Dayton Fan & Motor Co. Dayton, Ohio

For 36 Years Manufacturers of High-Grade Electrical Apparatus.



## WNAC, Shepard Stores, in the Hub City



plishment that required no small amount of skill. The quality of the programs that have been put on the air by this station are such that they have been instrumental in building up a great amount of good-will for the store through the splendid programs offered. It is more or less amusing for those who are con-nected with the broadcasting station to learn that strangers coming to town invariably seek the store if they require merchandise. The idea behind WNAC is for the purpose of entertainment, education, and amusement, and to create a good-will feeling toward The Shepard Stores and the owner of The Shepard Stores, Mr. John Shepard, Jr. John Shepard, III, vice-president of The Shepard Stores, can honestly be called the father of Station WNAC. He became inter-ested in Radio and installed a very small de-partment in the men's department of The Shepard Stores. The business that came in increased with such rapidity that an entire

Operating room, with Irving B. Robinson at con-trol panel. Re-ception room with Jean Sargent at her desk.

. .

John Shepard, third vice-presi-dent of The Shepard Stores and "Father" of WNAC.



## LESS INTERFERENCE HOPE OF RADIO OFFICIALS

Thirty-Five Broadcasters on Different Lengths—List Showing Many Changes Is Given

WASHINGTON.—To make room for more clsss B stations, and give more ex-clusive wave lengths with less interfer-ence, a number of wave assignments have been altered. So that listeners may have a record of the old and new waves, both are listed below for the thirty-five sta-tions making the changes: Old New

	Old	N
KOKA, East Pittsburgh		3
KFDM, Beaumont. Texas	306	3
FFKX, Hastings, Neb.	291	
KFOA, Sesttle, Wash.	405	394
KFUO, St. Louis, Mo.	546	5
KGW, Portland, Ore		4
	992	3
KOB, State College, N. M.		35
KSO, St. Louis, Mo.	536	5.
	030	
WBAP, Fort Worth, Texas	476	4
WBAV, Columbus	423	1215
WCX, Detroit, Mich.	517	5
WEAR, Cieveland, Ohio	390	3
WFAA, Dallas, Texas	476	4
WHA, Madison, Wis.	536	5
WHAA, Iowa City, Iowa	484	4
WHK, Cieveland, Ohlo	283	23
WHN, New York, N. Y.	360	3
WHO, Des Moines, Iowa	526	5
WIP. Philadelphia	509	5
WJJD, Moosehcart, Ill.	278	3
WMC, Memphis, Tenn.	500	535
WMH, Cincinnati, Ohio	309	3
WNAC, Boston	278	215
WNYC. New York	526	5
WOAi, San Antonio, Texas	385	3
WOAW, Omaha, Neb.	526	5
WOC, Davenport, lowa	484	4
WOI, Ames, Iowa.		2
W00, Philadelphia	500	2
WREO, Lansing, Mich.	999	
WEAL Clasing, Mich.	200	23
WSAI, Cincinnati, Ohio	200	3
WTAM. Cleveland, Ohio	000	3
WIAS, Eigin	200	
WWJ, Detroit, Mich.	917	5
	_	

Terrell Authority on Rules WASHINGTON, D. C.—W. J. Terrell, chief of the Radio section of the depart-ment of commerce, has been asked for in-formation concerning Radio inspection and administration in the United States by the government of New Zealand, which it is understood is just organizing its Radio work.



Loud and Clear with the **Howe Radio Receiver** \$175

D<sup>O</sup> you know that you can listen to every radio broadcasting station in and around your city with a Howe Radio Receiver costing only \$1.75? Thousands of folks-young and old all over the country are having many hours of solid enjoyment listening to the wonderful and varied programsmusic, talks, sport and church services. The Howe Radio Receiver is not a toy but a very sensitive, practical, radio set made of the best materials and furnished in a strong, steel case finished in a beautiful dark olive antique verde. It is fool and trouble proof. No Batteries to Buy. Guaranteed you can hear any broadcasting stations within 25 miles. One or more persons can "listen in" at the same time. For perfect local reception use a Howe

Radio Receiver crystal set. For Sale by All Dealers

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## **RECORDS BROADCAST SPEECHES**



Further advance in the science of Radio broadcasting is inevitable—it is also inevit-able that broadcasting as we know it will eventually be discarded as too crude. And so, the device shown above has been perfected to record broadcasts on wax records so that they can be stored away for future use.

Radlo trade in Australia is experiencing a boom, following the adoption of new regulations permitting any type of set to be used. Pierrc Hemardinquer of France has com-pleted a new diagram card for a standard hook-up in which certain parts are change-able.

Herald MODEL NOW \$12

The Big, Clear Voice of Radio /

> THE same speaker that won nation-wide popularity at \$18, in competition with the most expensive speakers built. At the new price of \$12, the Herald-B is the greatest value ever offered in Radio. The only speaker in its class with fullsized, gooseneck fibre horn, 25 inches high over all, 12 inch bell, art metal base. Clear, loud and delightfully mellow ! Hear the Herald before you buy!

States and

## Will Open Catholic Station in New York

## Paulist Fathers Plan Others in Chicago and San Francisco

NEW YORK.—The Paulist Fathers, propagandizing organization of the Roman Catholic church, have completed plans for and are erecting a 500-watt broadcaster here for the purpose of "acquainting the public with the Catholic viewpoint on current affairs." The station will be known as WPL and will use a wave length of 405 meters. Plans of the Paulist Fathers also call for similar stations in Chicago and San Fran-cisco.

cisco. Speaking of the new station, the Very Rev. Joseph MacSorley, superior general, has said: "Our station will be the official mouthpiece of everything catholic. We want especially to reach isolated com-munities where there is no Catholic church. We want owners of Radio sets everywhere to be in a position to under-stand Catholicism and the Catholic vlew-point." point.

point." Saves \$50,000 Necklace NEW YORK.—A pearl necklace valued at \$50,000 was saved by Radio recently when the Marquise d'Orgeix of Paris, suddenly remembered while aboard ship bound for France, that she had left the jewels hidden under a pillow in her former apartments here. A Radiogram from her located the mere bauble which was then put in safe keeping.



You secure Marvelous Reception with these Scientifically Designed, New KARAS HARMONIK Audio Fre-quency Amplifying Transformers.

What Karas Harmoniks Do That Other Transformers Cannot Do They amplify with GREAT VOLUME the ex-tremely low frequency tones that other transformers fail to amplify at all-KARAS HARMONIKS also amplify EQUALLY all of the many vital harmonics and rich overtones that combine to form musical sounds. winds. With KARAS HARMONIKS there is no muffling i sounds—no fuzz on the edges of words—no thin, jucaky distorted tones. Instead, EVERY tone is ean-cut, separate and distinct from every other no-matural.

nc-natural. The Results of Karas Harmoniks The result from any radio set of any and all ficient circuits is an outpouring from the loud beaker of soft, rich, round, full, uclow tones such s you have never before heard from any radio-surprising volume of REAL MUSIC to which it is delightful pleasure to listen.



## Scientific Evidence of Actual Performance

ret of the strikingly wonderful reception Harmonik Transformers is disclosed by this Laboratory CURVE of their actual perance. W frequencies represent low notes—high fre-cles represent high notes and the harmonies of notes. All musical sounds are composed of a unental harmonic and many other harmonics overtones of varying and successively higher tendes. overton encies.

### Equal Amplification

Equal Amplification It is the combination of these many harmonics and overtones forning a single mole that makes it a beautiful, pleasing, musical sound. The inability of ordinary transformers to fully and equally amplify all of these many harmonics and overtones is the cause of distorted and unnatural sounding tonce in the loud speaker. This Scientific Laboratory CURVE shows that Karas Harmonik Transformers amplify all sounds and all harmonics and overtones of all sounds equally-delivering to the loud speaker a pure, natural sounding musical reception.

## Structural Factors That Produce the Flat Curve

**Structural Factors That Produce the Flat Curve** LARGE COILS of many thousands of turns of wire giving a very high inductance: LARGE IRON CORE offering an easy path for the lines of magnetic force to influence the secondary windings: VERY HiGH IMPEOENCE to retain the full amplification delivered by the amplifier tubes: CONTROLLED AIR GAP insuring high amplified in of low frequencies, volume-carrying, fundamental harmonics—this factor enables Katas Harmoniks to deliver more total am-plification with a low ratio than cheap transformers do with a high ratio: LOW OISTRIBUTED CA-PACITY insuring full amplification of high audo frequency harmonics and overtnoes: LOW HYSTER-ESIS LOSS insuring a maximum amount of energy for amplification of all frequencies: SCIENTIFICALLY SHIELOEO against intercoupling of electrostatic and electromagnetic fields: PERFECTLY MATCHEO insuring the same values of amplification in both first and second stages.

**Price \$7 Each** If your dealer has not yet been able to secure a supply they will be sent direct upon receipt of price.

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RADIO DIGEST-Illustrated

## **RADIO TEACHES ART IN PUBLIC SCHOOLS**

CALIFORNIA CHILDREN GET INSTRUCTIONS VIA ETHER

Judges Surprised at Quality of Work Turned in by the Pupils— Immediate Response

<text><text><text><text><text><text>



STATION OWNER IS

**POPULAR ON COAST** 

Earle C. Anthony, owner of the new KFI super station. Mr. Anthony is a pioneer in Radio on the Pacific coast.

### **OPERA HELPS SALES** (Continued from page 1)

(Continued from page 1) That the famous Irish tenor was satis-fied with the acclaim which greeted his Radio appearance was voiced by his secre-tary, who said: "Mr. McCormack approves heartily of Radio broadcasting, entirely because it is such a pleasure-spreading medium. As to the commercial value effected, it is very difficult to venture an authentic reply so soon after the trial. The mail response was tremendous.

was tremendous. " "The concert crowds have increased somewhat, but it is not fair to attribute it to Radio yet. When Mr. McCormack returns in March from his tour he shall be able to answer more definitely." Mme. Bori also is in favor of Radio and says that the mail response has been very flattering.

Plans are now being laid for a broad-casting station in Bouzaria, Algeria, the studio being located in Algiers and con-nected to the station by ground wire.



BRISTOL AUDIOPHONE Loud Speaker

## **PRODUCER BACKS UP STATEMENTS**

John Golden Proves to Public When He Says a Thing, It Goes

It Goes NEWARK, N. J.—As though translating into action his spoken and written ap-proval of Radio as an ally of the modern theatrical showmen, John Golden, pro-ducer of "Pigs," was a headline attraction of the WOR afternoon program last Fri-day, when he presented to the Radio audience, Anne Morrison and Patterson McNutt, co-authors. In company with them were Lydia Westman and Wallace Ford, featured players in the successful laugh hit which is attracting capacity crowds to the Little theater, New York. "Pigs" has done much to make theatri-cal history in New York. The unusual comedy has flourished throughout the present lean theatrical season and Mr. Golden, rated one of the most clever and discriminating American producers, has another hit to his credit. A feature of the performances at the Little theater is the Radio concert, tuned in between acts to enable confirmed Radiophans to get an earful during the evening.

## Present World's Greatest Accompanist in Recital

Accompanist in Recital NEWARK, N. J.—Frank La Forge, com-poser-pianist and the artist to whom goes credit for being the greatest accompanist in the world, was presented in recital under his direction at WOR last Saturday evening, January 24, with Ernesto Beru-men, pianist; Frances Fattmann, soprano; Valeriano Gill, tenor; Grace Demms, so-prano; Zelina Bartholomew, soprano, and Madeleine Hulsizer, soprano. The latter artist will sing a complete program of the songs of Mr. La Forge with the com-poser at the piano.

WNAC—THE HUB CITY

(Continued from page 5)

(Continued from page 5) Jean Sargent, who is secritary of WNAC, and has charge of all of the detail work in connection with the station, is one of the few women announcers who have a complete program in their care. For some time Jean Sargent was known by the pen name only, before her first announcement came over the air and to the utter con-fusion of some of the masculine fans who had invited her to smokers, and on fishing and hunting trips, it was pro-claimed that Jean was a woman and not a man. a man.

claimed that Jean was a woman and not a man. Mrs. M. K. Stewart, the bedtime story lady, is hostess of the Little Folks' store, of the Shepard stores and is a Southern woman, whose interest in, and love for children, made her an ideal person to tell the kiddies their good-night stories. Some of the unique features of WNAC were the broadcasting of a circus, taking the microphone to the tent, and going so far as to taking the microphone in to the part of the circus where the animals were being displayed so that the public might hear them as they were transferred from cage to cage. The broadcast of plays, direct from the theaters with the ampli-fier in an upper stage box so that the operator might catch each portion of the drama or musical comedy, is another fea-ture that has made WNAC popular. It has broadcast grand operas each season since its existence and one of the popular weekly features is the concert by the Boston American orchestra.

## **Dick Long Makes Record**

MINNEAPOLIS.—The first Minneapolis orchestra to broadcast by remote control, and the first local orchestra to make Vic-tor records are distinctions now held by Dick Long and his Nankin Cafe musicians. Recently they were selected to record for the Victor company. The records were released last week when the Gold Medal station, WCCO, broadcast four special programs by Dick Long and his orchestra.

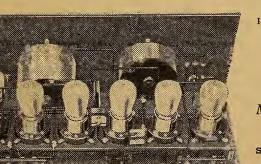


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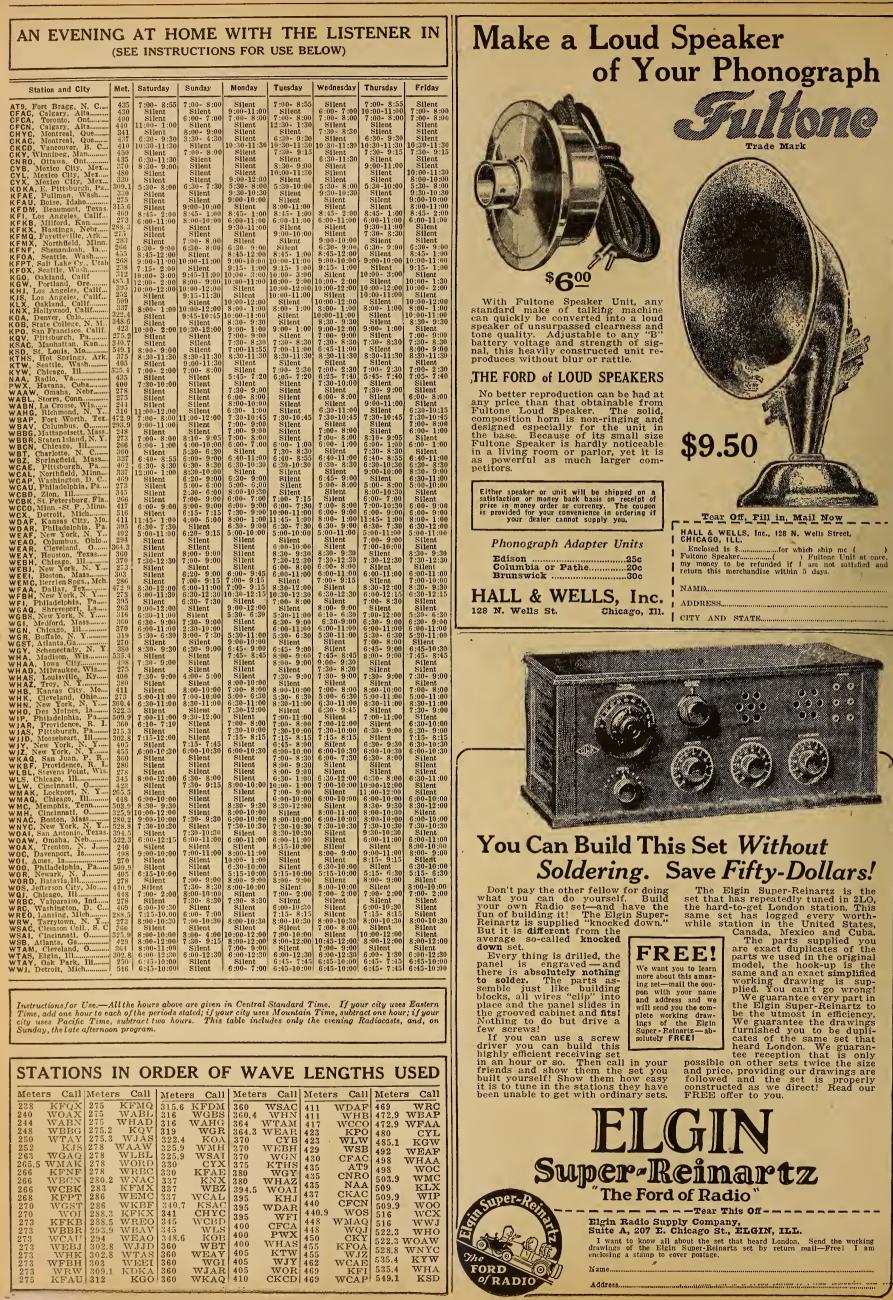
You take no risk whatever in sending us your order for unless you are completely satisfied with the receiver and with your saving you may return the receiver to us and we will refund your money.

## **GOLDEN-LEUTZ**, Inc. **NEW YORK CITY** 476 BROADWAY

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Interior View Show-ing Compact and Efficient Dcsign

January 31, 1925



----Tear This Off

Name Address

Elgin Radio Supply Company, Suite A, 207 E. Chicago St., ELGIN, ILL. I want to know all about the set that heard London. Send the working drawlngs of the Elgin Super-Relnartz set by return mail—Freel I am enclosing a stamp to cover postage.

# WCBD OPENS HIGH POWER STATION

## Saturday, January 31

Forbes W. Van Why; 5:30, Town Crier and Village Urchins; 6-7, dinner hour music; 7-7:30, D. B. Carpenter's musicsi half hour; 8-10, program, Salis-bury and Alexander, Captain Edward Salisbury, lec-turer; 10-11, Abe Lyman'a Cocoanut Grove dance or-chestra from Ambasssdor hotel; 11-12, program, The Green Mill. DA. Denver Cole. (March 1997)

Saturday, silent night for: CFAC, CFCA, CKY, KFAF, KFDM, KFKX, KHJ, KOB, WBAP, WBAV, WBBG, WCAU, WCBD, WEAO, WEBJ, WEEI, WEMC, WHA, WHB, WHO, WJY, WKAQ, WLW, WOI WOO, WTAY.
CHIC, Toronto, Can. (Eastern, 350), 7:30-8:30 p. m., Instrumental guintet: Arthur E. Vandersont, bari-tone; Lawrence DeFoe, tenor; Hazel Hall Vander-voor, soprancj 9:30-11, Chosries E. Bedley and his orchestra.
CHNC, Toronto, Can. (Eastern, 350), 9-11 p. m., dance mist, Charles E. Bodley and his orchestrs; Jack Gourlay, Stotch monologulat; Dwight Wilson, baritone, GAC, Montreal, Gan. (Eastern, 455), 7:30 p. m., kiddles' stories in French and English; 7:30, Windsor hotel dinner concert; 8:30, studio varlety program; 10:30, Windsor hotel dance corchestra.
CHNC, Ottawa, Can. (Eastern, 455), 7:30 p. m., kiddles' stories in French and English; 7:30 p. m., bedtim; story and lullaby, Aunt Agnes; S, "William Tell; "Danse des Enfants," "Danse des Galants," "The Mikado," Chateau hotel orchestra; 8:30, "Homins,"

orchestra, Prof. Antonio M. Romeu.
WAHG, Richmond Hill, L. 1. (Eastern, 316), 12 p. m., 2 a. m., Ascultto Brothers dance orchestra.
WBBR, New York, N. Y. (Eastern, 273), 8 p. m., riolin duets, Georga Twaroschk, Carl Park, 10 in duets, Georga Twaroschk, Carl Park, 10 in duets, Georga Twaroschk, Carl Park, 10 in duets, George Twaroschk, Carl Park, 10 in duets, George Twaroschk, Carl Park, 10 in duets, George Toraya, International Mark, 10 in duets, 10 in du

CCO, Minneapolis-St. Paul, Minn. (Central, 417), 10:45 a. m., home service, Betty Crocker; 8 p. m., "Fireside Philosophies," Rev. Roy L. Smith, pastor; 8:15, opening of Twin City Automobile Show and Trade week.

8:15, opening of Twin City Automobile Snow and Frage work work
WDAF, Kansas City, Mo. (Central, 411), 3:30-4:30
p. m., The Star's Radio orchestra; 6:7, School of the Air, address, Tell-Me-a-Story Lady; Trianon ensemble, Hotel Muchlebach.
WDAR, Philadelphia, Pa. (Eastern, 395), 11:45 a. m., daily: almanac; 12:02 p. m., Stanley thesater organ recital; Arcadia cafe concert orchestra; 2, Arcadia cafe concert orchestra; 7:30, Charles Silverthorne, baritone; Mrs. Paul R. Gibson, soprano; 4:30, Cotton Pickers dance orchestra; 7:30, Arcadia cafa dance orchestra.

recifal; Arcadia cafe conceri orchestra; 2. Arcadia cafe concert orchestra; 2:30, Charles Silverthorne, baritone; Mrs. Paul R. Gibson, soprano; 4:30, Cotton Pickers dance orchestra; 7:30, Arcadia cafa dance orchestra.
 WEAF, New York, N. Y. (Eastern, 492), 4-5 p. m., Dart's Brooklake orchestra; 6:7, dinner music, Waldorf-Astoria hote; 10:30-10:30, Madge Kennedy, screen and stage star; 7:45-8, Phillips Steele, bartone; 8-8:30, taik, "A Home for Every Child." Sophie Irene Leeb, President of Child WcIfare committee of America; 9:30-10:30, concert, Waldorf-Astoria hote; 10:30-10:30, concert, Waldorf-Astoria hote; 10:30-10:45, Ida Davenport, soprano; 11-12, Vincent Lopez and his Hotel Pennsylvania orchestra.
 WFAA, Dallas, Texas (Central, 472.9), 12:30-1 p. m., address, G. F. Thomas; 8:30-9:30, Baylor University Alumni's Founder's day program; 11-12, Adolphus hotel orchestra.
 WFI, Philadelphia, Pa. (Eastern, 395), 1 p. m., Meyer Davis Bellevue Stratford concert orchestra; 5:30, strate Poland, Leon; Etal. Aron, Kork, Contralto, Loretta Kerk, planist; 4:30, Rey Elrae dance orchestra; 6:30, Meyer Davis Bellevue Stratford concert orchestra; 7: 8:30, program from WEAF.
 WGN, Chicago, III. (Central, 370), 1:40 p. m., luncheon soncert, Drake concert ensemble, Blackstone string quintet; 3:-9, sprogram from WEAF.
 WGN, Chicago, III. (Central, 300, 1:40 p. m., luncheon string quintet; 3-9, classical concert; 10-11, dance numbers, Don Bestor Drake danca orchestra, Jerry Conley Blackstone dance orchestra.
 WGY, Schenetady, N. Y. (Eastern, 380), 7:30 p. m., International intercollegiate night, auspices Edison, club: chorus selections, entire assemble; Catain, "Ab J. Moore, violinist, instrumental selections, University of Minnesota; "On the Road to Mandalay,"

Professor Marshall S. Brown, Dean of the faculties of New York nuiversity, delivers the N. Y. U. "Air College" lectures on Ameri-can history every Monday evening from Station WJZ, New York city. Mrs. Rose Ellen Dickey, new home adviser of WLS, Chicago, talks every morning at 9:15 a. m., about home management, home economics, children, correct dress, beauty hints, recipes, home decoration and other matters pertinent to the ladies who dial. Robert Worthington Davie (right) will read his own poems at WOAW, Omaha, Monday, February 2.

Wait," Ircne Babin, sopranc; "Saxophohia," A. Lewis, monologue, "The Speil of the Yukon," Gordon Rocers; "I Am a Friar of Orders Grey," Frank A. Sim," Gavota and Variations," C. C. Bailantyne Fuller; plsy, "Suppressed," Ottawa drama players; "Why is the Geological Survey," E. D. Inzail: "Bird of Love Divine." Irene Babin, sopranc; "Nois," A. Lewis, saxophonist; monologue, "Pledged," Gordon Rogers; "Tha Lost Cord," Frank A. Sim, tenor; "Note," The Major, "C. C. Bailantyne Fuller; Chateau Laurier hotel orchestra; Jack Grace.
RDKA, E. Pittsburgh, Pa (Eastern, 309.1), 1:30 p. m. Dayherty's orchestra; 7:30, Richard, the ridder; 8:30, banquet, Westinghouse Veteran's association.
Ff, Los Angeles, Calif. (Pacific, 469), 5:30 p. m.; Fwening Herald, table talk, news; 5:30-6, Examiner's musical half hour; 6:35-7, speaker, 7-7:35, dance orchestra; 7:45-8, The Bookshell; 8-9, song recita; 9:10, Examiner, Flacenti, California, Chamber of Commerce program; 10-11, Packard Radio Cub.
KFNF, Shenandosh, Iowa (Central, 265), 6:30 p. m.; Streing, Herald, table talk, news; 5:30-6, Examiner's musical half hour; 6:35-7, speaker, 77:45, dance orchestra; 7:35-8, The Bookshell; 8-9, song recita; 9:10, Examiner, Flacentia, California, Chamber of Commerce program; 10-11, Packard Radio Cub.
KFNF, Shenandosh, Iowa (Central, 2626), 6:30 p. m.; Streing, Mash, IPacific, 455, 8:10:30 p. m.; Streing, Roy Acido profile, 455-10; Song, 7:45, 9:130 a. m., sunshine hour program, conducted by Mrs. Concert, Maitland, Mo, H. L. Leeper, director; "Go, Galand, Calif. (Pacific, 312), 1 p. m., luncheon concert, Pacific States Electric company; 4-5:30, concerts; 7:30-9, additorium service, sermon on Dive Healing, Aimes Semple McPherson, pastor." The Arohaese in the Direct Primary Lawy, 4. Haemansky; Arrillars Musical college, Vincend de Arillaza, director; 10-14, m., dances musica, Henry Halstead's orchestra. Electric concent orchestra, Edward Heaman's Blitmore hotel concert orchestra, Edward Heaman's Blitmore hote

2.2 a. m., Tha Lost Angels ( Six orchestra. XX, Los Angeles, Callf. (Pacific, 337), 8 a. m., morn-ng prayer; 9, Hired Hand, news; 10, Hired Hand's morning message; 10:30, "Radio Talk to Radio Fans,"

## Headliners of the Week

<text><text><text><text>

at WEMC by Dixie members of this college. Tuesday night the American Pen Women of the Atlantic coast will give a program at WJY, New York. Tune in and hear some of your fa-vorite authors. Mr. "Bones" and Mr.

of the Week "Tambo," well-known characters of the American minstrel show, will make their Radio debut at KGO to-ingth. At midnight Wednesday tune in for WBAP and get religion with the Hired Hand broadcasting from the the gro Holy Ghost Camp meeting. The Hired Hand will broadcast direct com the church. "I Trovatore," an opera popular for its beautiful music, will be given by the WGY Opera company. Thurs-day at WGY, Schenectady. The entire opera will be given. Later in the evening at 9-10 p. m., Pacific time, Clara will take charge of the KPO program. If you prefer something it you professors give a "Swede". The original Peggy O'Neil, charac-trist time Friday at WAHG, Rich mond. Whether he will sing "Peggy O'Neil" is still unknown. W. T. Mc Dermidd will give an interesting talk at KFAE, Pullman, on the art of the strest to KSND. Do not be surprised

B. K. Swartz, tenor; Edison club quartet; songs, graduate engineers, British Empire colleges and universities from New Zealand, Australia, South Africa, India, Canada. British Isles; comedy skit, "Burlesque du Radio Brosdcasting," Masachusetts Institute of Technology; songs and cheers, Kansas State college, Washington State college. University of California, Leland Stanford; Edison club string orchestra; "Laddie Buck of Mine," E. W. Bauthman, Davitone: address, J. G. Barry; songs and cheers, alumni of Clemson college. University of Kansas, California Tech, address, J. G. Barry; songs and cheers, alumni of Clemson college. University of Kansas, California Tech, address, Prsneis C. Pratt; guitar and banjo duet, "Southern Melodles," E. O. Ricker, George Ricker; reading; songs and cheers, alumni of University of New Haupsohite, Georgia Tech., Virginia Policehnie Institute; trumpet and flute duet, "An Evening on the Sea." A. Sellers, Fr. L. Hempker; songs and cheers, alumni of Vorchester Polytechnic Institute, University of Vorchester Polytechnic Institute, University of Orexas, Pa. State college, University of New, Astar Collina; "Native Songs." General Elec, Chinese engineers; "A Test Man's Oplinion of Testas, Pa. State college, University of Nebraska; "The Trumpeter," R. E. Welton, bass; of oregon State college; Edison elub.
"WHAS, Louisville, Ky. (Central, 400), 4-5, p. m. selections; Sangs and cheers, alumni of University of Mississippi, Auburn Polytechnic Institute, Tulang, Oregon State college; Edison elub.
"WHAS, Louisville, Ky. (Central, 400), 4-5, p. m. selections; Sangi song, 5:3, 5:0, 5. Mark, Haupsong, Sangi San

Berch, Levins, Alamo theater organ; 7:30-9; concert, Barney Rats orchestra; fifteen-minute specialty, Wendell and State organization of the state organization of the specialty of the state organization of the state or the state or the state or the state of the state or the state or

# NEGRO CAMP MEETING AT WBAP

## Saturday, January 31

## (Continued from page 9)

Plummer; 8:45-9:15, Elena DeSayn string quartet; 9:15-9:30, "Radio as a Vacation," J. H. Dellinger of Bureau of Standards; 9:30-10, Stilo Sideli, bari-ione; 10-10:30, Dittorn Howard's string orchestra; 10:30-11:30, Freddle Rich and Hotel Astor dance orchestra

10:30-11:30, Freddle Rich and Hotel Astor dance orchestra.
WEL, Stevens Point, Wis. (Central, 278), 12 midnight, "Enemites of Sleep."
WLS, Chicago, III. (Central, 345), 7 p. m., Ford and Glenn's trip to Paris; 7:20, national barn dance, Isham Jenes and his College Inn orchestra, Ralph Emerson, erganist; Walter Peterson; Grace Wilson; Harmony Girls; Glenn's Corn Huskers; Ford and Glenn; Barn dance fiddlers; 11:15-12:45, Senate theater reflew.
WLW, Cheinnati, Ohio (Central, 423), 8 a. m., physical exercises, William Stradtman, Instructor; 3 p. m., dance program, Marco Melody Spred Lindenan, director; other features; 6, dinner hour concert, Cincinnati, Onio (Central, 423), 2 p. m., Uhlon League club forum; 6, Young Folks' Catholic association; S, LaSaile hotel orchestra; 8:30, "World Reporting," Junius B. Wood; 9, weekly Chicago theater refue.



Stephen E. Boisclair is the organist who plays on the late Tues-d a y and Thursday pro-grams at W G Y, the General Elec-tric station at Schenectady, New York. Mr. Boisclair is the official organist of this station.

WAC. Memphis. Tenn. (Central, 503.9), 12 m., musical program. O. K. Houck Piano company: 8 p. m., bed-time story. Uncle Percy; 8:30, classical program. Gladys Barber.
WhJ, Newark, M. J. (Eastern, 233), 10:30-1 a. m., dance revue, Paradise dance palance.
WNC, New York, N. Y. (Eastern, 228.8), 5:30-6:30
p. m., Frederick Benson and his orchestra; 6:30-7:30, sam Wooding and his Cub Alabam orchestra; 6:30-7:30, sam Wooding and his Cub Alabam orchestra; 6:30-7:30, sam Wooding and his Cub Alabam orchestra; 6:30-7:30, we work, and recitals; 10:10-10:30, New York public lecture.
WOG. Womaha, Nebr. (Central, 522.3), 6 p. m., dramatic hour. Davis Studio of Expression; 6:45, Sammy Heiman's orchestra; 9:30, program, quartet; 11, Frank Hodek and his Omaha Nightingales; 11:30, organ music, Arthur Hays, World theate.
WOG. Oavenport, Iowa (Central, 498), 12 m., chimes; 7 p. m., sandmar's visit; 9, Lonis Conor and his celtaire hotel orchestra; 7:30, songs and novelty numbers, Peter MacArthur, bartione.
WOI, Ames, Iowa (Central, 270), 12:30 p. m., college chimes; 'Feeding and Management of Chicks,'' Prof. W. H. Lapp.
WOO, Philadelphia, Pa. (Eastern, 509.9), 11 a. m.

(Ref. Preducting and statistication of chicks, 1101-Philadelphia, Pa. (Eastern, 509.9), 11 a. m., recital, Mary E. Vogt; 12:02 p. m., Waua-er, F. 145, Eastern, Kobert E. Golden, et al. 145, and recital, Mary E. Vogt; band critication or cristication of the statistic band. Neark, N. J. (Eastern, 405), 2:30-4 p. m., her's program; 6:15-7:30, "Music While You a," Freddle Slecknan and his Green Mt. Idlers; 8:15, Whilred DeWitt Vogellus; 9:30-10:30, concert, eville male clorus; W00. WOR,

X:30-X:3., (Winfred DeWitt Volgenus, contanto; 3:35-9:30, Winfred DeWitt Vogenus, contanto; 3:45-9:30, Winfred DeWitt Vogenus, contanto; 3:45-9:30, Winfred DeWitt Vogenus; 'Fve-Fvolted, WGJ, Chicago, HJ, (Central, 442), 11-12 m., home eco-nomics, Heien Harrington Downing; 'Fve-Fvolted, Jrrs, Darius T, Phillips; taik, J. W. Foley; 'Fanacy Cookies,'' Bertha M. Harrls; 3:4 p. m., Koffee Klutsch, special musical (central, 448), 11-12 m., home eco-nomics, Heien Harring; 3:4 p. m., Koffee Klutsch, special musical (central, 448), 10-12 m., special musical (central, 448), 10-12 m., withiams and his Kainho Garden orchestra; Olis Flie estep, soprano; Mary T. House, acempnalist; noders kluthos Kularks; derry Kullvan, sond:: Genere A. Little and Laurry Shas, harondning; C. Afred Tweed, Little and Laurry Shas, harondning; C. Afred Tweed, Little and Laurry Shas, harondning; C. Afred Tweed, Hotel Washington, D. (Eastern, 469), 6:45 p. m., ediliferej: hour, Mariorle Thicker; 7, dinner music, Hotel Washington, 11:15, Otto Beck, organist, WREO, Lansing, Mich, (Eastern, 288:5), 9:12 middight, Frank Logan and his orchestra.
 WSLB, Atlanta, Ga. (Central, 429), 6 p. m., achines; 8:15, Bilcycle mixed quartet; 9:30, Breda Sanker's Toad Stool orchestra.

WSAI mining entertainters; 12:30, Freda Sainters
 Toad Stolo orchestra.
 WSB, Atlanta, Ga. (Central, 429), 6 p. m., songs, Bonnie Barnhardt; 8-9, orchestra; Mrs. Rose Matthews, soprano; 10:45, Ed and Grace McConnell.
 WTAM, Cleveland, Ohio (Eastern, 364), 6 p. m., Maurlec Spitainy's Hutel Statler orchestra; 9, WTAM dance orchestra, Ev Jones, director.
 WWJ. Oetroit, Mich. (Eastern, 516), 8 a. m., setting-up exercises, It. J. Horton; 9:30, tonight's dinner; 3 p. m., the Detroit News orchestra.

## Sunday, February 1

## Sunday, silent night for: CFAC, CHNC, CKAC, KFAE, KFDM, KFOA, KFKX, KFQX, KOB, KSD, PWX, WAHG, WBAV, WBBG, WCAU, WDAF, WEAO, WEBJ, WHA, WHAS, WHO, WJJD, WKAQ, WLBL, WMAQ, WNJ, WOI, WOR, WTAY.

CFAC. Calgary, Can. (Eastern, 430), 11 a. m., morning Service.
CFCA. Toronto, Can. (Eastern, 400), 11 a. m., services, Bloor Street Presbyterian church, Rev. George C. Pidgeon, pastor; 5:55-6, m., Bihle story for small children; 7, service, Timoihy Eatou Menoorhal church, preacher Dr. Trevor II. Davies
CKAC, Montreal, Can. (Eastern, 425), 4:30 p. m., band concert. CKAC, montreat, Can. (Cestern, 423), 4:30 p. m., band concert.
CKY, Winnlpeg, Can. (Central, 450), 7 p. m., servlce, Grace Methodist church.
KOKA, E. Pittsburgh, Pa. (Eastern, 309.1), 11 a. m., aervlces, Point Breeze Presbyterian church, Rev. Fercival H. Baker; 2:30 p. m., concert; 4, Dr. Charles Heinroth, organist; 4:45, vesper servlces, Shadyside Presbyterian church, Rev. Hugh Thomson Kerr, minister; 6:15, dinner concert. Scalzo's archestra; 7:30, servlces, Calvary Episcopai church, Rev. E. J. Van Etten, pastor.

Etten, pastor.
Fit. Los Angeles, Calif. (Pacific, 469), 10-10:45 a. m., L. A. Church Federation service; 4-5 p. m., vesper service, L. A. Church Federation musicalans; 6:45-7, musical appreciation talk; 7-6, stage arck, specialites and orchestra from Metropolitan theater; 8-9, Electa Felt Ferry, soprano and trio of women's voices; 9-10, Examiner, Anion Lada's Louisiana Five dance orches-tra; 30-11, Thereon Bennett and his orchestra.

IF, Shenandoah, Iowa (Central, 266), 10:45 a. m., gular church service; 3 p. m., program, Baptist urch; 6:30, concert, Smlth-Belding Harmony or-chestra. KFSG, Los Angeles, Calif. (Pacific, 278), 10:30-12:30 p. m., complete morning religious services of Angelus

services of the Church of the Open Door, Dr. French E. Oliver, pastor.
 KIXX. Los Angeles, Calif. (Pacific, 337), 7-7:45 p.m., International Bible Student's association; B-9, Ambas-sador hotel concert orchestra, Josef Rosenfeid, director; 9-11, program, Carson-Baruch Baking company.
 KOA, Denver, Celo. (Mountain, 322.4), 11 a.m., Solemn pontifical meass and scrnon, Immaculate Conception cathedral, Bishop J, Henry Then; 7:306-830, service, Immaculate Conception, Rev. Hugh L. McNenamin.
 KPO, San Francisco, Calif. (Pacific, 423), 11-12 m., church scrvice, Rev. Honer K. Pithuan; Lenore Solen-der Campbell, soprano; Theodore J, Irwin, organist; 8:30-10, concert, Rudy Seiger's Pairmont hotel or chestra.

8:30-10. contert, Rudy Seiger's Fairmont hotel or thesta
KSAC, Manhattan, Kane. (Central, 340.7). 8 p. m., piano voluntary: 8:05. special sacred unusic: 8:10. prayer of affirmation: 8:15. hymn: 8:20. "Common Folks." understanding them 8:35. song of benedleton.
KTHS. Hot Springs National Park, Ark. (Central, (375), 11. a.m., services, First Presbyterian church, Rev. Channey Hickok, pastor; 8:30-10:30 p. accelert, song of benedleton.
KTHS. Harry A. Jones; New Arlington Meyer Davis ensmible, Jack Rehmed, director; 10-11:30, jazz concert, Phil Barter and his singing orchestra.
KYW. Chicago, III. (Central, 635.4), 11 a. m., Central church services, Dr. Frederick F. Shannon; 4-3 p. m., studio concert; 7. Chicago Sunday Evening club, speaker, Bishop Thomas F. Galior.
wBAP, Fort Worth, Texas (Central, 472.9), 11 a. m., services, St. Faul's M. E. church, Rev. C. D. Meadé, pastor; 11-12, midnight frolics, Ted Miller's

WCX, Oetroit, Mich. (Eastern, 516), 7:15 p. m., church

WCX, Oetroit, Mich. (Eastern, 516), 7:15 p. m., church services.
WOAF, Kansas City, Mo. (Central, 411), 4-5 p. m., classical music, Star's orchestra.
WOAF, Kansas City, Mo. (Central, 411), 4-5 p. m., classical music, star's orchestra.
WOAF, Philadelphia, Pa. (Eastern, 395), 2:30 p. m., Arcadia cafe concert orchestra, Ferl Sarkozi, directorie, WEAF, New York, N. Y. (Eastern, 492), 7:20-9:15 p. m., musical program, Roxy and his Gang, Capitol theater; 9:15-10:15, organ recital.
WEAF, New York, N. Y. (Eastern, 334,3), 1 p. m., Philip Splitalny's Allen theater symphony orchestra.
WEBH, Chicago, III. (Central, 370), 5 p. m., twilight musicale; 7-9, scletelet artists program.
WEE, Boston, Mass. (Eastern, 303), 3:45-5:30 p. m., men's conference, Bedford Branch, Y. M. C. A.; 7:20-9:15, "Roxy and his Gang," Capitol theater.
WEMG, Berrien Springs, Mich. (Central, 266), 11-11:20 a. m., Radio Lighthouse choir; 11:30-11:40, Thelma Abel, soprano; Nelva Mundt, contralio; 11:40-712, serimon, Pastor W. R. French; 11:30-11:40, Thelma Abel, soprano; Nelva Mundt, contralio; 11:40-712, serimon, Pastor W. R. French; 15:5-8:40 p. m., Radio Lighthouse choir; 1:40-8:45, Scripture reading, Pastor John Knox; 8:45-8:55, yocal duet, Mrs. Gertrude Hanson, contralio; Mrs. H. B. Taylor, soprano; 8:55-9:25, Bible lecture, Pastor John Knox.
WFAA, Oallas, Texas (Central, 472.9), 6-6:30 p. m., Radio Elbie elass, Dr. William Anderson, pastor; 6:30-7:30, Chrlstian Endeavor Union service; 7:30-8:45, scripture filst church, Dr. George W. Truett, pastor; 9-11, Grace Methodist church male quartet and orchestra.
WFI, Philadelphia, Pa. (Eastern, 395), 4:30 p. m., Central, Y. M. C. A., services; 7:30, Services, Arch

scrvice, First Baptist church, Dr. George W. Tructi, pastor; 9-11, Grace Methodist church male quartet and orchestra.
 WFI, Philadelphia, Pa. (Eastern, 355), 4:30 p. m., Central Y. M. C. A. services; 7:30, services, Arch Street Presbyterian church.
 WGN, Chicago, III. (Central, 370), 11 a. m., Uncle Wait reads the comics to the children; 11:45, program, Chicago theater, twin organ recital, Mr. and Mrs. Jesse Crawford; 2 p. m., organ recital, Lyon & Healy; 3, Tribune Master artist concert, Margaret Anderson, planist; 3:30, program, faculty artists, Chicago Musical college; 9-10, special program, "Sir Edgar Elgar, British Composer," Charles H. Gahriel, Jr.
 WGR, Buffalo, N. Y. (Eastern, 319), 3:4 p. m., vesper service; 4:5, John F. Gunderman, Jr., organist; 7:15, Central Presbyterian church service and organ recital, William Vail Whildit, organist, and Dr. Robert J. WGY, Schenetady, N. Y. (Eastern, 380), 10:30 a. m., First English Lutheran church, Bry, WGY symphony orchestra; Roger H. Stonehouse, soloist; Dr. Frank Sill Rogers, organist; 1:30, envice, Pirst English Lutheran church, WHAS, Louisville, Ky, (Central, 400), 9:57 a. m., organ music; 10, church service, auspices Fourth Avenue Presbyterian church, Rev, Dr. Tharles W. Wehmed, Presbyterian church, Rev, Dr. Charles W. Wehmed, Presbyterian church, Rev, Dr. Charles, W. Wehmed, Presbyterian church, Rev, Dr. Charles, W. Veche, Pirst Line, 10, church service, Stabler, Weither, Massed Presbyterian, Church Serve, Charles, M. V. Wehmed, Presbyterian church, Rev, Dr. Charles, W. Wehmed, Presbyterian, Church Serve, Serve, Stabler, Medo-S. Mutch, Serve, Charles, Y. M. Wehmed, Presbyterian, Church Serve, Charles, S. D. 5, m., M. E. church services; 14, program of dance and popular music, entries of the Serve Serve, Serve,

church services; 12, program of dance and popular music. WHK, Cleveland, Ohio (Eastern, 273), 10:30 a. m., morning services, Old Stone church, Rev. W. H. Foulkes, pastor; 4:30 p. m., vesper service, Cleveland Federated churches, Rev. E. R. Wright, conductor; current religious topics; hymnas, sermon; 7:30, evening service, Epworth-Euclid Memorial church, Rev. Louis Wright, pastor; 9, Conn symphony orchestra, Ralph E. Story, director; Fred W. Hinz, baritone; Roy J. Crocker, pianist; A. E. Clark, trombone soloist; Eliza-beth Weidemann Kelly, soloist. WHN, New York, N. Y. (Eastern, 360.4), 3-4 p. m., Queena County Christian Endeavor program; 5-5:30, Nossland dance orchestra; 5-5:30, Olcott Vail and his string tric; 10-10:45, Gem Razor entertainers; 11-11:30, Vanity club revue; 11:30-12, Connic's Inn revue,



Here are four of the popular WOAI Entertainers of WOAI, San Antonio, Texas, in costume as they sang "In a Persian Garden." They are, left to right, Mrs. Fred Jones, soprano; Charles Stone, tenor; Warren Hull, bass; and Mrs. Guy Simpson, contralto. This Sunday, February 1, they will sing "Gallia."

Jones, soprano; Charles Stone, tenor, warten ratur, basis, and "Gallia."
Crazy hotel orchestra.
WBBR, New York, N. Y. (Eastern, 273), 9:10 p. m., I. B. S. A. choral singers; 9:20, wead duet, Thyra Lundberg, Fred Twaroschk, 19:30, Bible letter, Thyra Hary Richman and his ordestra; 12-12:30 a. m., service, sermon, Dr. C. S. Meddury, wBCN, Chicago, III. (Central, 266), 10:30-12 m., People's Liberal church, Dr. R. A. White, pastor; 4-5, m. chaskel concert, Lain & Son chapet; 5:13-5:15, m. chaskel concert, Lain & Son chapet; 5:13-5:15, wBCN, Chicago, III. (Central, 266), 10:30-12 m., People's Liberal church, Dr. R. A. White, pastor; 4-5, m. on classleal concert, Lain & Son chapet; 5:13-5:15, wear of WTB2, Midway Dancing Gardens orchestra, Rorden brothers; Bobble Mehr.
WCAE, Pittsburgh, P.a. (Eastern, 462), 10:45 a. m., services, Rodef Shalom temple; 3 p. m., People's Madio church service; 4, Prot. Otto Katleis, planist, 6:30, dinner concert, William Penn hotel.
WCAU, Philadelphia, P.a. (Eastern, 278), 5:14 p. m., sacred program, semon, J. J. Thompson, dean of morn accerd program, semon, J. J. Thompson, dean of morn sacred program, semon, J. J. Thompson, dean of morn and chieres Stater, 278), 5:14 p. m., statis Iddel Pennsylvania dinner orchestra, Mirced quartet; bards Iddel Pennsylvania dinner orchestra, Koren, Stater, 273), 5:14 p. m., strictical Religibility, Park, Mither League chaster, strictical Religibility, Park, Stater, 278), 5:14 p. m., statis Iddel Pennsylvania dinner orchestra, Mirced quartet; bards Iddel Pennsylvania dinner orchestra, Mirced quartet; celestial helbs; G. Mason, cornelist; Richard Birk, Mirk, J. D. Thomas, sopranoi WCBO, Zion, III. (Central, 345), 8 p. m., mixed quartet; wither Meteropolis of Mastinic, 7-8, Nathan Abas' Hotel Penn-sylvania orchestra; 7-8, Wather League chaster, strunt, wither Steward, volimists; Mrs. J. D. Thomas, sopranoi we there on services, I. B. M. Lakes, contralto, we W.W. Cincinnati, Ohio (Central, 423), 9:50 a. m.,

Davis Holei Pennsylvania (Innet Orchestra, direction Lon Chassey.
 WCBO, Zion, III. (Central, 345), 8 p. m., mixed quartet; celestial belbs; G. Mason. cornetist; Richard Hire, Sidhey Stewart, violinists; Mrs. J. D. Thomas, soprano; M. P. Barton, tenar; Mrs. P. M. LaRose, contrakto, Erwin Rendah, fluilst; Mrs. Grace Lund, planist; ladles' trlo.

164 trio. 6. Minneapolis-St. Paul, Minn. (Central, 417), 30 a. m., Plymouth Congregational church, Rev. H. Dewey; 4:10 p. m., House of Hope Presbyterlan rech, Rev. H. C. Swearlngen; 7:45, Central Lutheran rech, Rev. J...A. O. Stub; 9:15, classical concert. WCCO,

Emerson, organist; 7-8, waitner League and an error gram. WLW, Cincinnati, Ohio (Central, 423), 9:30 a. m., school, editorial staff of Sunday school publications, Methodist Book concern; 11, services, Church of Coven-ant, Dr. Frank Stevenson, 7:30 p. m., services, First Preshyterian church of Wainut Hills, Dr. Frederick McMillan; 3:30, Western and Southern orchestra, Wil-liam Kopp, director; Dan Beddoe, tenor; Thools Pre-witt Williams, accompanist.

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Sandy Meek is a wandering minstrel o f the air. His voice may be heard Satur-day and Wed-nesday at WQJ, Tuesday at WTAY, Thursday at WGN, and Fri-day at WEBH and WTAY. He sings his own songs.



ekey, planist; Milford Burdsall, tenor; Marldean rresen, baritone; Fern Denicke, accompanist; Oscar Williamson, tenor; Harry Abernathy, accompanist; ck Whalen and Gardner, "Rainbo Greetings" com-

Rick Whalen and Gardner, "Rainbo Greetings" company,
WREO, Lansing, Mich. (Eastern, 288.5), 10 a. m., chimes, Beilry Plymouth Congregational church; 10:30, services, Plymouth Congregational church, Dr. Edwin W. Bishop, pastor; 7 p. m., services, Central M. E. church. Dr. Frank Kingdon, pastor;
WSAI, Cincinnati, Ohio (Central, 325.9), 3 p. m., serromonetic; 3:10, sacred churcs.
WSB, Atlanta, Ga. (Central, 429), 11 a. m., service, Georgia Railway and Power company quartet; 7:30, Memorial church service.
WWJ, Oetroit, Mich, (Eastern, 516), 11 a. m., church services; 2 p. m., the Detroit News orchestra.

## Monday, February 2

Monday, silent night for: CFAC, CFCA, CKAC, CKY, KFDM, KFSG, KJS, KYW, PWX, WBCN, WCAL, WCAU, WEAO, WEBH, WEBJ, WFI, WGN, WHAS, WIP, WJY, WKAQ, WLBL, WLS, WMAQ, WNJ, WOAI, WREO.

Monday, Silent Right, N.S., KYW, PWA, WECA, WECAL, WCAU, WEAG, WEESH, WEEBJ, WFI, WGAU, WCAL, WCAU, WEAG, WLEBL, WLS, WMAG, WHAS, WIP, WY, WKAG, WLEBL, WLS, WMAG, WNJ, WOAI, WHEO.
 CHNC, Toronto, Can. (Eastern, 350), 8:30 p. m., CENCC instrumental trio, Frank Blaehford, violinika; Lionel H. Bilton, cellist; Simeon Joyce, planist; the Schuch singers, Vernon Gearing, Harvey Elinps, Hamilton Hill, Lois Erie Waters, Evelyn Haul, Marion Simons, KAC, Montreal, Can. (Eastern, 425), 1:45 p. m., Windsor hotel trio, 4:30, 1to lessons.
 KOKA, E. Pittsburgh, Pa. (Eastern, 309.1), 7 a. m., morning exercises; O. Shannon; 8, morning exercises; 1:30, children's period; 8, Girl Scout meeting; 8:15, address, University of Pittsburgh, 9:30, concert.
 KFAE, Pullman, Wash. (Eastern, 330), 7:30-9 p. m., Kappa Alpha Theta sovority program; Kathryn Fowier, planist; Geraldine Guertin, soprano; Phyllis Benefiel, planist; vocal solos, Eva LaFollette; group sones; mechanical engineering; talk, Prof. G. B. Thornton; "Masefield's Poetry," Prof. T. M. Raysor; "Rural Wonen and the Past Year," Maud Wilson; book chat, Alie Le Webb.
 KFL, Los Angeles, Calif. (Pacific, 469), 5-5:30 p. m., Evening Herald, table talk and news; 5:30-6, Examiner, musical half hour; 8-9. Evening Herald Hadiolians dnece orchestra; Charlis Melson, tenor; 9-10, program, Walter M, Murphy Motors company; 10-11, Examiner, Ray West's Alexandria hotel orchestra.
 KFKU, Lawrence, Kans. (Central, 275), 6:50 p. m., piano tuning-in number; 7, nutsic; 7:15, Spanish lesson Y; 7:30, basketball game, K. U. vs. Okia U; 8:30-10, seattle Wash. (Pacific, 455), 45:15 p. m., studio music, educational talks, today's recipe; 6:45-815, Sist, Sherman, Clay & Company Program, York Amateur musicale of Yrek, Nebr.
 KFKU, Lawrence, Kans. (Central, 283), 9:30-11 p. m., program, York Amateur musicale of crichstra.
 KFK, Hastings, Nebr. (Central, 283), 9:30-11 p. m., program, York Amateur musicale of Yrek

KHJ, Los Angeles, Calif. (Pacific, 355), 12:30-1:30
p. m., Pijgziy Wirgly girls 'trlo; 8-10, program, El Encanto apartments.
KNX, Los Angeles, Calif. (Pacific, 337), 8 a. m., morn-ing prayer; 9, Hired Hand, news; 10, Hired Hand's morning message; 10:30, home economics, Mrs. Kato Brew Yaughn; 6:30-7:30 p. m., program John A. Lvans corporation of Hacienda Park; 8-10, program, Western Auto Supply company; 10-11, Abe Lyman's Cocoanu Grove dance orchestra from Ambassador hotel.
KOA, Denver, Colo. (Mountain, 322.4), 8 p. m., "My Old Kentucky Home;" KOA orchestra, Lewis H. Chern-off, director; 'Valse in E," Mary Marzyck, pianist; "The Garden of Your Heart," Ina Mac Halns, soprand; Tathhe Freese, tenor; G. Raiph Crowder, accompanist; "At the Spring," "Sonnet," Mary Marzyck, pianist; (Continued on page 11) (Continued on page 11)

# AMERICAN PEN WOMEN MEET AT KPO

## Monday, February 2

#### (Continued from page 10)

(Continued from page 10)
 steetions from "The Mikado," KOA orchestra; "How bet tric, 'Lies," Harry Barris, tenci, "Bite Eyed, "Walting for the Love Light in Your Dyes," "Back in Hackensack, New Jersey," Bue Bell tric, 'Ondo Time in Bernuda, "Bite Bell tric, concert, Denver Lions glee club; 'Medley of of them songs, "Hustlers' March, 'Chaeles H. Speneer; doing with soprano obligato, "The World 1s Walting for the Your Walter's March, 'Chaeles H. Speneer; 'Ning with soprano obligato, "The World 1s Walting for the Your States' March, 'Chaeles H. Speneer; 'Ning with soprano obligato, "The World 1s Walting for the Your States' March, 'Chaeles H. Speneer; by 'O'd Unale Moon," "Mrs. Vinslow's Soothing Syrup, "Drink to Me Only with Thine Eyes," O'linger with 'O'd Valence Moon," "Mrs. Vinslow's Soothing Your, ''O'd Walter, 'Waler, 'Waler, 'You States', ''Alex, ''Alex

P. Barton, tenor; Zion orchestra; euphonium solo, W. C. Dunn; contraito and tenor duct, Mr. and Mrs. Glenn R. Sparrow; Richard F. Hire, violinist; E. B. Paxton, haritone; Miriam Hollingshead, flutist; brass quartet; Mrs. H. E. Mayfield, soprano; Arthur B. Rendall, clarinetist; Hermann Becker, cellist; Fred Faassen organist

Paxton, haritone; Miriam Hollingshead, fiutist; brass quartet; Mrs. H. E. Mayfield, soprano; Arithur B. Rendall, clarinetist; Hermann Becker, cellist; Fred Faassen, organist.
WCCO, Minneapolis-St. Paul, Minn. (Central, 417), 2
p. m., "Among Good Books," Eleanon Poehler; 2:30, matince musicale; 4, magazine hour, excerpts frouture, "Meng Good Books," Eleanon Poehler; 2:30, matince musicale; 4, magazine hour, excerpts frouture, "Dean, V. C. Coffey; 3:30, Twin City Auto show; Art Landry's Victor recording band; style taik, Lucile Babecck; 10:30, dance program.
WCX, Octroit, Mich. (Eastern, 516), 4:15 p. m., musical program; 8:30, musical program.
WOAF, Kansas City, Mo. (Central, 411), 3:30-4:30 p. m., program, Newman and Royai theaters; 5-5:30, weekly Boy Scout program; 6, school of the air; banking taik, C. H. Cheney; request sory night, story lady; Trianon ensemhle; Hotel Muchlebach; 8-9:15, around the town with WDAF; 11:45-1 a. m., Nighthawk/ frolic; the Merry Old Chief and Plantation players.
WOAR, Philadelphia, Pa. (Eastern, 395), 11:45 a. m., daily almana; 12:02 p. m., Stanley theater organ recital; Arcedia cafe concert orchestra; 2, Arcadia cafe concert orchestra; 2, Marcadia cafe concert orchestra; 7:55. "Short Azero-Waes," Chass Schöffner; 8:30, Pottstown micht; 9:30, Stanley theater symphony orchestra, Sydney Lowenterin, director, 10:03, Arcadia cafe dance orchware, violinist; Marcella North, planist; 7:30, Drean Daddy's bedime stories; 7:55. "Short Azero-Waes," Chass Knickerboecker theater.
WEAF, New York, N. Y. (Eastern, 402), 6-7 p. m., dime music. Waklorf-Astoria hotel; Nickerboecker theater.

WHO, Ocs Moincs, Iowa (Central, 522.3), 7:30-8 p. m., Mrs. Robert Finch, contralto; speech, Rev. Muriel Adams; 8-9, classical program, Dean Holmes Cowper, WIP, Philadelphia, Pa. (Eastern, 509.9), 1 p. m., Glmbel tea room orchestra; 6:05, Hotel St, James dinner dance orchestra; 7, Uncle Wip's hedtime stories, daneing lessons, Miller Conservatory of Musie.
WJJO, Mosecheart, III. (Central, 302.8), 3:30-4:30 p. m., music, Moseleart children, assembly; talks; 6:45-7:15, Albert Brown, organist; 7:15-8:15, Novelly orchestra; talk, Ben Oswalt; 11:30-12:30, request organ music, Albert Brown.
WJZ, New York, N. Y. (Eastern, 455) 10:90-10:20 p. m.

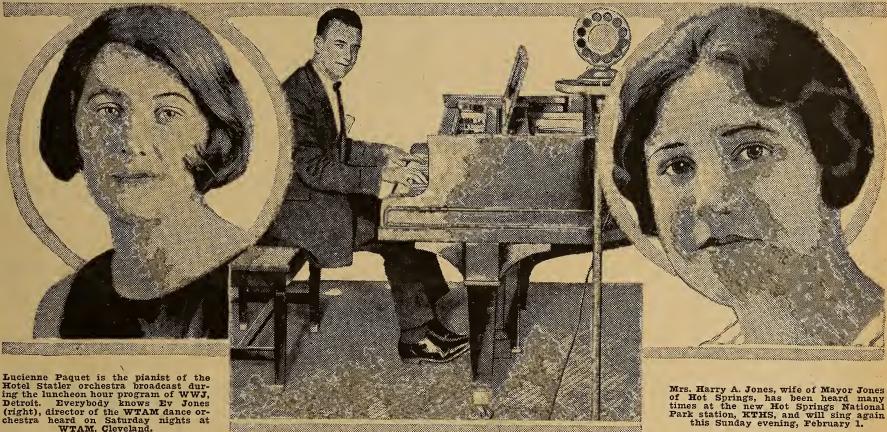
chi, Ben Oswalt, 11:30-12:30, request organ huste, Albert Brown.
W1Z, New York, N. Y. (Eastern, 455), 10:20-10:30 a. m., "Laundry Experience," Mrs. Julian Heath; 10:30-10:40, Home beautiful, Dorothy Ethel Walsh; 10:40-10:50, Ialk, John C. Cutting of Meat Council of New York 10:50-11, fashion talk, Eleanor Gunn; 1-2 p. m., Henry Yander Zanden's Hotel Ambassador trio; 4:30-5:30, Fred Hall's. Royal Terrace orchestra; New York Stoch Exchange reports, Evening Post News; 7-8, Bernharc Levitow's Hotel Commodore dinner concert; 8-8:10, Wal Street Journal review; 8-10-8:30, "American History," N. Y. U. Air college, Dean M. S. Brown; 10:45-11:45, Jacques Green and his Club Deauville orchestra with Clark's Hawaiians.

Clark's Hawaiians.
WLS, Chicago, III. (Central, 345), 12-1 p. m., R. F. D. program: unusic numbers, George Simons, tenor; 3:45-4:45, homemakers' hour, music.
WLW. Cincinnati, Ohio. (Central, 423), 8 a. m., physical exercises, Y. M. C. A., Win. Stradtman, instructor; 12:15 p. m., Williamson revue and entertainwent; 6, dinner hour concert, Selinsky Instrumental quintet; 8, Times-Star program, Indra Consistory Choir of Covington, Ky., J. Lincohn Newhall, director; Erich Sorantin, celebrated Viennese violinist; Lyrie male quartet, Howard Evans, director; Howard Hafford, tenor; entertainment, the Raganutfins from Liberty theater, Covington, Kentucky.

## **Tuesday**, February 3

Tuesday, silent night for: CHNC, KFAE, KFKY, KFNF, KOA, KOE, PWX, WAHG, WBAV, WBBG, WBBR, WCAL, WCBO, WCCO, WEAO, WEMC, WHO, WOC, WOI, WOO.
CFCA, Toronto, Can. (Eastern, 400), 8:15 p. m., "The Romance of Science," Dr. E. F. Burton.
CKAC, Montreal, Can. (Eastern, 425), 7 p. m., kiddics' storices in French and Enelish; 7:30, Windsor hotel dliner concert, Harry Salter, director; 8:30, studio variety program; 10:30, Windsor hotel dance program, Ben Leonard; 12, frolics.
CKY, Winnipen, Can. (Central, 450), 7:30, n. m.

variety program; 10:30, Windsor hotel dance program. Ben Leonard; 12, frolies.
CKY, Winnipeg, Can. (Central, 450), 7:30 p. m., university lecture; 8:15, concert, "Toe H;" 9, half-hour program, Capitol thcater; 9:30, Roseland dance gardens.
KDKA, E. Pittsburgh, Paz, (Eastern, 309.1), 12:20 p. m., Institute from the Trinity church; 6:15, dinner concert; 7:30, children's period; 8:30, concert; 11, conrert, Pittsburgh Post studio.
KFDM, Beaumont, Tex. (Central, 315.6), 8 p. m., musical concert.
KFI, Los Angeles, Calif. (Pacific, 469), 5-5:30 p. m., Evening Herald, table talk and news; 5:30-6; Ex-aminer, musical half hour; 6:15-7, speaker; 7-8, pro-gram, Hills Brothers company; 8-9, Acollan residence, pipe organ recital, Dan McFarland, organist; 9-10-11, Examiner, program arranged by Jane of the Ex-aminer; 10-11, Packard ballad hour.
KFOA, Seattle, Wash. (Pacific, 455), 4-5:15 p. m., Olympic hole concert corchestra; today's recipe; 6:25-8:15, Rhodes' Department store program; 8:30-10, Seattle Times orchestra; 10:05-11, Olympic hotel concert orchestra; 10:05-14, Suprogram; 4:30-10;



Lucienne Paquet is the pianist of the Hotel Statler orchestra broadcast dur-ing the luncheon hour program of WWJ, Detroit. Everybody knows Ev Jones (right), director of the WTAM dance or-chestra heard on Saturday nights at WTAM, Cleveland.

- tra; 8-9, Theodore J. Irwin, organist; talk on rythm, Hazel Johnson, soprano; 9-10, old ballad night, Mrs. Lessor, pianist; Mrs. Mark, contralto; T. Shawyder, accompanist; Theodore J. Irwin; Victor Vogel, hass; Fawn Post Trowbridge, soprano; 10-11, E. Max Brad-field's Versatile band.
- field's Versatile band. (SAC, Manhattan, Kans. (Central, 340.7), 9 a. m., march; 9:02, music lesson; 9:07, music for singing exercises; 9:15, inspirational talk; 9:20, calisthenics; 10, back yard gossip; 10:05, all around the house; 10:20, "Suggestions for Today's Meals," Amy Kelly; 12:30 p. m., readings, Osceola Hall Burr; "Legume as a Feed," J. W. Linn; "Plans for Summer Pasture," A. W. Knott; 7:20, college beil and quartet; 7:30, Spotted Poland China, Hampshire and Berkshire Breeds," J. B. Fitch. SD. St. Louis Ma (Contral 5001), "
- Records," J. B. Fitch. Records," J. B. Fitch. KSD, St. Louis, Mo. (Central, 549.1), 7 p. m., music, Missourl theater; 9. Grand Central theater; 10:45, studio recital, Mrs. Evelyn Fraley, seprano; Lila Harrison Cantor, pianist. KTHS, Hot Springs National Park, Ark. (Central, (375), 8:30-10 p. m., Hot Springs artists; 10-11, concert, Charles L. Fisher and his 11-piece Eastman hotel or-chestra
- Charles L. Fisher and his 11-piece Eastman hotel or-chestra. KYW, Chicago, III. (Central, 535.4), 6:30 a. m., morning exercises; 11:35, table talk, Mrs. Anna J. Peterson; 6:35-7, children's bedtime story, Uncle Bob. WAHG, Richmond Hill, L. I. (Eastern, 316), 8-8:30 p. m., Gordon's orchestra; 8:30-8:45, Emery Deutsch, violinist; 8:45-9, Jean Gordon, soprano; 9-9:10, St. Valentine of WAHG; 9:10-9:45, Synchrophase string tric; 9:45-10, Irving Firstenberg, pianist; 10-10:10, Emery Deutsch, violinist; 10:10-10:20, Jean Gordon; 10:20-10:35, Bessie Leihowitz, pianist; 10:35-11 Syn-chrophase string tric; 12-2 a. m., special midnight dance program.
- 10:20-10:35. Bessie Lethowitz, pianist; 10:35-11 Syn-chrophase string trio; 12-2 a. m., special midnight dance program.
  WBAP, Fort Worth, Texas (Central, 472.9), 12:05-12:30 p. m., musical program; 7:30-8:30, dance music, Frens-ley Moore's Black and Gold Screnaders; 9:30-10:45, musical program, Montsomery Ward and company en-tertainer; 12-1 a. m. popular dance music, Swayne's southern seconders.
  WBAY, Columbus, Oho (Eastern, 233.9), 8 p. m., WBAV Golumbus, Oho (Eastern, 233.9), 8 p. m., WBAV Gels, Mattapoiset, Mass. (Eastern, 243), 8 p. m., Blinnore orchestra.
  WBER, New York, N., Y. (Eastern, 243), 8 p. m., Syrtan Orlenial music, Touffe Mouhaid Elizaneth Awad; 8:10, Irene Kleinneter, soprano; 8:20, world news di-gest, editor of Golden Are magazine; 8:40, Irene Kleinneter, soprano; 8:45, Syrian Oricntal music, Tuoine Moubaid, Elizabeth Awad.
  WBCN, Chicago, 'III. (Central, 266), 6-6:30 p. m., juvenile period, Lucila Drew Wilson, director.
  WCBO, Zion, III. (Central, 245), 8 p. on., special dedi-catory Itadio program for new high-power station; Zion choir; Meditory saxopione quintet; trio, violin, viola, piano, itichard F. Hire, Mrs, and Mrs, L. J., Hire; soprano and contrako duet, Mrs. J. D. Thomaa, Mrs. P. M. LaRose; Carl Newcomer, gaxophonist; M.

 WEAR, Cleveland, Ohio (Eastern, 364.3), 7 p. m., musl-cal program, Loew's State theater.
 WEEL, Boston, Mass. (Eastern, 303), 6:30 p. m., Boston Edison Big Brother club; 7, Dok-Eisenbourg and his Sinfonians; 8, Louise Noera, mezzo-soprano; 8:15, Manuel Silveira, pianist; 8:30, Buddy's Bostonians; 9:30, Mendelssohn Choral Union, C. F. Woods, director.
 WMAQ, Chicago, III. (Central, 447.5), 4 p. m., mothers in council, Mrs. Frances M. Ford; 6, Chicago theater organ recital; 6:30, Hotel LaSalle orchestra.
 WMAQ, Chicago, III. (Central, 447.5), 4 p. m., mothers in council, Mrs. Frances M. Ford; 6, Chicago theater organ recital; 6:30, Hotel Carlos Meier, organist.
 With Council Contral Union, C. F. Woods, director. WEMC, Berrien Springs, Mich. (Central, 286), 8:15-9:15
 p. m., program, Dixie men and women, Emanuel Missionary college.

9.30, Mendelsson, Choral Union, C. F. Woods, director,
WEMC, Berrien Springs, Mich. (Central, 1286), 8:15-9:15
p. m., program, Dixie men and wonen, Emanuel Missionary college.
WFAA, Oallas, Texas (Central, 472.9), 12:30-1 p. m., address, Judge Charles F. Greenwood; 6:30-7:30, vesper musicale, Buddy's Blue Melody hoys; 8:30-9:30, Marnolia Petroleum company's Dallas band.
WF, Philadelphia, P.a. (Eastern, 395), 1 p. m., Meyer Davis Bellevue Stratford orchestra concert orchestra; 3, talk, Dovlestown Library company, Gubble quartet, Swarthmore Women's cluh; 9:30, 49:30, Marnolia Petroleum company's Dallas band.
WF, Philadelphia, P.a. (Eastern, 335), 1 p. m., Meyer Davis Bellevue Stratford concert ensemble, Blackstone string quintet; 2:30, artist series, Lyon & Healy; 3, rocking chair time; 5:30, Steelix time for the children; 6, organ recital, Lyon & Healy; 6:30-7; dinner concert. Drake concert ensemble, Blackstone string quintet; 2:30, artist series, Lyon & Healy; 3, rocking chair time; 5:30, Steelix time for the children; 6, organ recital, Lyon & Healy; 6:30-7; dinner concert. Drake concert ensemble, Blackstone string quintet; 1:00-10, and 1:00, 2:5, 2:00, 3, Radio Dealers' program; 6:30-7; 30, dinner music, Vincent Lopez Hotel Statler concert; 8:25-8:40, Francis Bushten; Yatger Peirce, pianist; 8:40-8:55, Erich Hechter, violinds; Norman F. Taier, pianist; 9:10, Hewitt Ruhher company concert, direction of Jack Brindley; 10-11, Robertson Cataract company concert, direction of A. J. "Al" Erisman; 11:30, supper dance music, Vincent Lopez Hotel Statler dance orchestra, Harold Gieser, director.
WHA, Madison, Wis, (Central, 535, 5:4, 7:45 p. m., Mary Watts, violinist, pianis, "Alegro Brilliante," "Carving," Gavotte; Mary Metkritch, Contral, 400, 4-5 p. m., elections, Alamo theater organ.
WHA, Katison, Wis, (Central, 400, 4-5 p. m., elections, Alamo theater organ.
WHA, Katison, Wis, (Central, 535, 5: "The Cfulnial and the Napanch Plan," Watt

program, O. K. Houck Plano company; 8 p. m., bcd-director; 11:15-12 midnight, L. Carlos Meier, organist, time story, Uncle Jerry; 8:30, Hotel Gayoso orchestra. (NYC, New York, N. Y. (Eastern, 528.8), 7-7:30 p. m., Harry Ash and his Royal orchestra; 7:35-7:40, health talk; 7:40-8:15, Harry Ash and his Royal orchestra; 8:15-9:25, vocal and instrumental reclutis; 9:25-10:30, Riesenfeld's Rialto theater; 10:35-10:40, Trend of Times, Dr. Sydney Neville Usher.

Times, Dr. Sydney Neville Usher. WOAW, Omaha, Nebr. (Central, 522.3), 6 p. m., Arthur Hays, organist; 6:45, Pat's Melody Boys; 9:30, concert program, 17th U. S. Infantry hand, Herman Wehel, bandmaster. WOC, Oavenport, Iowa (Central, 498), 7:20 p. m., "Function of the Liver." K. G. Stephan; 8, Troy Laundry Machine company band; Nora Jorgensen, plan-iste; 10, W. R. Van Allen, reader; Black and White string trio. WOI, Ames. Iowa (Central, 270), 19:20 p. m.

WOI, Ames, Iowa (Central, 270), 12:30 p. m., college chimes; 10, program, popular music.

WOI. Ames. Iowa (Central, 270), 12:30 p. m., college chimes; 10, program, popular music.
WOO. Philadelphia, Pa. (Eastern, 509.9), 11 a. m., organ recital, Mary E. Vogi; 12:02 p. m., Wanamker crystal tea room orchestra, Robert E. Golden, director; 1:45, organ recital, Mary E. Vogi; 12:03 A. Candelorl's Fronch Room ensemble, Hotel Adelphia; 8:25, concert, Fox theater studio; 9:30, WOO orchestra; 10:03, Willam Bove's Royal Paim dance orchestra; 10:30, Vincent Rizo's Hotel Sylvania dance orchestra; WOR, Chieago, III, (Central 448), 11:12, content Rizo's Hotel Sylvania

orchestra. WQJ, Chicago, III. (Central, 448), 11-13 m., home eco-nomics, Helen H. Downing; "Ice Cream Gossin," L. L., Jones; "Antiseptics," Madeline Gregory; "Ladles' Colffeures for 1925," Leon Tryon; 3-4, "Carefully Planned Breakfasts," Helen H. Downing; "Care of the Hair," Madame Huntingford.

the Hair," Madame Huntingford.
WSAI, Cincinnati, Ohio (Central, 325.9), 10 p. m., songs, Malle and Stept; Cliff Burns' Country etbo orchestra.
WSB, Atlanta, Ga. (Central, 429), 12 m., entertainment; 5-6 p. m., songs and hedtime story, Bonnie Barnhardt; 8-9, Elk Royal Purple band; 10:45, Warner's Seven accs.

accs.
WTAM, Cleveland, Ohio (Eastern, 364), 6 p. m., Guy Lomhardo's Royal Canadians orchestra; 8, studio pro-gram.
WWJ, Detroit, Mich. (Eastern, 516), 8 a. m., setting-up exercises, R. J. Horton; 9:30, tonight's dinner; 12 m., Jules Klein's Statler orchestra; 6 p. m., Jules Klein's Statler orchestra; 7, the Detroit News orchestra; Stanley Perry, tenor; Ina M. Lockhart, contralto...

KFQX, Seattle, Wash. (Central, 238), 6:30-7:15 p. m., news; 7:15-8, bedtime story, Aunt Yivien; 8-9, Earl Gray and Hotel Butler orchestra; 9-10, concert hour; 10-11, Earl Gray and his orchestra; 0-10, concert hour; 10-11, Earl Gray and his orchestra; KFSG, Los Angeles, Calif. (Pacific, 278), 10:30-11:30 a. m., sunshine hour; 3:30-4:30 p. m., organ recital, Esther Fricke Green and assisting artists; 6:30-7:30, children's hour, Harry James Beardsley (Cousin Jim) and others.

bestner Fricke Green and assisting artists; 6:30-7:30, cilidren's hour, Harry James Beardsley (Cousin Jim) and others.
KGO, Oakland, Galif. (Pacific, 312), 11:30 a. m., luncheon concert, Pacific States Electric company; 4-5:30 p. m., concert orchestra, Hotel St. Francis; 8, Sciots minstrels, Arthur C. Toft, director; 10-1 a. m., dance music, Harry Halskead's orchestra.
KGW, Portland, Orc. (Pacific; 455.1), 12:30 p. m., concert; 5, children's program, story, Uncie Dave; 8, lecture, Oregon Asricultural college extension service; 3:30, concert; 10, Multinomah hotel strollers.
KHJ, Los Angeles, Calif. (Pacific, 355), 12:30-1:30 p. m., Major and his Forum Roof orchestra; 6-6:30, Art Hickman's Biltmore hotel concert orchestra. Edward Fitzpatrick, director; 6:30-7:30, little stories, American history, Prof. Walter Sylvester Hertzog; weekly visit of Queen Titana; Sandman of Fairyland; Louis F. Klein, auto-harp and harmonica soloist; Uncile John; 8-10, program, Globe fee Crean company; 10-11, Earl Burtnett's Biltmore hotel dance orchestra.
KJS, Los Angeles, Calif. (Pacific, 327), B-9:30 p. m., program of vocal and instrumental numbers, members of the Church of the Open Door, Dr. Book, director.
KNX, Hollywood, Calif. (Pacific, 337), 8 a. m., mon-

rector. The online of the open plot, pl. poor, pl. poor, of KNX, Hollywood, Calif. (Pacific, 337), 8 a. m., morn-ing prayer; 9, State Board of Education musical pro-gram for schools; 10, Hired Hand's morning mess-sage; 10:30, Mrs. Kate Brew Vaughun, home eco-nomics; 5:30, Town Crier and Village Urchins; 6, sport taik; 6:30-7:30, program sponsored by R. C. "Cilfi" Durant; 8-9, program, Peerless Products com-pany; 10-11, feature program; 11-12, Abe Lyman's Cocoanut Grove dance orchestra from Amhassador hotel.

Chin Dutain, 5-5, program; 11-12, Abe Lyman's Cocoanut Grove dance orchestra from Amhassador hotel.
 KOA, Denver, Colo. (Mountain, 322.4), 3 p. m., "When Song Is Sweet," "Rejoice Greatly from the Messiah," Olive Riley, soprano; "How Everything Started." "Courtship of Miles Standish," Iris Ruth Parey, reader; piano solos, Bonnie Veeder.
 KPO, San Francisco, Calif. (Pacific, 423), 7 a. n., daily dozen; 10, town erier; 10:15, "What Is Playing at the Various Theaters;" 1-2 p. m., Rudy Seiger's Fairmont hotel orchestra; 5:30-6:30, children's hour stories, Big Brother of KPO; Natalie Heyman, cellist; 7-7:30, Rudy Seiger's Fairmont hotel orchestra; 5:30-6:30, children's hour stories, Big Brother of KPO; Natalie Heyman, cellist; 7-7:30, Rudy Seiger's Fairmont hotel orchestra; 5:30-6:30, children's hour stories, Big Brother of KPO; Natalie Heyman, cellist; 7-7:30, Rudy Seiger's Fairmont hotel orchestra; 5:30-6:30, children's hour stories, Big Brother of KPO; Natalie Heyman, cellist; 7-7:30, Rudy Seiger's Fairmont hotel orchestra; 5:30-6:30, children's hour stories, 9:15, Inspirational talk; 9:20, cellisthenics; 10:0, ougestion and answers; 10:20, "Suggestions for Today's Meals," Amy Kelly; 12:30 p. m., Oscoola Hail Burr, reader; "Seed Experiences," H. R. Sunner; 7:20, colloge beil and music; 7:30, "Yaricles of Atfalfa," S. C. Salmon; 7:40, music, Mrs. G. W. (Continued on page 12)

(Continued on page 12)

### The National Broadcast Authority-RA

# CHIC, NEW TORONTO STATION, HA

## Where to Hear Concerts

Central Standard Time

 $T_{\rm viding}^{\rm HESE}$  are the stations for music lovers to dial, and you can hear, providing you dial correctly and read the programs carefully, everything from jazz to opera.

from jazz to opera. Saturday, January 31: 6, KGO, WEAF, WLW, WRC: 6:30, CHIC, CKAC, KFNF, WBZ, WBCN, WDAF, WGN, WGY; 6:35, WNYC; 6:45, WJZ; 7:20, WLS; 7:30, CKAC, KDKA, PWX. WCAE, WFI, WGR, WHAS, WEAF; 7, KYW, WBBR; 7:15, WJJD, WHN, WNYC, WOR; 7:45, WBBR, WRC; 8, KHJ, KSD, KYW, WGN, WSAI; 8:10, WHN; 8:15, WOR; 8:30, KTHS, WEAF, WFAA, WJZ, WMC, WOR; 8:45, KFOA: 9, KNX, WMAQ; 9:30, KTHS. WEAF, WOAW; 9:35, KYW; 10, KFI, KGO, KHJ, KNX, WQJ; 10:30, KFOA: 10:45, WSE; 11, KFQX, KGO; 11:15, WLS; 11:30, WOAW; 12, WCAL.

OAW; 12, WCAL. Sunday, February 1: 6:20, WEAF, EEI; 6:30, WLS; 7, KYW, WBCN, LS, WREO; 7:30, WBZ, WJZ; 8, SAC, WBCN, WCBD, WGY, WHK, NYC; 8:10, WBBR; 8:15, WEAF, EMC; 8:30, KTHS, WBZ, WCAL, IP; 8:45, WEMC; 9, KFI, KGW, HJ, WBBR, WFAA, WGN, WGY, OAW; 9:15, WCCO; 9:30, KTHS, OAI, WOC; 10, KFI, KHJ, KNX; :30, KPO; 11, KNX; 12, KFSG, WHB

Monday, February 2: 6, WEAR, VGN, WIZ, WMAQ; 6:15, WEAF, VGN, WIZ, WMAQ; 6:15, WEAF, 30, KFNF, WFAA, WGN, WOO; 45, WJJD; 7, KSD, WBBG, WBBR, VCAE, WEEI, WGY, WHB, WTAM; 15, WEEI WNYC, WOR; 7:20, SAC; 7:25, WGR, WOO; 7:30, CHNC, ODKA, KFI, WAHG, WEZ, WDAR, VHO; 7:45, WHA; 8, WAHG, WEZ, VCAE, WCBD, WDAF, WGR, WHO, VC, WSE: 8:10, WAHG; 8:15, VEMC; 8:25, WNYC; 8:30, KNX; CTHS, WCCO, WDAR, WEEI; 8:45, CFOA, WAHG; 9, KOA, KOB, KSD, VAHG, WCAE, WCBD, WGR, VOAW; 9:20, WAHG; 9:30, KFAE, CFKX, KTHS, WBAP; 9:35, WAHG; 0, KGW, KHJ, KNX, KPO, WCAE, VCBD, WOC, WOI, WSAI; 10:30, CFOA; 10:45, KSD; 11, KFI, KFQX, VJJD. WJJD.

KPO, WCBD; 11:15, WHO; 11:30, WJJD.
Tuesday, February 3: 6, KGO, KSD, WGN, WMAQ; 6:25, WOAW;
6:30, CKAC, WCCO, WDAF, WFAA, WGN, WLS, WMAQ; 6:45, WJJD;
7, KYW, WBCN, WCAU, WEHN, WEBJ, WEAF; 7:15, CKY, WCAU, WEHN, WGY, WIP, WJJD, WKAQ, WLS;
7:20, KSAC; 7:25, WJZ; 7:30, CKAC, KDKA, KFI, WBAP, WCAE, WEAF; WHAS, WSAI; 8, CKY' KFD, KHJ, KYW, WBCN, WCAE, WEAF, WEAR, WHEI, WFI, WGN, WGA, WAS, WSAI; 8:30, KGW, KNX, KTHS, WFAA, WMC, WNYC, WOAI;
8:45, CFAC, KFOA, KYW; 9, KFI, KSD, WCAE, WEAH, WGY, WHN, WJY, WLS, WSAI; 9:15, WMAQ; WREO; 9:30, WBAP, WJY, WOAW;
10, KDKA, KFI, KGO, KHJ, KJS, KNX, KPO, KSD, KYW, WQJ; 10:30,

KPO, WGY; 11, KFI, KFQX, WEBH, WFAA; 12, KNX, WLS.

WFAA; 12, KNX, WLS. Wednesday, February 4: 6, KGO, WGN, WKAQ WMAQ; 6:30, KFNFF, WDAF, WGN, WHO, WKAQ, WLS, WOO, WTAY; 6:45, KSD, WCAE, WJJD; 7, KYW, WBBR, WBCN, WEZ, WCAU, WEAO, WEBH, WHB, WQJ, WTAM; 7:15, WEEI, WGR, WJJD; 7:30, KDKA, KFI, WBZ, WCAE, WCAU, WHAS, WHO, WOO; 7:40, WBBR, WLS; 7:45, WHA; 8, KHJ, KSAC, KYW, WBCN, WDAF, WEEI, WGN, WOC; 8:15, WBZ, WEEMC; 8:30, WFSG, KNX, KTHS, WEAM, S:45, CFAC, KFOA; 9, KOA, KYW, WCCO, WEBH, WEEI, WHO, WLS, WMAQ, WTAY; 9:15, WTAY; 9:30, KFAE, KFI; 9:45, KYW; 10, KGW, KNX, WEEI, WLS, WNJ, WQJ; UO:30, KFOA, KHJ, KYW; 11, KFI, KFQX, KNX, WEBH; 11:30, KYW; 12, WBAP, WTAY; 12:30, KYW; 2, KYW. Thursday, February 5: 6, KGO

KYW; 2, KYW. Thursday, February 5: 6, KGO, WEAR, WEEI, WGN, WMAQ; 6:15, WTAY; 6:30, KFNF, WCCO, WQJ, WDAF, WFAA, WGN, WLS, WMAQ, WTAY; 6:45, WCAE; 7, CKY, KDKA, KYW, WBCN, WEAF, WEAR, WEBH, WEEI, WGY, WHK; 7:20, WLS; 7:30, CKAC, KDKA, KFI, WBAP, WCAE, WHAS, WJZ, WNYC; 7:45, WHA, WJY, WOR; 8, KHJ, KSAC, WBCN, WCBD, WCCO, WEAF, WFI, WGN, WHE; 8:10, WBBR; 8:15, WOI, WOR, WREG; 8:30, KNX, KTHS, WFAA, WMAQ, WMC; 9, WBBR, WCAL, WEBH, WHN; 9:05, KYW; 9:30; KFI, KFKX, WBAP, WOAW; 10, CFAC, KDKA, KFI, KGO, KHJ, KJS, KNX, KPO, KYW, WQJ; 10:30, WGY; 10:45, WSB; 11, KFI, KNX, KPO, WEBH, WFAA; 11:15, KFSG; 11:30, KHJ.

KNX. KPO, WEBH, WFAA; 11:15,
KFSG; 11:30, KHJ.
Friday, February 6: 6, KCO,
WEAR, WEBJ, WGN, WJZ, WMAQ;
6:30, KFNF, WCCO, WEEI, WFAA,
WGN, WLS, WMQA, WOO, WTAY;
6:45, WJJD; 7, KYW, WAHG, WBAV,
WBCN, WCAU, WEAR, WEBJ,
WHAF, WEEI, WHB, WOR, WQJ;
7:15, WGR, WJJD, WLS; 7:25,
WAHG, WOO; 7:30, CNRT, KDA,
KFI, WBAP, WCAE, WDAR, WEBJ,
WHAS, WJY, WNYC, WOR; 7:40,
WJZ; 8, CFAC, CKY, KFDM, KHJ,
KSD, WAHG, WBCN, WCCO, WDAF,
WEAF, WGN, WGR, WMAQ, WSE;
8:15, WEMC; 8:30, KNX, KTHS,
WDAR, WFAA, WMAQ, WMC; 8:45,
KFI, KFOA, WAHG; 9, KOA, KTHS,
WOR; 9:10, WHN; 9:15, WMAQ; 9:30,
KFAE, WAHG, WBAP, WOAW: 10,
KHJ, KNX, WLS, WNJ, WQJ; 10:30,
KFOA, I0:45, WSE; 11:30, WJD; 12, KFI,
KFSG, KNX, KYW; 1, KYW; 2, KYW.

## **Tuesday**, February 3

## (Continued from page 11)

ry; 7:50, "Artificial Method and Some Prob-Overcome." L. F. Payne. Louis, Mo. (Central, 549.1), 6 p. m., Benja-ider's orchestra; 9, studio reeltal, E. T. Trovo; Dr. A. G. Poliman; 10, Mrs. F. Ingalls, ; F. Ingalls, harltone; Mrs. Frank Neal,

Hot Springs National Park, Ark. (Central, (375), 0 p. m., concert, Eastman hotel ensemble, Charles

- Kyön b. B., toberte and a status in the status of the status of
  - association of Fort Worth; 9:30-10:45,
- Tacturers' association of Fort Worth; 9:30-10/34, Mc-Dowell sixtes.
  WBCN, Chicago, III. (Central, 266), 6-6:30 p. m., ju-venile period, Buella Drew; 7-8, classical program, David Crueger, violinist; R. F. Slins, tenor; Mrs. Muldey, reader; Victoria Swanson, planist; Harold Cone, reader; F. E. Hathaway, baritone; Ady May Hathaway, violinist; 8-8:30, popular program, Harry Bundy; F. E. Hathaway, harltone; George Forsyth, tenor; Midway Danelng Gardens orchestra; 8:30-9, Walton School of Commerce program, 9-10, Wonderland Wonder orchestra; 10-12, popular program, Flinney Brace, reader; Famous Four, F. H. McDonald, A. M. William, soprano; Will Rossiter's Melody Girls, Al Phillips, tenor; Buster Graves, hoy soprano; Blanch Icohinson, planist; Alex Santry, tenor; 12-1, Plrate ship.
- MCAE, Pittsburgh, Pa. (Eastern, 462), 8:30 p. m., dinner concert, William Penn hotel; 7:30, Uncle Kay-hee; 7:45, address; 8:30, Stephen Sutch, planlat; 9, Eveready hour; 10, concert, Goodrich Silvertown Cord
- CAL. Northfield, Minn. (Central, 337), 9:45 a. m., St. Olaf college chapel services.
- St. Olaf college chapel services.
  WCAU, Philadelphia, Pa. (Eastern, 278), 6 p. m., Meyer Davis Hotel Pennsylvania dinner dance orches-tra; 7, serics of short talks; 8, reeltal; 8:15, Meyer Davis Hotel Pennsylvania concert trio. Minneapolls-St. Paul, Minn. (Central, a. m., "The Recipe Exchange," Betty Cri
- a. m., The Recipe Exchange," Bet 1., woman's hour, League of Women ne hour, "A Special Purpose;" 5:30, Mrs. Charles Ramsdell; 6:30, dinn ath trio; 7:30, leeture, "Personal

and Credits on Independent Income Tax Returns," J. A. McHardy; 7:45, current events, W. P. Lemon. WCX, Detroit, Mich. (Eastern, 516), 4:15 p. m., musl-cal program; 8:30, musical program; 10, the Red Apple

 McBatuy, 1:49, culterin events, W. 1. Benton, WCX, Detroit, Mich. (Eastern, 516), 415 p. m., musl-cal program; 8:30, muslcal program; 10, the Red Apple club.
 WDAF, Kansas City, Mo. (Central, 411), 3:30-4:30
 p. m., Star's Radio trio; 5:530, weekly child talent program, arranged by Florence M. Woodward, Missour Federation Music clubs; 6-7, plano tuning-in number on Duo-Art; Tell-Mea-Story Lady; Radio trio; 5:40, weekly child talent program, arranged by Florence M. Woodward, Missour Pederation Music clubs; 6-7, plano tuning-in number on Duo-Art; Tell-Mea-Story Lady; Radio Woodward, Philadedphia, Pa. (Eastern, 395), 11:45 a. m., Nirhthawk frolle, Newman theater.
 WDAG, Philadedphia, Pa. (Eastern, 395), 11:45 a. m., dely almanae; 12:02 p. m., Stanley theater organ cafes concert orchestra; 2, Arcadia cafe concert orchestra; 2, Arcadia cafe concert orchestra; 2, Arcadia cafe sonoration, Marcella North, Scound Harley Krips, soprano; Marcella North, Scound Harley Krips, Soprano; Marcella North, Scound, Harley Chias, 49, 6-7, p. m., dinner musie, Waldorf-Astoria huel; 7:50, play rolew, Armold Abi, 7:30, Dream Daddy; 7:50, play rolew, Armold Abi, 7:30, G. Gid Dust Twins; 9-10, ''Eveready Hour;'' 10-11, Silvertown Cord orchestra under Joseph Knecht.
 WEAF, Cleveland, Ohio (Eastern, 364.3), 7:30, p. m., E. C. Bacon, bedtime story; Radlo carioon talk. Don Palmer; 8, Welsh male chorus, W. A. Hughes, director; 10, Joe Smith-Martha Lee club dance program from Martha Lee club rooms, WEBH, Chicago, III. (Central, 370), 7-8, p. m., Oriole concert orchestra; Pat Barnes, tenor and reader; Riviera treater; 9-10, Radlo Age program, Dennis Sisters, Cougle, accompanist; Oriole dance orchestra; 8-8:15 Minna Wessel, soorano; 8:15-9, May Singhi Breen and her Syncopaters.
 WEBH, New York, N. Y. (Eastern, 233), 7-8, p. m., Paul to and his Til Say She Is orchestra; 8-8:15 Minna Wessel, soorano; 8:15-9, May Singhi Breen and her Syncopaters. her Syncopaters. WEEL, Boston, Mass. (Eastern, 303), 2 p. m., Paul Davier and his orchestra; 6:30, Boston Edison Big Brother elub; 7, Dok-Elsenbourg and his Sinfonians; 8, program, New York studio; 9, Everady hour; 10, Goodrich Silvertown Cord orchestra.

WFAA, Dallas, Texas (Central, 472.9), 12:30-1 p. m., address, Charles E. Oshorne; 6:30-7:30, vesper muci-cale, Tommy's Texans; 8:30-9:30, Tom D. Collins and the mandolin and guitar club; 11-12, Dwight Brown, organist

Weinsteelen and gutat (the), 11-12, Dwight Brown, organist.
 VFI, Philadelphia, Pa. (Eastern, 395), 1 p. m., Meyer Davis Bellevue Stratford concert orchestra; 3:05, Carolino Hoffman, planist; 6:30, Meyer Davis Bellevue Stratford concert orchestra; 7, Sunny Jin; 9, Eveready hour; 10, Goodrich Silvertown Cord orchestra.
 (CAN, Chicago, III. (Central, 370), 1:30 p. m., luncheon concert, Drake concert ensemble, Blackstone string quintet; 2:30, artist series, Lyon & Healy; 3, rocking chair time; 5:530, Skeezix time for the children; 6, organ reetial, Lyon & Healy; 6:30-7, dinner concert, Drake concert ensemble, Blackstone string quintet; 8-11, De Wolf Hopper at Great Northern thecater.
 /GR, Buffalo, N. Y. (Eastern, 319), 11:30 a. m., Mrs. Katherine Norton Britt, home conconcert ensemble; 2:30-4:30, Radlo Dealer's program; 6-7:30, dinner

music, Halipryd string quartet; 9-10, Eveready hour; 10-11, Goodrich Silvertown Cord orchestra.
WGY, Schenettady, N. Y. (Eastern, 380), 2 p. m. music and talk; 6:30, dinner music, Hotel Ten Eyck trio; 7:45, "Income Tax," J. F. Zoller; WGY or-chestra; "Romance." Giotanni Troublini, cellist; 8:15, "Mirs. Wiggs of the Cabbage Patch." WGY players; 10, Brunswick Hour of Music, first national musicul memory contest, WJZ, WRC, KDKA, KYW, KDFXN; 11:30, Stophen E. Bolsclait, orranist.
WHA, Madison, Wis. (Central, 535.4), 8 p. m., "Being Friends wild Animals," Dr. A. S. Aloxander.
WHAS, Louisville, K.; (Central, 400), 4-5 p. m., scien-tions, Alumo theater orsan; 7:30-9, concert, Carl Zooffers Moloists; a chapter of the "Billy and Jane" WHE

stories. WHB, Kansas City, Mo. (Central, 411), 2-3 p. m., ladies' hour of classical and operatic nusic; 8-9, program, University church, direction, Harding Wing-HK, Cleveland, Ohio (Eastern, 273), 6 p. m., Radio

WHK, Cleveland, Ohio (Eastern, 273), 6 p. m., Radio-grams. music.
WHN, New York, N. Y. (Eastern, 360.4), 12:30-1 p. m., (Charles Strickland and his Palais D'Or orchestra; 2:15-3:15, overture and vaudeville, Loew's State the-ater, New York city; 6:30-7, Straud Roof orchestra; 10-10:30, Loew's vaudeville headiners; 10:30-11, New Rockwell Terrace revue; 11-11:30, Club Bose revue; 11:30-12, Sam Wooding and his Club Alabam orches-tra; 12-12:30 a. m., Ted Lewis and his orchestra with Heve Intime from Parody club.
WIP, Philadelphia, P.a. (Eastern, 509.9) 1 p. m. Karl Bonawitz, organist; 4:20, "Market Hints for House-wives," auspices Penna, Burceau of Markets; 6:05, songs by Mark Fisher and Joe Burke; 6:15, Harvey Mar-burger and his vaudeville dance orchestra; 7, Uncle Wip's bedtime stories; 8, "Timely Talks for the Morditz' Gene Hogle; 8:15, Philadelphia Police hand; 10:05, "Emo's Weekly Movie Broadcast." Ell M. Orowitz; 10:30, Harvey Marburger and his vaude-will Gene orchestra.

M. Orowitz; 10:30, Harvey Marourger and his vauce-ville dance orchestra.
 WJJD, Mosseheart, HI. (Central, 302.8), 3:30-4:30 f. m., music, Mosseheart children, assembly: talks; 6:45-7:15, Albert Brown, organist; 7:15-8:15, concert band, "Child Care," M. F. Adams.
 WJY, New York, N. Y. (Eastern, 405), 8:15-10:15 p. m., "Mrs. Wiggs of the Cabbage Patch." comedy drama, WGY players; 10:15-11, Hotel St. George trlo, Fran-cisco P. Cortez, director.
 WJZ, New York, N. Y. (Eastern, 455), 10:20-10:30 a. m.,

WJY, New York, N. Y. (Eastern, 405), 8:15-10:15 p. 1 "Mrs. Wiggs of the Cabbage Patch." comedy drau VGY players: 10:15-11, Hotel St. George trlo, Fr. cisco P. Cortez, director. WJZ, New York, N. Y. (Eastern, 455), 10:20-10:30 a. "Etiquete." Yogue magazine: 10:40-10:50. "Tribu Institute," Bertha Baldwin; 1-2 p. m., Nathan Ab Hotel Pennsylvania orchestra; 4-4:30, Gwenddyn Lea soprano; 4:30-5:30, Bernhard Levitow's Hotel Comm dore tea orchestra; 5:30-6:30, agricultural, hor finance, etc., reports, Evening Post News; 7-7: "Dogs." Frank Dole; 7:15-8, Joseph Strissof's He Vanderbit orchestra; 8-8:10. Wall Street Journal view; 8:10-8:25, "Business Economics." N. Y. U. college, Reid L. McClung; 8:25-9, Mme. Maria C briells Leschetivky, planist. WKAQ, San Juan, P. R. (Intercolonial, 360), 9-10 p. 1

Weit, S. No. 23., Mathematics, M. V. Mark, C. M. Mark, C. K. B. K. McClung; S.25-9, Mme. Marka Gabriells Leschetivky, planist.
WKAQ, San Juan, P. R. (Intercolonial, 360), 9-10 p. m., Euterpe Jazz band.
WLSL, Citevens Point, Wis. (Central, 278), 8 p. m., neighborhood talent.
WLS, Chicago, III. (Central, 345), 12-1 p. m., R. F. D. program; Ned and Ches, harmony singers; "Farm Question Box," E. B. Heaton; 3:45-445, homemakers' hour; "What Are You Doing For Your Ex-Service Men?" H. W. Hardy; "Feeding the Family." Mrs. Wilbur E. Fribley; music; 6:30, Ralph Emerson, organist; 6:50, Senate studio; 7, Iullaby time, Glenn Rowell and Ford Rush; 7:15, Edouard Hesselberg, planist; James D. Westbrook, tenor; 7:45, WLS theater presents a Saddler feature; 8-9, R. F. D. program; 9:30, Kenneth Clark, Hawailan guitarist; 9:40, Art Kahn, Senate theater; 10:30, Ford and Glenn time; 11, vaudeville; 12, WLS revue.
WLW, Cimeinnati, Ohio (Central, 423), 8 a. m., physical

WLW, Cincinnati, Ohio (Central, 423), 8 a. m., physica. exercises, Y. M. C. A., Wm. Stradtman, instructor exercises, Y. M. C. A., Wm. Stradtman, instru 1215 p. m., program, Delta Omieron sorority; 4, pr of William Kyle in recital; storics, Samuel Mass dinner hour concert, Sclinsky Instrumental quiltet; concert, Radio division, Ohio Rubber and Textile; pary, Ohio Rubber Male Quartet and Instrume concert, Radio division, Onio Rubber and ' pany, Ohio Rubber Male Quartet and trio; Keefer Koeker orchestra, popular progr (MAQ, Chicago, III. (Central, 447.5), 12 program, auspices Illunois Manufacturers' 4 p. m., Amerlean Ked Cross talk, Estell 4:30, Hathaway Concert company; 5, Jullaby Gene Davenport; 6, Chicago theater organ; LaSalle orchestra; 8, book review, Harry H travel talk, Clara E, Laughlin; 8:40, w Clara E, Laughlin; 8:40, weekly talk, As commercet; 8:50, University of Chicago, le e Weltman lady, Mrs. 6:30, Hote insen; 8:20 eekly talk sociation of turc; 9:15

 conmerce: 8:30, University of Chicago, lecture; 9:13, musical program, Church Athletic association.
 WMC, Memphis, Tenn. (Central, 503.9), 12 m., musical program, O. K. Houck Plano company; 8 p. n., bed-lime story, Uncle loe; 8:30, musical program, Enoch Walton; 11, midnight frolie.
 WNJ, Newark, N. J. (Eastern, 233), 10:30-11 p. m., Frank Daily and his Meadowbrook orchestra; 11-11:30, Jimmy Clark and his Broadway Entertainers; 11:30-12, Original Dixieland jazz band; 12:12:30 a. m., Frank Dally and his Meadowbrook orchestra. 11:30-127 Frank Dally and his area WNYC, New York, N. Y. O p. m., sports analysis, T Paragon orchestra; 9:30-10 recitals; 10:10-10:30, New WOAL, San Antonio, Tex. (C WOAL, San Antonio, Tex. (C) owbrook orchestra. (Eastern, 528.8), 7:35-7:45 Thernton Elsher: 8:30-9:30

ry Hopkins (left), lead-man in comedy Thurs-at KGO. The Hough-l Sisters String quartet ove) play this Sunday at KYW.

(OAW. Omaha. Nebr. (Central, 522.3), 6 p. m., "Advice to Lovelorn" period conducted by Cynthia Grey, cditor of "Please Tell Me" column of the Omaia Daily News; 6:25, dinner program, transmitted from WOAW's remote control studio in the May Seed & Nursery building. Shenandoah, Iowa; 9:30, program, courtesy of the Omaha Typographical union, address, Donald McAillan, arctic explorer. 901, Ames, Iowa (Central, 270), 12:30 p. m., college chimes.

WOI, Ames, Iowa (Central, 270), 12:30 p. m., college chimes.
WOO, Philadelphia, Pa. (Eastern, 509.9), 11 a. m., oran et al. 2010 (1998) (1

trio, Edna Solomon, contraito. REO, Lansing, Mich. (Central, 288.5), 7:45 p. m., basketball game, Michigan Aggies vs. Hope college 

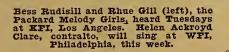
3.5. Atlanta, Ga. (Central, 429). 12 m., entertainment. 5-6 p. m., songs and bedtime story, Bonnio Barnhardt 8-9, women's division, Atlanta Chamber of commerce program; 10:45, Vick Meyers Melody orchestra. WTAM, Cleveland, Ohio (Eastern, 364), 6 p. m., Maurice Spitainy's Hotel Statler orchestra. WI, Detroit, Mich. (Eastern, 516), 8 a. m., setting-up exercises, R. J. Horton; 9:30, tonight's dinner; 12 m., Jules Klein's Statler orchestra; 3 p. m., the Detroit News orchestra; 6, Jules Klein's orchestra; 7, the De-troit News orchestra; Jane Robinson, contralto; S. J. Shone, tenor.

Wednesday, February 4

Wednesday, silent night for: CHNC, CKAC, CKY, KFDM, KFKX, KGO, KJS, WBAY, WCAL, WCBD, WEBJ, WFAA, WFI, WGY, WIP, WJY, WLBL, WMC, WOAW, WOI, WREO, WSAI. CKAC, Montreal, Can. (Eastern, 425), 1:45 p. m., Windsor holel luncheon concert. KDKA, E. Pittsburgh, Pa. (Eastern, 309.1), 7 a. m., morning exercises; 8, morning exercises; 12:20 p. m., Institute, Trinity church; 6:15, dinner concert, Pitts-burgh Athletic association; 7:30, children's period; 8:15, address, University of Pittsburgh studio; 8:30, concert.

8:15, address, University of Plitsburgh studio; 8:30, concert.
(FAE, Pullman, Wash. (Eastern, 330), 7:30 p. m., Margery Segessenmann, planist; basketball game, W. Mc, ex, Facific university; Gladys Fraser, violinist; "Shleidlng," Dean H. V. Carpenter; "Pointers on Dairy Farming," Prol. E. V. Ellington; "Overcoming Farm Flock Obstacles," C. M. Hubhard.
(FI, Los Angeles, Calif. (Pacific, 469), 5-5:30 p. m., Evening Herald, table talk and news; 5:30-6, Examinor, musical half hour; 6:35-7:30, Nick Harris, dotective storles; 7:30-8, program, Goodwind, Klinger and MacKay company; 8-9, Evening Herald, Fisher's Melo-Jazz orchestra, Sophie Cooper, vocalist; 9-10, Examiner, "Wampus" (tub program presenting many of the screen's famous players; 10-11, Patrick and Marsh's dance orchestra.
(FNF, Shenandoah, Iowa (Central, 266), 6:30 p. m., program, Henry Field Seod company.

# **INAUGURAL PROGRAM SATURDAY**



KFOA, Seattle, Wash. (Pacific, 455), 4-5:15 p. m., Olympic Hotel concert orchestra; today's recipe; 6:45-8:15, Hopper-Kelly Company studio program; 8:30-10, Seattle Miner-Kelly Company studio program; 8:30-10,

G e) 31: W

Wtam; Kpo, , Wnj; , Wls; , Ksd, , Kfi, Knx.

11:45, Khj.

Wnj, 9:45, Kyw, 10:30, Wis, Wmc, f; 12, Kfoa;

Si 1, "Homos Kully Commany studio program; 8:30-10. Seattle Times Kully Commany studio program; 8:30-10. Seattle Times dance program.
KFQX, Seattle, Wash, (Pacific, 238), 6:30-7:15 p. m., news; 7:15-8, bedtime story, Aunt Vivier; 8-9, Earl Gray and his Hotel Butler orchestra; 9-10, concert hour; 10-11, Earl Gray and his orchestra.
KFSG, Los Angeles, Calif, (Pacific, 278), 10:30-11:30 a. m., sunshino hour program for siek and afficied; 2:30-4:30 p. m., auditorium service with sermon on Divine Healing, Aimee Semple McPherson, pastor; 6:30-7:30, children's hour presenting Helen Edwina and Mary Elizabeth Hughes, Mrs. Rose, piunist.
KGO, Oakland, Calif, (Pacific, 312), 11:30-1 p. m., luncheon concert, Pacific States Electric company; 3, musical program, Ocra L. Williams institute speaker; 4-5:30, concert orchestra, Hotel St, Franels.
KHJ, Los Angeles, Calif, (Pacific, 395), 12:30 p. m., concert, 10, Multonmah hotel strollers.
KHJ, Los Angeles, Calif, (Pacific, 395), 12:30-1:30 J. m., wartin Music company program, arranged by J. Howard Johnson; 2:30, Claire and Mel, an illustrated musical review on Bethoren; 6-6:30, A:t Hickman's Bithmore hotel concert orchestra, Edward Fitzpatrick, director; 6:30-7:30, little stories American Isloxy, Prof. Walter Sylvester Hertzog; Dick Winslow, invenile reporter; Baby Muriel MacCormac, sereen starlistor, Prof. Walter Sylvester Hertzog; Dick Winslow, invenile reporter; Baby Muriel MacCormac, sereen starlist, earl Burnore hotel stollace orchestra.
KN, Holywood, Galif, Cacific, 337), 8 a. m., morning prayer; 9, Hired Hand, news; 10, Mirce Hand's morn

10-11, Earl Burthet's Biltinore hotel dance orchestra. KNX. Hollywood, Galif. (Pacific, 337), 8 a. m., morning prayer; 9, Hired Hand, news; 10, Hired Hand's morn-ing message; 10:30, Mrs. Kate Brew Yaughn, home economies; 5:30, Town Criter and Village Urchins; 6 sports taik; 6:30-7:30, dinner hour music; 8-9, pro-gram, Gordon and Harrison; 9-10, feature program 10-12, Hollywoodland dance orchestra.

gram, Gordon and Harrison; 9-10, feature program; 10-12, Hollywoodland dance orchestra.
KOA, Oenver, Colo. (Mountain, 322.4), S n. m., "Herd Girl's Dream," KOA orchestra; "Nanl," "Ub Like No a Like," Edwin Akina, guitarist; "Hawail, the Paradise of tha Pacific," Eben G. Fine; "Wallana Waltz," Alcah Oe, Edwin Akina, guitarist; "Fre-Inde," "Valcik," Fern Johnson; "Mulligen Musketeers," "Mary Had a William Goal," Olinger quartet; "In-victus," "Friend O'Mine," James R. Youngs; "Sextet from Lucia," "Kiss Me Goodnight," Nick Palizzi, aecordion soloist; "To the Rising Sun," "Waltz in C. Sharp Minor," Fern Johnson, pinalst; "I Got a Robe," "Massa's in the Cold, Cold Ground, "Carry Me Back to Oik Urginn," "Olinger quartet; "Charity," "Gae to Sleep," Hazle Engle Youngs; 'Jealons," 'Lady of My Cigarette," "Bingin 'Houme the Bacon," "Vir-ginia Luilaby," Nick Palizzi, aecordionist; "Duna," "Three for Jack," James R, Youngs, bas; 'John, Get Up and Shut the Door," "Dried Apple Pie," "Tha End of a Perfeet Day," "Olinger quartet; "Dream Tryst," "Curly Headed Baby," Hazla Engle Youngs; "March Alla Turka," orchestra.
KOB, State College, N. M. (Mountain, 348.6), 7:30-8:30

KOB, Stata College, N. M. (Mountain, 348.6), 7:30-8:30 p. m., international code course, lesson 5, Dean R. W.

Goddard.
KPO. San Francisco, Calif. (Pacific, 423), 7 a. m., daily dozen; 10, town erter; 10:15, "What Is Playing at the Various Theaters," 1-2 p. m., Rudy Selger's Fairmont hotel orchestra; 2:30-3:30, matinea program, Johnnie Buick's Amphians; 4:30-5:30, Rudy Selger's Fairmont hotel orchestra; 5:30, 6:30, children's hour storles; Marlanne De Smet, planks; 6:30, "What Is Playing at the Various Theaters;" 7-7:30, Rudy Selger's Fairmont hotel orchestra; 8:41, E. Max Bradfleid's Versatila hand; Gertmek Mortin, planist.

hotel orchestra; 8-11, E. Max Bradheid's Versatila Gertrade Mortin, planist. Manhattan, Kans. (Central, 340.7), 9 a. m., 9 0.2, mule lesson; 9:07, music for singlng ses; 9:15, inspirational talk; 9:20, calisthenles; packyard gossip; 10:05, all around the house; questions and answers; 10:20, "Suggestions for 's Meals." Amy Kelly; 12:30 p. m., readings, la Hail Burr; "Farrowing Houses for the Spring s," Walter G. Ward; "How to Make a Germi-Test," H. R. Summer; 7:20, college hell and ; 7:30, "Financing State Road Work," L. E. d; 7:40, vocal solos, Harold Finann; 7:50, farm W. G. Ward; 8-9, elassleal musical program, of Music

HS, Hot Springs National Park, Ark. (Central, (375), KTHS, Hot Springs National ratio, June Jones; 10-11, 8:30-10 p. m., concert, Mrs. Effic Cline Jones; 10-11, dance program, Fisher Eastman hotel orchestra. KSO, St. Louis, Mo. (Central, 549.1), 6:45 p. m., Abergh's concert cansemble; 11, dance program, Varsity club orchestra. KYW, Chicago, III. (Central, 535.4), 6:30 a. m., uorning exercises; 11:35, table taik, Mrs. Anna J. Peterson; 6:35-7, children's bedtime story, Uncle Bob; 7-7:35, dinner concert, Congress hotel; 8-8:30, program, Sher-wood School of music; 8:30-8:45, around the town with KYW in Chlcago; 8:45-9, musical program; 9:05, taik, Vivette Gorman; 9:15, taik, James E. Poolc; 9:45-2:30

 Wrette Gorman; 5:15, cuts, saids, saids
 a. m., midnight revue.
 WAHG, Richmond Hill, L. I. (Eastern, 316), 12-1 p. m., tolt cliquette and cooking, the Veteran Reporter; Wild, Heinder Hil, L. 1. (Castell, 516), 12-1 (J. H., talk, etiquette and cooking, the Veteran Reporter; 8-8:30, topics of the day, H. V. Kaltenborn.
 WBAP, Fort Worth, Texas (Central, 472.9), 12:05-12:30 p. m., musical program; 7:30-8:30, program, Victor B. Acers; 9:30-10:45, dance music, Jim Riley's Texas hotel orchestra; 12, Negro Holy Ghost camp meeting.
 WBBR, New York, N. Y. (Eastern, 273), S p. m., Watchtower orchestra; 8:20, Bible lecture, Norman Woodworth; 8:30, Watchtower orchestra.
 WBCN, Chipano, III (Central, 266), 6:6:30 p. m.

Wait, nor jok, R. 1, 16, Casini, 201, 5, 96 Jul., Woodworth; 8:30, Watchtower orchestra.
 WBCN, Chieago, III. (Central, 266), 6-6:30 p. m., jurenlla period; 7-8, Mrs. Kathrine Bly Utesch; 8-5, Amber Furnlure company, F. Parker, tenor; Midway Daneing Gardens orchestra. Florence Tenney, soprano; Bernard Sweltzer, tonor; 9-10, popular Englewood Overland company; South Town Harmonizers, Engle-wood quintci, 9-10, Les Cameron, tenor; automobile talk, Merle Yagle, planologuist; 10-10:15, Midway Juncing Gardens orchestra.
 WCAE, Pittsburgh, Pa. (Eastern, 462), 6:30 p. m., dinner concert, William Penn hotel; 7:30, Unck Kay-bee; 7:45, speelal feature, 8:30, artists and orchestra, Nixon restaurant.
 WCAL, Northfield, Minn. (Central, 337), 9:45 a. m., St. Olaf colloge chapel services.
 WCAU, Philadelphia, Pa. (Eastern, 278), 6 p. un, Meyer Davis Hotel Pennsylvania dinner dance orches-tra; 7:30, reeital, N. Snellenburg and company; 8, Brever fee Cream company concert; 8:30, reeltal.
 WCCO, Minneapolis-St. Paul, Minn. (Central, 417), 10:45 a. m., "How to Entertain Easity," Betty Crocker; 2, woman's hour, "The Romance of Rings." George F. Kunz; 2:30, mainee musical; 4, Mac-Phall's Little Theater company, John Seaman Garns, irrector; 5:30, children's hour, Alpha Stalson; 7, mid-week church service; 9, Twin City Auto Show and Market week; style talk, Lucile Babcock; 10:30, dance program.

morran text, style taik, Martie Badder, Middle data WCX, Ostroit, Mich. (Eastern, 516), 4:15 p. m., musi-cal nogram; 8:30, musical program; WOAF, Kansas City, Mo. (Central, 411), 3:33-4:30 p. m., Star's Radio trio; 6-7, School of the Air, address, story lady, Trianon ensemble, Hotel Muchle-adress, story lady, Trianon ensemble, Hotel Muchle-school of L. O. O. F. school

school. WOAR, Philadelphia, Pa. (Eastern, 395), 11:45 a. m., daily admanae; 12:02 p. m., Stanley theater organ recital, Arcadia cafe concert orchestra; 2, Arcadia cafe concert orchestra; 7:30, Dream Daddy; 8:15, reading travel talk; 10:03, Arcadia cafe dance orchestra. WEAF, New York, N. Y. (Eastarn, 492), 6-7 p. m., dinner music, Waldorf-Astoria hotel; 7-7:30, services, United Synagogue of America; 11-12, Club Lido-Venice orchestra.

WEAO, Columbus, Ohio (Easterâ, 294), § p. m., chimes concert, Prof. A. P. McManigal; 8:15 p. m., Radio talk, A. M. Rose; musical program, Ohio State university alumni artists.
 WEAR, Cleveland, Ohio (Eastern, 364.3), 7 p. m., Hotel Cleveland orchestra, Itvan Francisci, director.
 WEBH, Chicago, Ill. (Central, 370), 7-8 p. m., Orlola concert orchestra; Riviera theater, Dean Romick, pianist; 9-10, Langdon Brothers, Hawailan gultarist; Maria Kelly, readings; Edna Solomon, contralto; Orlola dance orchestra; Il-12, Langdon Brothers, Hawailan guitarist; Maria Kelly, readings; Edna Solomon, contralto; Orlola dance orchestra;

Landon Brothers, Hawailan gnitarists; Maria Kelly, readings; Edna Solomon, contraito; Oriola dance orchestra.
 WEEI, Boston, Mass. (Eastern, 303), 6:30 p. m., Boston Edison Big Brother elub; 7, Sid Relnherz and his orchestra; 8, Harry Einstelle, tha bad boy from the good home; 8:15, musicale; 9, Gilletto Safety Razor concert orchestra; 10, musicale; 11, Fenway theater organ reeital, Lloyd G. Del Castillo.
 WEMC, Berrien Synings, Mich. (Central, 286), 8:15-9:15 p. m., Radio Lighthouse Music Makers. "Our Favorita Reglment," "You Can't Drivo My Dreams Away," "At Sunset," "Three Quotations,", "I'm Forever Tinking of You," "Miss Liberty," "Spanish Waltz," "Stars and Stripes Forever."
 WFIA, Dallas, Texas (Central, 472, 9), 12:30-1 p. m., musical featuras, Dallas theater performers.
 WFI, Philadelphia, Pa. (Eastern, 395), 1 p. m., Moyer Davis Bellevus Stratford concert orchestra; 3:05, reading, white Gray, 6:30, Meyer Davis Bellevus Stratford concert orchestra; 3:05, reading, Walter Gray, 6:30, Meyer Davis Bellevus Stratford concert ensemble, Blackstona string quintet; 2:30, artist series, Lyon & Heaiy; 3: orcking chair time; 5:30, Skeezix time for the children; 6. organ recital, Lyon & Healy artists.
 WGR, Buffalo, N. Y. (Eastern, 319), 10:45 a. m., Gold Meral homa service tak by Betty Crocker; 12:30-1 p. m., Hotel Statler concert ensemble; 2:30-47:30, Radio Leaster, 7:30, dinner music, Vincent Lopoz Hotel Statler dance or

## Where to Hear Talks

Central Standard Time

 $T_{daily}^{ALKS, instructive, serious, heaters}$ ALKS, instructive, serious, humorous and even frivolous, are Radiocast

Saturday, January 31: 6, WDAF, WMAQ, WOAW; 6:15, WBZ; 6:45, WCAE; 7, WBCN, WEAF, WJZ, WRC; 7:15, WBBR; 7:45, WJZ; 8, WCCO; 8:30, KHJ, WMAQ; 8:15, WJZ; 9:05, KYW; 9:15, KJS; 9:30, KFSG; 9:45, KFI.

Sunday, February 1: 8:20, KSAC; 8:30, WBBR; 8:45, KFI; 8:55, WEMC; 9, WJY.

Monday, February 2: 6, WCCO, WDAF; 6:10, WHN; 6:15, WBZ; 6:35, WNYC; 6:45, WCAE, WGY; 6:55, WDAR; 7, KDKA, WHN, WJZ; 7:15, KDKA; 7:20, WOC; 7:30, KSAC, WHB; 8, WCCO; 8:30, KOB, WOR; 9.35, WNYC; 10, KFAE, KGO.

Tuesday, February 3: 6, WCAU, WDAF, WJZ; 6:15, WBZ; 6:30, CKY, WBZ, WEAF, WJY; 6:45, WCAE, WGY; 6:50, WDAR, WJZ; 7:15, CFCA; 7:30, KSAC, WCCO; 8, WHA, WLS, WMAQ; 8:20, KYW, WMAQ; 9:30, KHJ; 8:45, KFI; 8:50, WMAQ; 9:05, WIP; 9:10, WNYC; 10, KGW; 11:05, KYW.

Wednesday, February 4: 6, WCCO, WDAF, WEAF; 6:15, WBZ; 6:30, WBZ, WHN; 7, WAHG, WGR, WJZ, 7:15, KDKA, WBZ, WDAR; 7:20, WBBR; 7:30, WJZ, WNYC; 3, WHA, WLS, WMAQ; 8:30, KHJ, KOB, KYW; 8:45, KFI; 9:05, KYW; 10, KHJ; 12, WBAP.

Thursday, February 5: 6, WDAF, WEAF; 6:30, CKY; 6:45, WGY; 6:55, WJZ; 7, WEAF, WIP, WJZ; 7:15, WJY; 7:30, KSAC, WCCO; 7:45, WCCO, WHA; 8, KYW, WHA, WMAQ; 8:15, WMAQ; 8:30, KHJ; 8:40, WBBR; 9:15, KYW; 9:20, KFI; 9:30, KHJ; 9:45, KHJ.

Friday, February 6: 6, WCAU, WCCO, WDAF; 6:30, CKY, WCAU; 6:45, WGY; 7, WDAR, WGY; 7:10, WJZ; 7:15, KDKA, WDAR; 7:20, WGY, WOC: 7:30 KGO KSAC, WCCO; 8, KNX, KYW, WLS; 3:30, KHJ, KOB, WCAL; 8:55, WEMC; 9, WHN; 9:25, WHN; 9:30, KHJ; 10, KGW.

chestra, Harold Gieser, director: 8-8:15, lecture, "Some Frogs, Toads, and Salamanders of western New York," Prof. William P. Alexander of the Buttalo Society of Natural Sciences; 8:15-10:15, Philharmonic concert jointly with WEAF; 11:30, supper dance music, Vincent Lopez Hotel Statler dance music, Harold Gleser, director. "HA, Madison, Wis. (Central, 535.4), 7:45 p. m., Clef club; "The Need for a Rational Land Policy," John G. Jones, Jr. Gleser, director.
WHA, Madison, Wis. (Central, 535.4), 7:45 p. m., Clef club; "The Need for a Rational Land Policy," John G. Jones, Jr.
WHAS, Louisville, Ky. (Central, 400), 4-5 p. m., selections, Alamo theater orran; 7:30-9, concert, Tropical Hawalian sextet, Frank Plada, director; a chapter of the "Billy and Jane" stories.
WHB, Kansas City, Mo. (Central, 411), 2-3 p. m., ladies' hour; 7-8, special program, Parent-Tcachers' association.
WHB, Kansas City, Mo. (Central, 411), 2-3 p. m., ladies' hour; 7-8, special program, Parent-Tcachers' association.
WHB, Kansas City, Mo. (Central, 411), 2-3 p. m., ladies' hour; 7-8, special program, Parent-Tcachers' association.
WHK, New York, N. Y. (Eastern, 360.4), 6:30-7, Threent Catanese and his Hotel Alamac orchestra; 7-7:30.
Harry Richman and his entertaincrs with Eddie Elkins and his orchestra; 7:30-9, Bankers Jife and his orchestra; 7:30-9, Bankers Jife Radio orchestra, W. L. Marsh, director; WHO, Oes Moines, Iowa (Central, 522.3), 6:30-7:30 p. m., Reese-Hughes orchestra; 7:30-9, Bankers Jife Radio orchestra; 6:05, Art Coogra and his Club Madrid orchestra; 7:09-9:35, Art Coogra and his Club Madrid orchestra; 7:00, P. D., Milazelphia, Pa. (Eastern, 459), 10:50-11 a. m., fashion talk, Eleanor Gunn; 1:15-2 p. m., luncheon ruusie; 4:4:30, Write Holmes Purdy, contraito; Norman Curtis, accompanist; 7:15-8:15, Philharmonie orchestra; 3:00-3:30, Hotel Belmont tea musie; 7:6, Cafe Boulevard orchestra; 8:8:10-8:30, 'Wite Holmes Purdy, contraito; Norman Curtis, accompanist; 4:30-5:30, Netel Belmont tea musie; 7:8, Cafe Boulevard orchestra; 8:8:10, Wall
Street Journal review; 8:10-8:30, N. Y. U. Air college; 8:30-9:30, 'Tevis History and Literature,'' auspiese of Rabbinical assembly of Jewish Theological seminary, Dr. Elias Margolis; 10:30-11:30, Billy Wynne's Greenwich Villaga Inn orchestra.

8:30-9:30, "Jewish History and Literature," auspices of Rabbinical assembly of Jewish Theological seminary, Dr. Elias Margolis; 10:30-11:30, Billy Wynne's Greenwich Villaga Inn orchestra.
WKAQ, San Juan, P. R. (Intercolonial, 360), 8-9:45 p. m., Nuncicpal band.
WLS, Chicago, Ill. (Central, 345), 12-12:30 p. m., R. F. D. program, Nubs Allan, contrallo; musle numbers; 3:43-4:45, "Growth of Amercan Falning," C. R. Dahympie; "American Ideals," Mrs. O'Neill; "Suggestions for Lincola's Birthday," Julia Deal; music; 5:30, Raiph Emerson, organist; 6:30, Scotte theore; 5:40, "Growth of Amercan Falning," C. R. Dahympie; "American Ideals," Mrs. O'Neill; "Suggestions for Lincola's Birthday," Julia Deal; music; 5:30, Raiph Emerson, organist; 6:30, Scotte theore; 7:10, Sandy Ime, Ford and Glenn; 7:15, WLS Lona Scout tribe; 7:30, Sandy Meek, Scotte tenor; 7:50, WLS harmony aces; 8-9, R. F. D. program, music; 9. Donald Poster, trombonist; 9:10, Scatdet theore; 9:30, program, DiAn, Ill, artist; 10, Scatdet theore; 9:30, program, Nu, Ri, artist; 10, Scatdet theore; 9:30, Program, Mu Phi Epsilon sorority; 4, program for "Suit-Ins;" 6, dinner hour concert, selinsky quintet; 8, Wyoming Presbyterian church quarter, Mrs. Lillan Arkel Rixford, director and organist; Cilford Lang, planist; Milnor Instrumental trio; "Monov, How It Has Developed Since the Days of Barter," Harry J. Plogstedt.
WMAQ, Chicago, III, (Central, 543:), 12, 30, Piano concert; 9, WMAQ players.
WMC, Memphis, Tenn, (Central, 503, 12, m., musical program, 0, K. Houck Piano company.
WMVC, Newyrk, N. J. (Eastern, 233), 12 m., musical program, 0, K. Houck Piano company.
WNC, New York, N. Y. (Eastern, 528, 8), 8:30-9:45, Mondewhook orchestra; 11-11:35, Victor Wilbor, havitone; 11:2:30, P. m., Ervin Swindell, organist
WOC, Philadelphia, Pa. (Central, 509, 9), 11 a. m., organ.
WOC, Philadelphia, Pa. (Eastert, 509, 9), 11 a. m., organ.
WOC, Philadelphia, Pa. (Eastert, 509, 9), 11 a. m.

WOI, Ames, Iowa (Central, 270), 12:30 p. m., collage chimes.
WOO, Philadelphia, Pa. (Eastern, 509.9), 11 a. m., organ recital, Mary E. Vogt; 12:02 p. m., Wanamaker texts tea room orchestra, Robert E. Golden, director; 4:45, organ recital, Mary E. Vogt; 7:30. A. Candelor's ensemble. Hotel Adelphia; 8:30, recital, Harrietta G. Ridley; 9, WOO orchestra, Robert E. Golden, director; 10:03, William Bove's Royal Palm orchestra; 10:30, Vincent Rizzo's Hotel Sylvanla dance orchestra.
WOR, Newark, N. J. (Eastern, 405), 3:4 p. m., Kenneth Kitchen's club, orchestra; 6:15-6:30, Albert E. Sonn, technicat ditor, Newark Sunday Call; 6:30-7:30, "Music While You Dino," Jinnmy Lent's orchestra: WQ, Chicago, III. (Central, 448), 11-12 m., home economics, Helen H. Downing; "Proparing Swing," Mrs. W. E. Fribley; "California," Mrs. E. T. East; 3-4 p. m., domestic sclue. Sonnates, 19-500," Chan Sommerville; 7-8, concert, Ralph Williams and his Rainbo Skylarks; soprano; Jamos Mitchall, baritone; Rogers boys, Charonce Thedors, tonor; Alfred Tweed, harmonica and

gultar; melodians, Harmony singers, Fred Jacobson, guiltar; melodians, Harmony singers, Fred Jacobson, monologues.
WSB, Atianta, Ga. (Central, 429), 12 m., cntertainment; 5-6 p. m., Bonnie Barnhardt; 10:45, Georgia Tech. Marionette orchestra.
WTAM. Cleveland, Ohio (Eastern, 364), 6 p. m., Philip Spitalny's Music Box orchestra; 8, Cleveland Plain Dealer concert program; 10:30, Philip Spitalny's Music Box orchestra.
WTAY, Oak Park, III. (Central, 250), 6:30-7:30 p. m., Oak Park night; 9-9:15, organ, Parthenon theater; 9:15-10, Spencer, Laverne, Shayne, Xvlophone Har-mony Kluss; the Melody Girks; Dr. W. P. Zimmer, tenor; Lester Kelsey, tenor; 12-1, organ.
WJ. Oetroit, Mich. (Eastern 516), 8 a. m., setting-up exercises, R. J. Horton; 9:30, toniaft's dinner; 12 n., Jules Klein's orchestra; 3 p. m., the Detroit News or-chestra; 6, Jules Klein's orchestra; 7, the Detroit News or-chestra; Charles Coates, baritone; E. B. Curtus, tenor.

Thursday, February 5

## Thursday, silent night for: CHNC, KFAE, KFDM, KFOA, KFQX, KGW, WOA, KOB, KSD, FWX, WAHG, WBAY, WBBG, WBZ, WCAU, WEA WEBJ, WEMC, WGR, WHO, WJJD, WLBL, WNJ, WOO.

WAHG, WBAV, WBBG, WBZ, WCAU, WEAO, WEAO, WEBJ, WEMC, WGR, WHO, WJJD, WLBL, WNJ, WOO.
AT9, Fort Bragg, N. C. (Eastern, 435), & p. m., Mabelle New Williaus, soprano; Margaret Cotton, contrato; Rev. Sam K. Phillips, tenor; Mr. Sheets, bass; Francis Green, accompanist; Mrs. Henry Spears, pianist; Mrs. McElveen, violinist.
CKAC, Montreal, Can. (Eastern, 425), 4:45 p. m., musleal tea; 8:30, Canadian National Railways using call letters CNRM.
CKAV, Winnipeg, Can. (Central, 450), 7:30 p. m., lesson in French diction, A. C. DeLalande; S. Canadian National Railway's program, Fort Garry hotel.
KDKA, E. Pirtsburgh, Pa. (Eastern, 30-1), 12:20 p. m., Institute, Trinity ehurch; 6:15, dinner concert, KDKA Little Symphony orchestra; 7:30, children's period; 8, program, National Stockman and Farmer studio; 8:30, concert; I1, concert. Pittsburgh Post studio.
KFI, Los Angeles, Calif. (Pacific, 469), 5-5:30 p. m., Evening Herald, table talk, news; 5:30-6, Examiner, musical half hour; 6:45-7:20, Bon Ton orchestra; 7:20-7:30, Y. M. C. A. speaker; 7:30-8, vocal recital; 8-9, program, Standard Oil Company of California presenting play with music; 9-10, Examiner, pupils of Louis Fertazzano; 10-11, vocal and instrumental.
KFKU, Lawrence, Kans. (Central, 275), 6:50 p. m., plano tuning in number; 7, music; 7:15, "The Child Labor Law and It's Relation to Industry," Prof. F. W. Blackmar; 7:30, "Science, Old and New," Dr. H. M. Elsey; 7:45, educational psychology, lesson V, Dean R. A. Schwegler.
KFKK, Hastings, Nebr. (Central, 288,3), 9:30-11 p. m., program, limaculate Conception academy.
KFK, Los Angeles, Calif. (Pacific, 452), 4-5:15 p. UL, Olymple Hotel concert orchestra; today's recipe.
KFK, Benandoah, Iowa (Central, 288,3), 9:30-11 p. m., program, limaculate Conception academy.
KFK, Benandoah, Iowa (Central, 288,3), 9:30-11 p. m., program, limaculate Conception academy.
KFK, Hastings, Nebr. (Gentral, 288,3), 9:30-11 p. m., program,

organist. GO, Oakland, Calif. (Pacific, 312), 10:40 a. m., class-room instruction, Oakland Public schools; 4:5:30 p. m., concert orchestra, Hotel St. Francis; 8, farce, "Mrs. Temple's Telegram; Arlon trio; 10-1 a. m., Henry Halstead's orchestra. KGO,

ampte s Tetegram; Arlon trío; 10-1 a. m., Henry Halstead's orchestra.
 KGW, Portland, Ore. (Pacific, 485.1), 12:30 p. m., concert, Civie Music club; 5, children's program.
 KHJ, Los Angeles, Calif. (Pacific, 355), 12:30-1:30 p. m., Martin Music company program, arranged by J. Howard Johnson; 6-6:30, Art Hickman's Biltmore hotel concert orchastra, Edward Fitzpatrick, director; 6:30-7:30, little stories American history, Dickie Brandon and Jane Hughes, screen juvoniles, bedtimo story, Uncle John; 7:30, Harold Swartz of Otis Art institute, talk on "Art;" 7:45, Care of Body." Dr. Philip M. Loveli; 8-9:30, program, Vest Coast theaters; 9:30-10, Hatch Graham, banjoist and singer; 10-11, Early Burtnett's Biltmore hotel done orchestra.
 KJS, Los Angeles, Calif. (Pacific, 221), 8-9:30 p. m., rocal neetal with plano and organ numbers of classical mature.

vocal recital with plano and organ numbers of classical nature.
KNX, Hollywood, Calif. (Pacific, 337), 8 a. m., morning prayer; 9, Hired Hand, nows; 10, Hired Hand's morning message; 10:30, Mrs. Kata Brew Vaugin, home economics; 5:30, Town Criter and Villaga Urchins; 6, sports talk; 6:30-7:30, dinner hour music; 8-9, program, Gobo Ice Cream company; 9-10, program, Carson-Baruch company; 10-11, Abe Lyman's Coconnut Grovo dance orchestra from Ambassador botel.
KOA, Oenver, Colo. (Mountain, 322,4), 3 p. m., matineco for housewives, "Danny Boy," "Friend O'Mine," "Beloved, It is Morn," Mrs. Irving Green; "Essentials of the Group Mind," Mrs. Kuskuis; "Whins," "Plutos Revels," "Etudo Mignoune," Mable Garviu Baber.

17 Just Active and Active and

# CHIC, NEW TORONTO STATION, HAS INAUGURAL PROGRAM SATURDAY

DANCING (Central Time)

## Where to Hear Concerts

#### Central Standard Time

THESE are the stations for music lovers to dial, and you can hear, pro-viding you dial correctly and read the programs carefully, everything jazz to opera

#### Tuesday, February 3

(Continued from page 11)





#### Wednesday, February 4



## Where to Hear Talks

Central Standard Time

 $T_{daily}$  and below are listed the stations.

bruary 1: 8:20, KSAC 8:45, KF1; 8:55, WEMC

Thursday, February 5





lary 5

## KFAE, KFDM. DB, KSD, PWX, WCAU, WEAO. ID, WLBL, WNJ,

35), 8 p. m., Ma-garet Cotion, con-Mr. Sheets, bass; enry Spears, pian-25), 4:45 p. m., al Railways using

al Railways using 7:30 p. m., lesson 8, Canadian Na-yhotel. 609.1), 12:20 p. m., er concert, KDKA Idren's period; 8, 30, studio, 5:30-6, Examiner, on orchestra; 7:20-vocal recitai; 8-9, California prosent-r, pupils of Louis ental. 275), 6:50 p. m., 7:15, "The Child stry," Prof. F. W., New," Dr. H. M., 1, lesson V, Dean 30, 9:30-11 n. m.

, lesson V, Dean 3), 9:30-11 p. m., ademy. (66), 6:30 p. m., G. Bliss, director, ), 4-5:15 p. m., y's recipo. 230), 10:30-11:30 a, afternoon organ 5, auditorium serv-semple McPherson, nd, G. N. Nichols, her Fricke Green,

10:40 a. m., class-ools; 4-5:30 p. m., 5; 8, farce, "Mrs. )-1 a. m., Honry

8:15, 8:45, Woc, Wnye: Wcco, Wip; Whn, 11:45, Khj,

6: 8, 8:30, 9:03, Wahg; Wnj, 9:45, Kyw, 10:30, Wls, Wmc, f; 12, Kfoa; 1x.

Concert orenestra; 10. Musicale; 11, Fenway uncater orsan recital, Lioyd C. Del Castille.
WEMC, Berrien Springs, Mich. (Cartral, 256), 5:15-9:15 p.m., Radio Lichthouse Music Makers, "Out Away," "At Sunset," "Three Quotations," "I'm For-weitz," "Stars and Stripes Forever."
WFAA, Dallas, Toxas (Gentral, 472,9), 12:30-1 p. m., musical features, Dallas theater performers.
WF, Philladelphia, P.a. (Eastern, 395), 1 p. m., Moyer Davis Bellevue Stratford concert orehestra; 3:05, read-ing, Waiter Grazy 5:30, Meyer Davis Bellevue Strat ford concert orchestra; 7, Sunny Jim.
WGN, Chicago, III. (Gentral, 70), 1:40 p. m., luncheor concert, Drake concert ensemble, Blackstone string quintet; 2:30, artist series, Lyon & Heady: 3, rocking chair time; 5:30, Skeczix time for the children; 6-organ recital, Lyon & Heady artists.
WGR, Burfalo, N. Y. (Eastern, 319), 10:45 a. m., Gold Medal home service taik by Betty Corcker; 12:30-p. m., Hotel Statler concert ensemble; 2:30-4:30, Radio Dealers program; 4:30, certer, "What the Honey Stripes program; 4:30, certer, Wille Yun Dine," Jinmy Lent's orchestra: Adelaide Steeg, contralto; Howard Hanks, plantst asoprano; James Mitchell, barltone; Rogers boys, Clar-ore Thedres, tenor; Alfred Tweed, harmoniea and

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#### (Continued from page 13)

(Continued from page 13) "What is Playing at the Various Theaters:" 7-7:30, Rudy Seiger's Fairmont hotel crehestra; 7:30-8, Home Town Synco-Symponists; 8-9, Theodore J. Irwin, urganist; 9-10, program, Santa Clara branch, American Pen Women; 10-11, E. Max Bradfield's Versatile band. KSAC, Manhattan, Kans. (Contral, 340-7), 9 a. m., warch; 9:02, nusic lesson; 9:07, music for singing exercises; 9:15, inspirationat talk, 9:20, calisthenles; 10:10, questions and answers; 10:20. "Suggestions for Today's Meals." Anuy Kelly; 12:30 p. m., readings, Oscoola Hall Burr; "Farm Management," I. N. Chapman; "Making the Boy a Partner," M. H. Coe; 7:20, collecto bell and music; 7:30, "Adlusting Equip-ment to the Individual," Harrlet W. Allard; 7:30, Musike, Mrs. G. W. Saltsbury, director; 7:50, "The Milk Way; the Health Way," Emily Bennett; 8-9, "Swede Songs and Storles," music, direction of Prof. P. P. Brainard; storles, Dr. H. T. Hill. KSO, St. Louis, Mo. (Central, 549.1), 4 p. m., home hour.

KSO, St. Colls, and Canal Park, Ark. (Central, (375), 8:30-10 p. nn., concert, Mrs. J. M. Frisbee, director.
KYW, Chicago, III. (Central, 535.4), 6:30 a. m., morning exercises; 11:35, table talk, Mrs. Anna J. Peterson; 2:35-4 p. m., studio frolle; 6:35-7, ehildren's bettime story; 7-7:30, dinner concert, Congress hotel; 8-8:20, "Twenty Minutes of Good Reading," Rev. C. J. Pernin; 8:20-9:05, musical program; 9:15, "Safety First" tafk, Storemeter, 10-11-26, evening at home.

story; 7-7:30, dinner concert, Congress hotel; 8-8:20,
 "Twenty Minutes of Good Reading," Rev. C. J. Pernin;
 8:20-9:05, musical program; 9:15, "Safety First" tafk, Bert Vanderwark; 10-11:30, evening at home.
 WBAP, Fort Worth, Texas (Cestral, 472.9), 12:05-12:30 p. m., musical program; 7:30-8:30, musical program, artlsts, Texas Christian university, Prof. H. D. Guelick, director; 9:30-10:35, Wylbert Brown's stolin ensemble.
 WBBR, New York, N. Y. (Eastern, 273), 9:10 p. m., Malcolm Carnent, clarinetist; 9:20, Genevieve Ford, planist; 9:30, Prof. Pietro Marzen, tenor; 9:40, Inter-national Sunday school lesson, S. M. Van Sipma; 10, enger-soles; 10:10, Robert Young, planist; 10:20, Mafeolm Carnent, clarinetist;
 WBCN, Chicago, IH, Central, 266), 7-8 p. m., Walther leaguer: 8-8:30, Chicago trio, Ethel Merriam, reader; Midway Dancing Gardens orchestra; 8:30-9, Walton School of Commerce; 9-12, popular concert, Ebuer Jor-don & company, Midway Daneing orchestra, Leona Fay, violinist; Larry Loser, tenor; Lindsey MePhail, John Williams, baritone; AI Phillips, tenor; Mort Green, composer; Rulph Norris, planist;
 WCAE, Pittsburgh, P.a. (Eastern, 462), 6:30 p. m., dinner concert, William Penn hotel; 7:30, Uncle Kay-bee; 7:45, speela feature; 8:30, concert, attists from Moores' cafeterla, E. T. Moores, manager.
 WCAL, Northfield, Minn. (Central, 337), 9:45 a. m., chapel services; 9. p. m., College guartet.
 WCBOD, Zion, IH, (Central, 355), 8 p. m., string quar-tet; celesting hells; Fred Faassen, organist; J. D. Thomas, barltone; M. P. Barton, tenor; Mrs. Athol Heath, plauist; Mrs. H. E. Mayfield, soprano; Arthur Kendall, elarinetist.
 WCCO, Minneapolis-St. Paul, Minn. (Central, 417),

Rendall, elarinetist. (CCO, Minneapolis-St. Paul, Minn. (Central, 417), 10:15 a. m., 'More About Meat,' Betty Crocker; 2 p. u., 'The Popular Concert,' Mrs. Agnes Fryberger 4, magazine hour, 'Martiage Insurance,'' 5:30, child-ren's hour. Gold Medal Lady; 6:30, dinner concert. 7:30, ''Paruu Planning for 1925,'' Andrew Boss; 7:45, lealth talk; 8, municipal organ concert, Hugo Goodwin

health talk; 8, municipal organ concert, Hugo Goodarin, III, dance program. WCX, Octroit, Mich. (Eastern, 516), 4:15 p. m., musical program; 8:39, musical program. WDAF, Kansas City, Mo. (Central, 411), 3:30-4:30 p. m., Star's Radio trio; 6-7., School of the Air, read-ing, Cecile Burton; address, Louis Meeker; story lady; Trianon ensemble, Hotel Muchlebach; 11:45-1 a.m., Nighthawk frolic, the Merry Old Chief and Plantation

Mighthawk frolic, the Merry Old Chief and Plantation players.
WDAR, Philadelphia, Pa. (Eastern, 395), 11:45 a. m., daily almanae; 12:02 p. m., Stanley theater organ relatal, Arcadia eafe eoncert orchestra. "Care of Children." Mrs. Louis Love; 4:30, Helen Bates Wilson, contraito; 7:30, Dream Daddy.
WEAF, New York, N.Y. (Eastern, 492), 6-7 p. m., dinner music, Waldorf-Astoria hotel; 7-7:30, services, Greater New York Federation of churches; 8-8:30, "Touring with a Packard Eight," George Elliott Cooley; 9-10, Victor hour; 10-11, Süvertown Cord orchestra; 11-12, Vincent Lopez and his Hotel Pennsylvanla orchestra; 80, concert.
WEAR, Cleveland, Ohio (Eastern, 364.3), 7 p. m., Midday club musical program; 8, concert.
WEAR, Cleveland, Ohio (Eastern, 364.3), 7 p. m., Midday club musical program; 8, concert.
WEAR, Cleveland, Ohio Stamford, tenor; late retue, soprano; John Stamford, tenor; Orlole orchestra; 11-12, Vincent Lopes Brothers, sonss; Banks Kennedy, planiogues; John Stamford, tenor; late retue, Steaton, Mass. (Eastern, 303), 1 p. m., assembly luncheon, Boston Chamber of conincre; 6:30, Boston Pdiss, Dato, Resembly luncheon, Boston Chamber of conincre; 6:30, Boston Pdiss, Dato, Resembly luncheon, Boston Chamber of conincre; 6:30, Boston Pdiss, Pdiss, Statlan, 14:5, 29, 12:30-1 p. m., WEAR, Calass, Texas (Central, 472.9), 12:30-1 p. m., Net A.M. Olass, Texas (Central, 472.9), 12:30-1 p. m., Net A.M. Olass, Texas (Central, 472.9), 12:30-1 p. m.

FAA,

York studio. A, Oallas, Texas (Central, 472.9), 12:30-1 p. m., Jund F. Boettcher, tenor; William H. McRaven, ist; DeWitt McJurray; 6:30-7:30, Paul Cretien his banjo quintet; 8:30-9:30, Second Avenue tist church entertainers; 11-12, Jefferson theater

Aptist church entertainers; 11-12, Jefferson theater rlisk: aptist church entertainers; 11-12, Jefferson theater rlisk: Bellevue Stratford concert orchestra; 3:05. House-vires' Radio exchange, Mabel Swint Ewer; talks, Dela-vare County Federation of clubs; 6:30, Meyer Davis Sellevue Stratford concert orchestra; 7, Sunny Jlm; 9, Nexater Kent program from WEAF: Sh, Chicago, III. (Central, 370), 1:40 p. m., luncheon oncert, Drake concert ensemble, Blackstone string ulntet; 2:30, artist series, Lyon & Healy; 3, rocking hair time; 5:30, Skeezix time; 6, organ recital, Lyon & Healy; 6:30-7, dinner concert, Drake concert en-emble, Blackstone string quintet; 8-9, classical con-ert, Herman T. Baer, baritone; 10-11, Don Bestor Jrake dance orchestra; Ned and Ches. Br, Buffalo, N. Y. (Eastern, 319), 12:30-1 p. m., Ret Statler concert ensemble; 2:30-4:30, Radio Deal-tra's program; 6-7:30, dinner music, Hallpryd string luartet.

tet. Schenectady, N. Y. (Eastern, 380), 2 p. m., all Our Young People Go to College," Prof. George York; 6:30, dinner concert, Hotel Ten Eyek; book William F. Jacob; 8, grand opera, "Il Trovatore,"

M. York; 6:30, dinner concert, Later, "Il Trovatore," (NGY opera company.
WGY opera company.
WHA, Madisan, Wis. (Contral, 275), 7:45 p. m., honorary recognition evertees. "Developing a Rural Comorary recognition evertees." Developing a Rural Commun.
WHAS, Louisville, Ky, (Central, 400), 4-5 p. m., selections. A lamo theater organ; 7:30-9, concert, auspices Mrs. Robert K. Van Pelt.
WHB, Kansas City, Mo. (Central, 411), 2-3 p. m., hadles' program, 3-9, varied vocal music, Scott Shawgo, director; Walt Wood and his orchestra.
WHK, Cleveland, Ohio (Eastern, 273), 6 p. m., Radiograms, Charles Strickland and his Palais D'Or orchestra; 6:30-7:10, Vincent Catanese and his Hotel Alamae orchestra; 9:30-10, O'Meara Gardens ballroom; 10-10:30, Loew's vanderille headlincrs; 11-11:30, Connic's inn revue featuring Leroy Smith'a orchestra; 12:12:30 a. m., "maint and his orchestra from Parody clubs."

featuring Leroy Smith'a orchestra; 12-12:30 a.m., Ted Lewil and his orchestra from Parody clubs. WIP, Philadelphia, Pa. (Eastern, 509), 1 p. m., Gimhel tea room orchestra; 6:05, Art Coogan and his Club Madrid orchestra; 7, Uncle Wij's beditume atorics; 8, talk, George G. Calhoun; 11:05, Harvey Marburger and bis yaudeullo orchestra.

George G. Calhoon; 11:05, Harvey Marburger and senderlillo orchestra.
 New York, N. Y. (Eastern, 455), 10-10:20 a, m., icevires league menn, Mrs. Julian Heath; 10:20-30, Review of Heviewa; 10:30-10:45, household ipment, Ethel R. Peyser; 10:50-11, fashion taik, anor Gunn; 1-2 p. m., Nathan Abas' Hotel Penn-vanla orchestra; 4:30-5:30, Bernhard Levitow's Hotel modore tea orchestra; 7:755, Bernhard Levitow's tel Commodre orchestra; 7:755, Bernhard Levitow's tel Commodore orchestra; 7:55, Bernhard Levitow's tel Commodre orchestra; 7:55, Bernhard Levitow's tel Commodre orchestra; 7:55, Bernhard Levitow's tel Commodre orchestra; 7:55, Wenres of Cour-set Journal review; 8:10-8:30, N. Y. U. Air col-e; 8:30-8:15, night with Thomas Moore; 10:30-interview; 10:4000, here orchestra.

Street Journal review; 8:10-8:30, N. Y. U. Air college; 8:30-8:15, nicht with Thomas Moore; 10:30-11:30, Waldorf-Astoria dance orchestra. WKAQ, San Juan, P. R. (Intercolonial, 360), 8:30-10 p. m., concert, La Cafetera. WLS, Chicago, III. (Central, 345), 12-1 p. m., farm program; Kenneth Clark, Hawalian guitarist; "Farm question Box," B. B. Heaton; 3:45-4:36, homemakera' hour, talks, muslc; 6:30, Ralph Emerson, organist; 6:50, Senate theater studio; 7. Ford and Glenn'a Woodshed theater players; 7:20, WLS theater presenta one revita.

etta. Cincinnati, Dhio (Central, 423), 8 a.m., physical chee, Y. M. C. A., Wm. Stradtman, instructor; 5 m. noonday concert; 4, French lesson, Madame Trimpidis; plano recital, Adelaide Apfel; 6, dinner concert, scilnsky Jaaitumental quintet; 8:30, baa-

at Hotel Grand; 9:15. o concert, 1 roue, isen, violinist; 1 es Civil Servico corporation

Melody Boys. , Ohicago, III, (Contral, 447:5), 4 p. m., house-hour, Mrs. Elizabeth O. Hiller, director; 4:30 is Federation of Women's clubs; 6, Chleago thea-rgan recital; 6:30, Hotel Laxulle orchestra; 8, ausplecs Western Rallways committee; 8:15, Boy talk; 8:30, program, Junior Association of com-

Scuut talk; 8:30, program, Junior Association of commerce.
 WMC, Memphis, Tenn. (Central, 503.9), 12 m., musical program, O. K. Houck Plano company; 8 p. m., bedtime story, Uncle Percy; 8:30, urgan recital, Scottish Rito eathedral, Harry O. Nichols.
 WNVC, New York, N. Y. (Eastern, 528.8), 7:35-7:45 p. m., sports analysis, Thornton Fisher; 8:30-9:30, Burough Night program; 9:20-9:40, "Timely Topics," Francis P. Bent, WOAI, San Antonie, Tex. (Central, 394.5), 9:30 p. m., Junule Joy's Hotel St. Anthony orchestra.
 WOAW, San Antonie, Tex. (Central, 394.5), 9:30 p. m., Junule Joy's Hotel St. Anthony orchestra.
 WOAW, Sura Koursey company bulkling, Science control studio in the May Seed & Nursery company bulkling, Shenamdon, Iowa.
 WOC, Oavenport, Iowa (Central, 490), O.

transmittéed from WOAW s' reinée Control Jussien and the May Seed & Nursery company building, Shenan-doah, lowa.
WOC, Oavenport, lowa (Central, 498), 9 p. m., program, Sciuster Sisters California orchestra; 11, Lonis Connor and his LeClaire hotel orchestra; song and novelty numbers, Peter MacArthur.
WOI, Ames, lowa (Central, 270), 12:30 p. m., college chimes; 8:15, musical program.
WOO, Philadelphia, Pa. (Eastern, 509.9), 11 a. m., organ recital, Mary E. Vogt; 12:02 p. m., Wanamaker erystal tea room orchestra, Robert E. Golden, director; 4:43, organ recital, Mary E. Vogt; 0:30-2:45-3, Harold Sutler, violinist; 3:15-3:30, Anna Rose; 3:45-4, Harold Sutler, violinist; 3:15-3:30, Anna Rose; 3:45-4, Harold Sutler, violinist; 3:15-3:30, Anna Rose; 3:45-4, Harold Sutler, violinist; 3:45-9:15, Helen O'Shea, coloratura sopramo; 1:45-12, popular jazz program.
WOI, Phisaga, III, (Central, 448), 11-12 m., home eco-

Dizest, 8:43:0-15. Helen O'Sheat, the Boly Liberaty 19:15-9:30, Helen O'Sheat; 10:45-12, popular Jazz program, 9:15-9:30, Helen O'Sheat; 10:45-12, popular Jazz program, 9:15-9:30, Helen H. Downing; 'Valentine Party Refreshments,'' Ene Bertrans; 'Dressmakers' Hints,'' Eleanor Chalmers; 'Spring Flowers,'' C. P. Binny; 'Salen D. Maylor; talks; 7-8, concert, Rahr Willisms and his Rainbo Garden orchestra; Munuel Lodriguez, Spanish tenor; Lydia Lochner, entralto; Edith Buck-master, accompanis; 'lo-2, m., Raibn Willisms and his Rainbo Garden orchestra; Munuel Lodriguez, Spanish tenor; Lydia Lochner, entralto; Edith Buck-master, accompanis; 'lo-2, m., Raibn Willisms and his Rainbo Skylarks; June Lee, comedicane; Asel the results in the second strain the sec

### Friday, February 6

Friday, silent night for: CHNC, CKAC, KFKX, KGO, KJS, PKO. PWX, WBBR, WCBO, WEAO, WFI, WIP, WKAQ, WLBL, WLW, WOI, WREO.

CKAC, Montreal, Can. (Eastern, 425), 1:45 p. m. Windsor hotel trio; 5:30, Ilo lessons, CKY, Winnipeg, Can. (Central, 450), 7:30 p. m., uni-versity lecture; 9, concert, choir, St. Matthews Angeli-can church and the state of t

CK Y, Winnipeg, Can. Contrat. 3507, 1505 P. and and versity lecture; 9, concert, chicr, St. Matthews Angelican church.
CNRT. Toronto, Can. (Eastern, 400), 6:30-8 p. m., Luigi Romanelli and his King Edward hotel concert orchestra; 8:30-10, studie program, "Come Where the Lilies Bloom," "Annie Laurie," Le Olde Tyme Village quartet; "A Deceiful Man," "A Flapper's Sunday Morning Breakfast," Pearl Carter; "The Standard on the Brases O'Mar." W. H. Norris, bass; "Drink to Me Oniy with Thine Eyes," "Cousin Jeddadiah," Ye Odle Tyme Village quartet; "Comin Throf the Rye," Ddisy Larush McAdam; "Venice and Naples," Edward Magee, pianist; edward hotel dance orchestra. RoKA, E. Pittsburgh, Pa. (Eastern, 309.1), 7 a. m., morning exercises; 8, morning exercises; 12:20 p. m., Sunday school lesson for February 8, James C. Mace; elits, adjord's orchestra; S:30, children's period; 8:15, address, University of Pittsburgh; 8:30, econcert.

concert.
KFAE, Pullman, Wash. (Eastern, 330), 7:30 p. m., Paul Christen, baritone; Mary Wyman, planist; "Art in the Northwest," W. T. McDermidd; "Essentials of Success-ful Farm Management," Prof. George Severance; "Re-sults of Extension Work," W. W. Underwood; talk on new books, Alice L. Webb, KFOM, Beaumont, Tex. (Central, 315.6), 8 p. m., band concert.

Kronert.
KFI, Los Angeles, Calif. (Pacific, 469), 5-5:30 p. m., Evening Herald, table talk, news; 5:30-6, Examiner, musical half hour; 6:45-8, Acolian residence pipe or-gan recital, Dan McFarland, organist; 8-9, Evening Herald, Owen Fallon's Californians, Clarabelle Beck, vocalist; 9-10, Examiner program; 10-11, Alma K. Moss, contraito; Mrs. Arthur Bliss Carpenter, pianist; Oswald Knilling, vio-cello and Billie Moss, haritone. KFNF, Shenandgah, Iowa (Central, 266), 6:30 p. m., program, Boy Scouts, Red Oak, Iowa, M. A. Pratt, director.

director. (FOA, Seattle, Wash. (Pacific, 455), 4-5:15 p. m. Olympic hotel concert orchestra; today's recipe; 6:45-8:15, Sherman Clay & company program; 8:30-10 Seattle Times studio program; 10:05-11, Olympic hote

By the state of the st

10, program, Columbia Outfitting company; Purcell, the KNX glrl, popular song re-

cital; 11-12, Abo Lyman's Cocoanut Grove dance or-chostra from Ambassadur hotel.
KOA, Denver, Coie. (Mountain, 322.4), 3 p. m., "Thir-teenth Hungarian Klapsody." "Kondo Brillante," Margaret Stubbs, pinist; "Electrical Illumination in the Home," S. W. Bishop; "The Princes," 'Odallske," "Thanks for Thy Hand, "Kalph Freese, tenor; 8, KOA orehestra; "Hall to the Dawn," Denver concert quartet; vocal duet, "Solenne in Quest 'Ora, from La Forza del Destino," Cornelius Delley, J. Allen Grubb; Lullaby from 'Jocelyn," "Friend of Mine," Bernice W. Doughty, soprano; 'Wake, Miss Lindy," 'Wood, Thou Sweet Music," Denver concert quartet; 'A Pleasant Half Hour at the Beach," Elsle Webb, reader; 'Aral, Ceteste Alda," 'Drink to Me only with Thine Eyes," J. Allen Grubb, tenor; "Etude en Forme de Valse," "Polonalse," Margaret Day Grubb, planist; 'Read Troubles with the Auto," H. L. Johnson; "Carry Me Back to Old Virgina," 'Sweet and Low," "Sweet Genevieve," quartet; Romance from 'Mlgnon," 'Dawn in the Desert," 'Birth of Morn," Laura Kemp Anderson; "Teddy, a Christian Soldier," Elsie Webh, reader; voeal duet, "Tho Voyagers," Estie Webh, reader; Areal, a Christian Soldier," Elsie Webh, reader; Areal, a Christian Soldier, "Estie Webh.
KB, State College, N. M. (Mountani, 348.6), 7:30-8:30 p. m., popular science course, lesson 3, member of the engineering frautys."

ROB, State Contege in microscience course, lesson 3, member of the engineering faculty.
KPO, San Francisco, Calif. (Pacific, 423), 7 a. m., dally dozen; 10, town crier; 10:15. "What is Playing at the Various Theaters," 12:45 p. m., talk, Commonwealth club luncheon; 1-2, Rudy Seiger's Fairmont hotel or-chestra; 8-9, dance music, Cleveland Six orchestra; 9-10, one act play, Theater Aris elub, Talma Zetta Wibhur, director.

Decki, 16, Don't Cite, 19.15. D. m., Chik, Commonwealth club luncheon; 1-2. Rudy Selger's Fairmont hotel or-chestra; 4:30-53.0, Rudy Selger's Fairmont hotel or-chestra; 5:0, Duck Arad cossin; 10:05. all around the house; 10:10, questions and answers; 10:20, "Sugrestions for Today's Meals," Amy Kelly; 12:30, p. m., Oscool Hall Burr, reader; "Sweet Clover for Dairy Pasture," James W. Lim; "Give the Pig a Chance," C. G. Elling; 7:20, college quartet; 7:50, "Relation of Botany to Agriculture," L. E. Mclehers.
 KSD, St. Louis, Mo. (Central, 549.1), 8 p. m., fillinols college quartet; 7:50, "Relation of Botany to Agriculture," L. E. Mclehers.
 KSD, St. Louis, Mo. (Central, 535.4), 6:30 a. m., morning exercises; 11:35, table talk, Mrs. Anna J. Peterson; 6:35-7, p. m., children's bedlime story. Uncle Bob; 7-7:30, dinner concert, Congress hotel; 8, speeches, auspieck American Farm Bureau federation; 9-10, mid-night revue; 11:2:30 a. m., midnight revue.
 WAHG, Richmond Hill, L. I. (Eastern, 316), 12-1 p. m., Brooklyn Federation of churches; 8-8:15, Charles Vollmer; 10:45-10:30, Ascuitto hrothers dance orchestra; 10:30-10:45, original Peggy O'Neill (Astronometric, Sec.13, 50), 0:10-9:25, Arnold T. Koch, cellist; 9:225-9:45, Morningside string quartet; 8:45-9, Ap. Original Peggy O'Neill (Astronometric, 10:45-10:30, Accuitto hrothers dance orchestra; 10:30-10:45, original Peggy O'Neill (Astronometric, 10:45-10:30, Accuitto hrothers dance orchestra; 10:30-10:45, original Peggy O'Neill (Astronometric, 10:45-10:45, Junes M. Sevell, 9:55-10:50, Charles Vollmer; 10:05-10:30, Accuitto hrothers dance orchestra; 10:30-10:45, Milling Penn, Mill, L. L. Central, 420, 10:10:51, Right's Revell, 9:15-10:35, Janes M. Sevell, 9:15-10:35

WOAF, Oetroit, Mich. (Lastern, 516), 415 p. m., musical program; 10, dance music for 2 hours.
WOAF, Kansas City, Mo. (Central, 411), 3:30-4:30 p. m., Star's Radio orchestra; 6-7, school of the air; plano; message, Roger W. Babson; story lady; Trianon ensemble, Hotel Muehlebach.
WOAF, Philadelphia, Pa. (Eastern, 395), 11:45 a. m., daily almanac; 12:02 p. m., Stanley theater organ reital; Arreadia cafe concert orchestra; 2. Arcadia cafe concert orchestra; 7:30, Dream Daddy's bedtime stories; s, book review, Arnoid Abbott; 8:15, "Fifteen Minutes of Humor," Sam Wingfield; 8:30, play, WDAR players; 9:30, Stanley theater symphony concert; 10:03, Arcadia cafe dance orchestra; Morning Glory club concert.
WEAF, New York, N. Y. (Eastern, 492), 6-7 p. m., dinner music, Waldorf-Astoria hotel; 7-7:30, children's stories, Elizabeth Wade of G. R. Kinney Shoe company; 8-9. Happiness boys; 9-9:30, Hohner Harmony hour; 11-12, Meyer Davis Lido Venice orchestra.
WEAF, Cleveland, Ohio (Eastern, 364), 7 p. m., Edwin Arthur Kraft, organ reeital from Cleveland Public auditorium.
WEAH, Chicago, 111, (Central, 370), 7-8 p. m., Hazel O'Noil

catchair Arait, organ reeltal from Cleveland chicago, III. (Central, 370), 7-8 p. m., Hazel I, soprano; Oriole orchestra, Riviera theater: 9-10, orchestra; Frederick Agard, tenor; Rita Me-soprano; 11-12, Oriole dance orchestra, Three teers, songs; Sandy Meck, tenor. New York, N. Y. (Eastern, 273), 7-8 p. m., Roborns' Blue Bird trio, featuring Jack Wheatin, ionist; S-8:15, Judith Ruth and Peter DeRose; Leon H. Fox, violinist, accompanied by Norman feld. 'EBH, O'Neil, WEBJ,

Henneled.
WEEL, Boston, Mass. (Eastern, 303), 6:30 p. m., Boston Edison Big Brother club; 7:30, program, Whiting Milk company; 8, program, Neapolitan Ice Cream company; 8:30, Gilchrist quartet; 9, Green Drason orchestra; 10, Haihs and Nocit, evangelists.
WEMC, Berrien Springs, Mich. (Central, 286), 8:15-8:35 p. m., Radio Lighthome choir; 8:35-8:45, Ernest Hurd, tenor; 8:45-8:55, Ardice Detamore, planist; 8:55-9:15, Bible chat.
WFAA, Dallas, Texas (Central, 472.9), 12:30-1 p. m., address, Dr. Robert Stewart Hyer; 4:30-5, woman's hour; 6:30-7:30, orchestra recital, Blue Bonnet aere-naders; 8:30-9:30, Mrs. William Echols and Prof. Julius Wanek.
WFI, Philadelnhia, Pa. (Eastern, 395), 1 p. m. Mark

ausplces Baptist: Seminary and Training school, Rev. E. A. Burnette. director; WHAS stock company.
WHB, Kansas City, Mo. (Central, 411), 2-3 p. m., request program; 7-8, musical program, Peking cafe; "Personal Magnetism." Zenola Randell.
WHK, Cleveland, Ohio (Eastern, 273), 6 p. m., nuslc, Radlograms; 7, beddime story, Ethel O. Hawes; 8, musical program, and educational forum.
WHN, New York, N. Y. (Eastern, 360.4), 6:30-7 p. m., Vincent Catanese and his Hotel Alamae orchestra; 7-7:30, Harry Richman and his entertainers with Eddie Eikins and his orchestra; 10:10:10, fashion ehats, Mmc. Belle; 10:10-10:25, Bob Miller, popular songs; 10:25-10:35, "Storage Batteries," H. B. Shontz; 10:35-11, Roscland dance orchestra; 11:11:30, Yanity club revue; 11:30-12, Sam Wooding and his Club Alabam orchestra; 12:42:30 a. m., Ted Lewis's and his Parody elub orchestra.

orcnestra: 12-12-30 a. m., 10, 10, 201. elub orchestra. /HO, Oes Moines, Iowa (Central, 522.3), 7:30-9 p. m., Williamson borohers; J. W. Fletcher, tenor; Emilie Ritchie orchestra: /IP, Philadelphia, Pa. (Eastern, 509), 1 p. m., Gimhel tea room orchestra; food talk, Anna B. Scott; 6:05, songs by Mark Flisher and Joe Burke; 6:15, Harvey Marburger and his vaudeville orchestra; 7, Uncle Wip's bathime stories.

songs by Mark Flsher and Joe Burke, 6:15, Harvey Marburger and his vaudeville orchestra; 7, Uncle Why's bedtime stories.
WJJD, Mooseheart, III. (Central, 302.8), 3:30-4:30 p. m., music, Mooseheart ehildren, assembly, talks; 6:15.7-15. Alhert Brown, organist; 7:15-8:15, solos, orchestra, talk; 11:30-12:30, request organ music, Albert Brown, WJY, New York, N. Y. (Eastern, 405), 8:15-10 p. m., "Tarelogue from Burna to Java," Dr. Sigel Ronsh with musical accompaniment; 10-10:30, "How Motlon Plctures Are Made," Dr. A. B. Hitchens.
WJZ, New York, N. Y. (Eastern, 455), 10:20-10:40 a. m., "Books," Grace fisched Color; 10:40-10:50, Arts and decorations, Mrs. Mary Roberts; 1-2 p. m., Henry Vander Zanden's Hotel Ambassador trio; 2,4:30, City Federation of Women's elubs; 7-8, Savarin ensemble; 8-8:10, Wall Street Journal reviews 8:10-8:20, "Public Speaking," N. Y. U. Air eollege, R. C. Borden; 8:40-9:25.eas ongs, Chief Steward Ballyn uf "Berencarla;" 9:25-10, Michael Markels orchestra; 10-10:30, Ould Guard Ball direct; 10:30-11:30, Duke Yellman and his Irene Castle orchestra direct from Kniekerbocker gtill.

"Berengarla," 9:25-10, Michael Markels orchestra; 10-10:30, Oil Guard Ball direct; 10:30-11:30, Duke Yellman and his Irene Castle orchestra direct from Kniekerbocker grill.
 WLS, Chicago, III. (Central, 345), 12-1 p. m., R. F. D. program, Harmony aces. "Book Farmer" serles, G. C. Biggar, 3:45-4:45, homemakers' hour, etub contest: 6:30, Ralph Emerson, organist; 6:50, Senate theater studio; 7, Iuliaby time Glenn Howell and Ford Rush; 7:15, Chicago Association of Credit Men, quartet. trio and doubles; 8, R. F. D. program, Ford and Glenn, Hawailan guitarist; "John Turnipseed." serles; 9, Henricetta Greenfield, violinist; 9:10, Stadter feature; 9:30, Janet Simons, planist; 9:40, Art Kahn, Senate theater; 10, Senate theater of and Glenn Home.
 WLW, Cincinnati, Ohio (Central, 423), 8 a. m., physical exercises, Y. M. C. A., Wm. Stradtman, instructor; 12:15 p. m., program Delta Omicron sorurity; 4. lesson in French, Madame Tcimpidis; pupils of Leo Stoffregen in reeltal.
 WMAQ, Chicago, Allaby Kid, Mrs. Gene Davenport; 6. organ recital, Chicago theater; 6:30, Hotel Lasalle orchestra; 8, weekly Wide-Awake elab program, Mrs. Frances M. Ford; 8:30, musical geography. Mr. and Mrs. Marx E. Oberndorfer; 9:15, Chicago Heights Women's elub chorus.
 WMC, Memphis, Ten, (Central, 503.9), 12 m., musical program, O. K. Houek Fianc company; 8 p. m., bed-time story; 8:30, concert, Britclings' Novelty orchestra; 11. Midnight frolic. Bob Miller.
 WNZ, New York, N. Y. (Eastern, 233, 10:30-11 p. m., Frank Daily and his Meadowbrook orchestra; 11-11:30, Wolf, Guiberto, 11:30-12. Original Dixeland; 3:22.30-10:30, concert program from studio.
 WOX, Mewark, N. Y. (Eastern, 528.8), 7:30-7:35 p. m., pollee alarms; 7:35-8, resum of meeting of board of estimate; 8:30-10:30, concert program from studio.
 WOX, Momaha, Nebr. (Central, 522.3), 6 p. m., story hour, conducted by Doris, Claire, Second, daughter of theater and the prodice the program from studi

board of estimate; 8:30-10:30, concert program to studio.
WOAW, Omaha, Nebr. (Central, 522.3), 6 p. m., story hour, conducted by Doris Claire Scendt, daughter of 'Uncle Ross' of the World-Herald; 6:30, Harry Brader, violinist-conductor, and Frank Strawn, pianist, of the Rialto symphony orchestra; 7:15, current sport events, by Ivan L. Gaddis, sports editor of the Omaha Dally News; 9:30, program arranged by Thelma Skeen Swauger, harpist and pianist.

Daily News; 9:30, program arranged by Thelma Skeen Swauger, harpist and planlat. WOC, Oavenport, lowa (Contral, 498), 7:20 p. m., "Al-falfa," Charles W. Lau; 8, "Tri-City Night Hawks" orchestra. WOI, Ames, Iowa (Central, 270), 12:30 p. m., college chimes.

Wolf Philadelphia, P. (Eastern, 509.9), III., Conges
 WOO Philadelphia, Pa. (Eastern, 509.9), II a. m., organ recital, Mary E. Vogi; 12:02 p. m., Wanamaker crystal tea room orchestra, Rohert E. Golden, director; 4:35, organ recital, Mary E. Vogi; 7:30, A. Candelori's ensemble, Hotel Adelphia; 8:25, Erno Rapee's intimate concert from Fox theater; 9:30, WOO orchestra; 10:03, William Bove's dance orchestra, Hotel Adelphia; 10:30, William Bove's dance orchestra; 10:04, 54:05, 94:05

William Bove's dance orchestra; 10:03.
William Bove's dance orchestra, Hotel Adelphla; 10:30.
Vincent Rizzo's dance orchestra.
YOR, Newark, N. J. (Eastern, 405), 2:30-2:45 p. m.,
Anne M. Fisher, soprano; Paul M. Yeaton, cornetist;
3:3:15. 'Nietzsche.'' John Romiser; 3:30-4, Joe Brown and his orchestra; 6:15-7:30. 'Music While You Dine.''
Ernie Krickett's orchestra; 8-8:30, Schubert string quartet; 8:30-9. program, Mahelanna Corby; 10-10:30, Matelanna Corby.

Mabelanna Corby: Well, Schubert String, Mabelanna Corby, Woll, Chicago, Ill. (Central, 448), 11-12 m., Sunday dinner menu; 3-4 p. m., "A Valentine Party," Dorothy Dickens; 7-8 p. m., concert, Ralph Williams and his Ralnbo Garden orchestra; Lois Mackey, accompanist; Mirlam Burns, soprano; S. Levine, tenor; Effe Overson, accompanist; 10-2 a. m., Ralph Williams and his Ralnbo Skylarks; Rogers boys, West Brothers, steel guitarists; Lauretta Giles, soprano; Monogram. trlo, Nate Caldwell, pianologues.
 WSB, Atlanta, Ga. (Central, 429), 12 m., entertainment; 5-6 p. m., songs and bedlime story. Bonnie Barnhardt; garden talk, William B. Deckner; 8-9, Tech. High school band; 10:45, program, students of Hoke Smith WTAM. Clavaland, Obj.

school. WTAM, Cleveland, Ohio (Eastern, 364), 6 p. m., Guy Lombardo's Royal Canadians orchestra. WTAY, Oak Park, HI. (Central, 250), 6:15-6:30 p. m., organ, Parthenon theater; 6:30-7:30, Atlas night; Black Cat orchestra

organ, Parthenon theater; 6:30-7:30, Atlas night; Black Cat orchestra. WWJ, Oetroit, Mich. (Eastern, 516), 8 a. m., settlng-up exercises, Ri J. Horton; 9:30, tonight's dinner; 12 m., Jules Klein's Statler orchestra; 3 p. m., the Detroit News orchestra; 6, Jules Klein's Statler orchestra; 7, the Detroit News orchestra; Anne Campbell, the De-troit News poet; Harry E. Parker, tenor.

## STATION KFSG PLANS **CHURCH FOR INVALIDS**

## Engraved Membership Cards to Be Issued Members

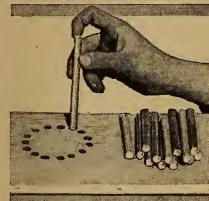
address, Dr. Robert Stewart Hyer; 4:30-5, woman's hour; 6:30-7:30, orchestra recital, Blue Bonnet aere maders; 8:30-30, Mrs. William Eelols and Prof. Julius Wanek.
 WFI, Philadelphia, Pa. (Eastern, 395), 1 p. m., Meyer Davis Bellevue Strattord concert orchestra; 7: Sunny alm.
 WGN. Chimaa, planist; 6:30-7:30, Jib p. m., luncheon concert, Drake concert ensemble, Blackstone string quintet; 2:30, attis seriea, Jyon & Healy; 3, cocker to concert. Drake concert ensemble, Blackstone string quintet; 5:30, Skeezix time for the entry of the string or the entry of the string or the entry of the string duintet; 6:30-7:30, dinner concert. Drake concert ensemble, Blackstone string quintet; 6:30-7:30, dinner torake dance or chestra, Harold Gieser, director, John Lund; 11:30, super director, sti5-8:30, W. L. Manning, baritone; 9: Angeretady, N. Y. (Eastern, 380), 2 p. m., "A Guide to Better Homes," Mildred G. Bewen, 7: 50ng, "orchestra; 8: 2:0, "From Burm to Java," Dr. Ster Ronsh; 10:20, WGY orchestra; 8: 7: Dog Psychology."
 WGY, Scheneetady, N. Y. (Eastern, 380), 2 p. m., "A Guide to Better Homes, "Mildred G. Bewen, 7: 50ng," orchestra; 8: 7: Dog Psychology."
 WGY, Scheneetady, N. Y. (Eastern, 380), 2 p. m., "A Guide to Better Homes," Mildred G. Bewen, 7: 50ng, "orchestra; 8: 4: 7: 50ng, "orchestra; 8: 50, "From Burm to Java," Dr. Ster Ronsh; 10:20, WGY orchestra; 8: 4: 7: 50ng, "orchestra; 8: 7: Dog Psychology."
 WHAS, Louisville, Ky. (Central, 535.4), 7:45 p. m., addresses, Wisconsin Press association banquet, whalison, Wis, Central, 400, 4:5 p. m., selections, Alamo theater organ; 7:30-9, one-hour concert.

# Winding Low Loss Tuned R. F. Inductances

Radiophan Can Make Own Transformers

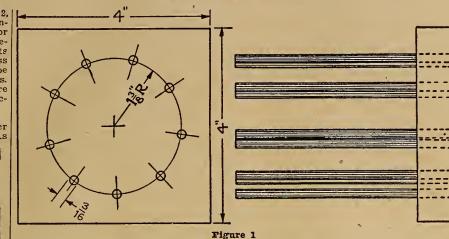
**By Jacques Fournier** 

A N THE Radio Digest of November 22, the writer described a low loss in ductance of the basket weave type for use in a three circuit regenerative re-eviver. There have been many requests from readers since then for a low loss inductance of this type that might be used in tuned Radio frequency receivers. In this article the writer will therefore give the complete data for the construc-tion of such a unit. **The Winding Form** The form for winding this transformer is shown clearly in figures 1 and 2. As



### Figure 2

Figure 2 will be seen in figure 1, a square block of wood, bakelite, hard rubber or metal is necessary. 4 inches on a side and from % to 1 inch thick. A circle is drawn in the eenter of this 2% inches in diameter and divided into nine parts so that holes will be drilled 40 degrees apart around the circle. The form shown in figure 2 is not the one used for this inductance, but the construction is similar; the form shown has more pegs and the two-over, two-under method of winding is used. In the inductance which we are going to build the one-over, one-under method is

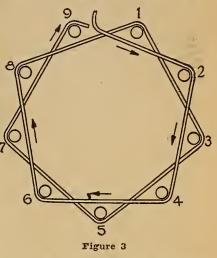


used. The rods on which the wire is wound may be either large nails or wood dowel pins as shown, and should be  $\frac{1}{45}$ inch in diameter and  $\frac{1}{2}$  inches long. If metal pins are used they can be soldered to the metal block which forms the base; if wood pins are used they can be glued to the wooden base; or, if metal pins are used with a bakelite or hard rubber base, they can be put in by making the holes a little smaller and driving the pins through. **One-Over, One-Under** The method of winding is shown in figures 3 and 4, although figure 4 shows the two-over, two-under system. As will

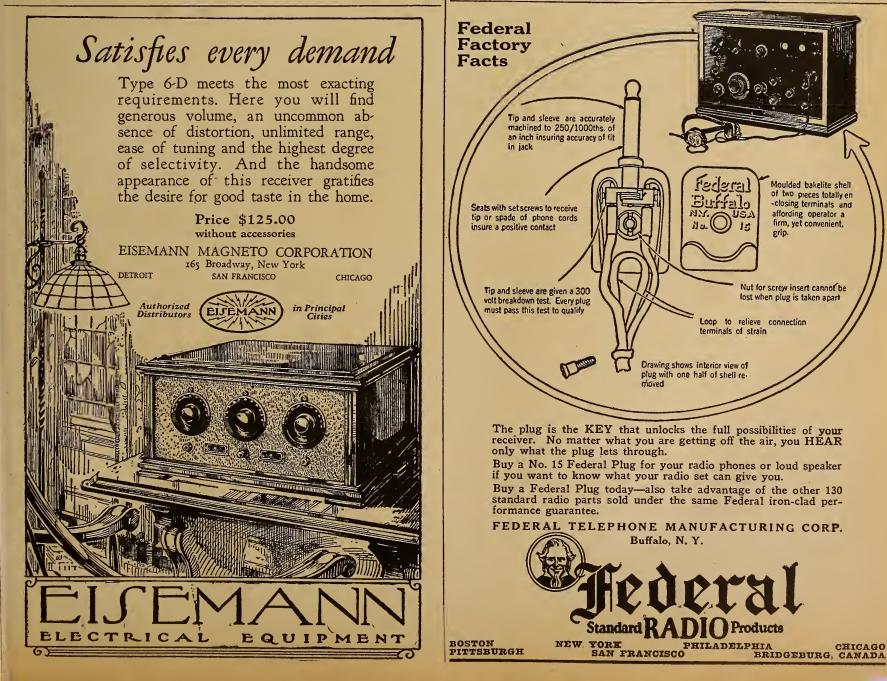
piece of thread is shown in figure 6. Securing with Thread The alternate turns cross each other diagonally at 9 points around the coils and it is at these 9 points that the thread holds the turns together. Following the thread in figure 6, it will be noted that it goes across to the left under the odd turns, around the end of the wires, and then under the even turns and over the odd turns to the opposite end of the coil where it goes around the last turn and

comes back under the odd turns and over the even turns. Thus the thread forms one complete loop and is carried across, as denoted by arrows 7 and 8, to the next in-tersection, where a loop is wound in the opposite direction as shown by arrows 9, 10, 11, 12 and 13. When the thread has been carried clear around the coil in this way and the ends tied together the coil can be slipped from the form either by removing the pins one at a time or slightly squeezing them together at the free ends and slowly sliding the coils from the pins. A strip of bakelite or hard rubber is

----



now cut as shown in figure 6 and measures 4 inches long,  $\frac{1}{2}$  inch wide and  $\frac{2}{36}$  inch thick. Holes are drilled  $\frac{1}{4}$  inch from each end large enough so that the coil can be mounted on the rear end plate of variable condensers. Before slipping this piece of bakelite through one of the points of our 9 pointed star coil, it would be well to smooth off the corners with a file so (Continued on page 18)





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## **Private Property**

### The Thing We Own We Call the Best

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## Profanity on the Air

Now the Air Is Polluted with a Different Dirt

'Now the Air Is Polluted with a Different Dirt R ECENTLY a noteworthy judge in our courts al-lowed himself to become so angry that he swore at the state's attorney. This somewhat lowered the dignity of the judicial bench, not only for those con-cerned in the trial but in the general public mind when they read about it in the morning paper. This so very long ago in the excitement of a football game profanity spilled forth in the regular street ingo, and into the nicrophone, which was done pur-posely to lay stress on the plays, but this coming forth from a receiving set at the fireside was abomi-nable. It is anything but gratifying to hear men of obvious culture and education lowering themselves to admit incompetency of expression by resorting to porfanity as a means of forceful delivery, and it is awfully embarrassing to have a burst of profanity pour out of a loud speaker into the midst of a family circle. Whether it comes from a college bred man or not it makes it none the more acceptable.

## **RADIO INDI-GEST**

## Expedition Leaves Next Week to Open Indi's Station BLAH

Indi's Station BLAH The broadeasting station owned by Indi-Hisself, and located on the beautiful island of Walla Walla, in the South Seas, will open again in the near future. This station has been closed for some time owing to altera-tions and repairs being made to the equipment. With all the new features added, this will be the most power-ful station in existence—and we haven't paid a license fee. (A. T. & T. please note.) Don't forget to watch for the experiences of the hardy adventurers who are making the trip, as the story will read more like fiction, but, it will be the whole truth and nothing but the truth. Followers of Indi-Gest desiring to secure reservations for the trip should write direct to Indi-Hisself as soon as possible, because the number of passengers will be limited. The expedition will sail for the gem—"Walla Walla"

limited. The expedition will sail for the gem—"Walla Walla" —of the South Seas next week. Photographs will be take to show those who stay at home all the beauties of this little island. Watch for them! INDI.

## My Radio

# By Rev. Marcus L. Gray My Radio's the stuff, Though static may be rough; For it I've paid my dough, And it is sure a go.

It climbs out in the sky, And keeps a weather eye On sermons, tunes and songs, And forks them on its prongs.

My lonely hours are gone, I fish around till dawn, Sometimes the strain's sublime, Sometimes not worth a dime.

This time it's all a jinx, Acts like it had the drinks, And then it soars on wings, Like angels then it sings.

### **Eckersley Being the Cheese**

Lckersley being the Cheese Dear Indi: Captain Eckersley, chief engineer of the British Broadcasting company, hopes that some day it will be possible for Radiophans to receive programs by following these instructions:— "Take a clothes' line, damp it slightly. Stick a knife into one end and the other end into a piece of cheese. Put a pair of 'phones across it. Finis." LONDON BOBBY.

## The "DX" Bug

The clock on the wall goes tick-tick-tock, The Radio-bug stung me. The broadcasters send them thick and hot, The Radio-bug got me.

- The night speeds on on wings of time-The Radio's fine you see. The programs are better after nine, I'm a Radio fan; get me?
- The anouncer just said, "until" 2 a.m. A program fine you'll hear; So tune her in to WTAM (Cleveland), And your bed you'll not get near. J. B. JAMES.

## He Went to Stop the Little Rain Drops Indi, u ole seamp: Wendall Hall, dry weather spe-cialist, has just returned from CUBA! Answer me: Did he go to CUBA to BROADCAST? DID HE? Or didn't he? I know a lotta friends who've gonc to Cuba in the past five years, BUT--they did not go to broadcast. SPIDER WEBB.

## Broadcasting for You Tonight

- I'm broadcasting my thoughts for you tonight, Across the miles and miles; I'm trying to say, how glad I would be, For just one of your smiles.

I'm sending a message across the waves, That's full of love and cheer; And though you are many a mile away, I'm sure that you will hear.

I'm crowding the air full of thoughts of you, Thoughts that are rich and free; For I know if my message reaches you, That you will think of me.

WILLIAM O. WINKLER.

## He May Not Have Selectivity, But He Isn't Missing a Thing

Dear Indi: I know a fella who has a set so good that it'll receive three stations at onct. SECOND FIDDLE.



## Condensed By DIELECTRIC

Los Angeles fans were given a pleasant surprise when KFI's new super station came on the air early in January. Prior to the time the new set began opera-tion it was predicted widely that the use of increased power by a station situated as KFI is, in the central business district, would result in blanketing for a radius of several miles. Some went so far as to state that crystal sets would be unable to tune out the new giant. The contrary turned out to be true. The new super set actually tunes sharper locally than the old 500-watt transmitter and is gaining thousands of lis-teners at distant points.

Another Radiocast station to put on some French concerts is WOC. The piano accompaniment to these songs was just about what it should be. Many times a voice or instrument is at great disadvantage because of the volume of the accompaniment. Very agreeable indeed was the singing of the great aria of Salome in the opera of Herodiade.

I don't know that many listeners could classify orchestras rendering dance music into bad, good and best—I admit my inability. It is not so difficult to judge of the ensemble work or quality of the tones produced, but if it's dance music why—that's what it is. Still I could find no fault with the dance program put on at WHB recently. The numbers followed with no waiting and the musicians were capable.

I listened to a program from WSAI, which had the marks of careful arrangement. Both instrumental and vocal solos were interspersed in a way to break any possible monotony. One of the vocal numbers is a melodious song and was very well rendered, so well indeed, that had I been able to applaud, a repetition would have been demanded for "Old Irish Mother O' Mine." It got down behind one's vest!

Sporting events have no appeal to some of the Radio public, yet to others it is the spice of all Radio-casting. Most sports are represented in the list of features sent through the ether, although at times it is necessary to be content with a second-hand de-scription. One of the latter type was the marvelous race of Nurmi whose style of running and progress in the races was depicted through WGBS.

The Pacific coast has been entertaining by Radio-cast for a long time, I mean pleasure resorts, but only recently has the foremost eastern resorts come on the air so as to be heard at a distance. "The World's Play-ground," WPG, the municipal Radiocast station at Atlantic City, has been fortunate to have the Traymore hotel orchestra to open their programs. The quality of transmission is good.

At the request of one of our readers I am calling the attention of WCX to what seems to be an error in program arrangement, or is it to afford respite for the announcer? In other words, why is it necessary to interpose five-minute waiting periods between num-bers during the dinner concerts and afternoon pro-grams? There are others to tune to.

that it'll receive three stations at onct. SECOND FIDDLE. That "Chi-CAW-go" Will Wear 'em Out Dear Indi: How many cans of Calumet Baking Pow-der would it take to raze the towers of WQJ, if it took me thirty-five minutes to figure out this question? DUKE X. For those who find great enjoyment in listening to jazz numbers, especially if they like them to follow one another with as little intermission as possible, the station to tune in is WCX. Out there in Detroit they seem to have every jazz selection at their finger tips and the musicians go from one to another without pause—except for the station announcement.

It calls to lands afar, Entices music's bar, And thrills my very soul, My heart it doth console.

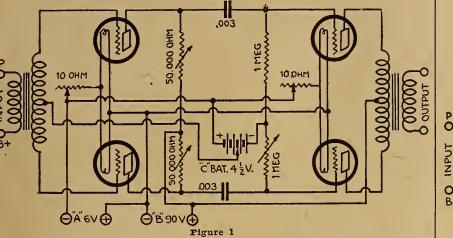
Anon it sounds a wheeze, It isn't worth a cheese, And then it sings so fine, It's worth a whole gold mine.

# **Demonstrating Radio Principles at Home**

## Chapter VIII-Experimenting with Push Pull Amplifiers

## By J. E. Owen

ADIO has suffered because of a lack of satisfactory audio frequency amplification. Until recently, the public has been obliged to content itself with its of sound frequencies. Within these limits, however, distortion is negligible unless more than two stages of amplification and one of push pull. No ligible unless more than two stages of amplification are used. When a push pull amplifier was heralded with much joy and the general standing of the straight type, distortion of the first it when only moderately strong signals. Others may of the stage in the same proportion that the desired signal is. This is evidently, then, a poor gractice.



enough, though, the standard two stage amplifier was retained and the push pull amplifier was added only to obtain more

Transformers inherently distort. Resist-Transformers inherently distort. Resist-ance coupled amplifiers are lower in effi-ciency. Push pull amplifiers use two tubes per stage. This reads like a pessimist's account of a shipwreck, but these are the facts that the experimenter must face when he enters the field of audio frequen-cies. The larger manufacturing concerns have spent enormous sums in an effort to improve audio frequency transformers. While their efforts have been crowned with

Two Stage Amplifier An arrangement that will give excellent volume with a minimum of distortion is shown in figure 1. This is a two stage amplifier of the push pull type using transformer coupling between the input and the tubes, and also between the tubes and the output. Between the stages a push pull resistance coupling is used. Any standard brand transformers may be used. The writer suggests that variable resistance be used in this circuit and there are several good makes of variable resis-tances on the market. This amplifier will give much more sat-



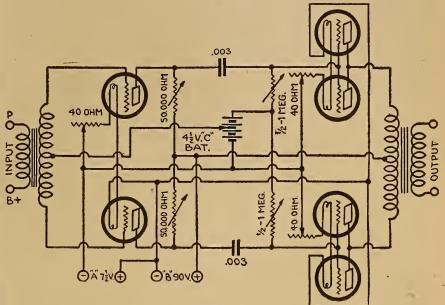
# **CROSLEY** *Grirdyn* Since the inception of radio, the esults obtained with Armstrong Regenerative Receivers have been the goal of comparison for all others. Trick circuits have been designed to get around the Arm-strong Patent, hoping to obtain re-sults "just as good." This has re-sulted in the use of more tubes, necessary without, but unnecessary with regeneration

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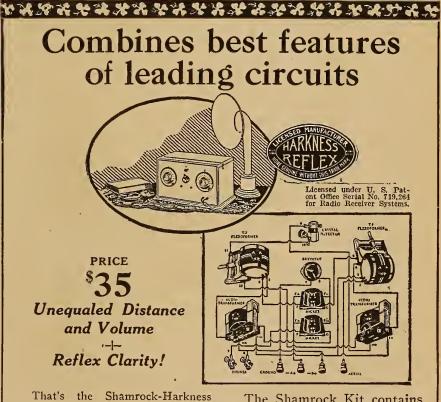
The CROSLEY RADIO CORPORATION Powel Crosley, Jr., President 1495 Sassafras St. Cincinnati, Ohio





#### Figure 2

Storage Battery Tubes The circuit of figure 1 is intended pri-marily for tubes of the storage battery type. However, dry cell tubes may be used. The amplification resulting from dry cell tube arrangements is not equal to that guency amplifier, but it is not unusual to see a nine tube set, five tubes of which are used directly or indirectly as Radio frequency amplifiers. The British almost ridicule the attitude of American Radio-(Continued on page 20)



That's the Shamrock-Harkness Two Tube Reflex which has created such a sensation among experi-menters and amateurs by its amazing performance. It combines the best features of the most powerful circuits in use today.

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Spir L. and Lew P.

We Agree with Mr. Hoover



issue of trodons.

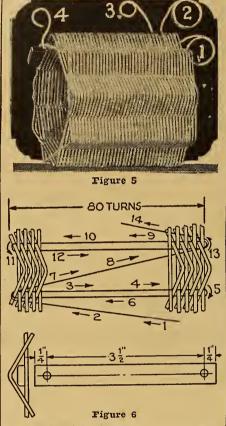
LOW LOSS INDUCTANCES condenser in shunt to the secondary, is a real pleasure, as the selectivity is remark-

(Continued from page 15) that the insulation on the coil will not be injured. After slipping this piece of bakelite into the coil the loop made at the twelfth turn can be untwisted and cut at its middle point. We will then have two separate windings, one of 12 turns and one of 68 turns. The method of mounting this coil on condensers cannot be shown, as this will vary with every type of condenser used. It is suggested, however, that small right



© K. & H Figure 4

angle brackets be made of heavy brass or aluminum, to be attached to the bakelite or hard rubber strip at the ends and to the rear end plate of the condenser. The condenser will then have to be mounted on the pancl in such a way that the coil just described will be at an angle of 57.4 degrees with the baseboard. In the near future the writer hopes to give full details for the construction of a receiver utilizing these inductances. Tuning with these inductances, and a good low loss



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of the dial and a vernier adjustment is necessary to get on the very sharp reso-nance peak. This unit, as described above, can be used as the antenna coupler and the air core transformer in a receiver comprising one stage of tuned Radio frequency de-tector and audio frequency. If more than one stage of tuned Radio frequency is tutilized, and three of these units must be built into the set, care should be taken to see that they are well spaced and all at exactly the same angle to the base-board. It may prove necessary also to remove from one to four turns of the pri-mary of the second or third unit to pre-vent oscillation on low wave lengths. Another method of preventing oscillation might be that shown by the writer in the issue of December 20, utilizing three neu-trodons.

#### Vernier Attachment

A plumber's fitting called the Fuller ball when mounted on a screw with some play to touch the edge of the dial makes a very desirable vernier attachment. When used for a vernier it is pushed toward the panel front so that it will come in contact with the edge of the



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TIT

## Construction of the Six Tube Hetduogen Part VI-Adjusting and Operating

By C. E. Brush

Differ of BuHalo, N. Y., for Caling this to our attention in his letter of January 15, in time to be included in this concluding article. As to placing it, refer to figure 11. Just to the right of holes 4 and 5, and above binding post Z, is a space on the under-side of the baseboard. The condenser can be secured there with its terminals to the left. One terminal connects to post Z, the other to the +A bus where it goes up through hole 8. We can all feel indebted to M. Joseph Murry, of Titusville, Pa., for a first-class suggestion on soldering tinfoil. To quote his letter of January 12, "I find the opera-tion is simplified by having the foil pressed against a cold metal surface, when, after a little practice, a drop of solder may be applied from the point of the iron without melting the tinfoil." The writer tried this today and it facilitates to operation greatly. Try it first on some foil scraps and then on the foil seg-ment of your filter condenser. We have left to this chapter two points which some might say more rightly be-long to the wiring explanation. These are the use of two extra binding posts shown, and the high resistance unit at the right of the sub-panel. The two binding posts are shown so hat the builder may use C battery grid bias on the audio amplifier tubes, if it should be found to be of benefit. As to whether the C battery is a necessity of not depends a great deal upon the par-ticular transformers used and, while it is considered good practice to use the C bat-tery, the writer has found that when using certain transformers, the third stage of audio amplification has been more easily controlled without it. The use of three stages of audio has usually been the occa-sion for the insertion of some method of oing away with the howl which is almost invariably produced in the third stage bub. Several methods of connecting-in ondensers and high resistance leaks are prescribed for this condition, any one of which may produce the desired result.

## Controlling Three Stages

The method we will recommend in this instance is to connect the variable high resistance directly across the grid and plate of the third audio tube. One side of the unit is to be connected to the grid post of the socket, and the other side of the unit should go to the plate post of the socket.

By C. E.
O N looking over the preceding article of this series the writer notes that a very important item was omitted both from the list of parts and figures 16 and 11, the wiring layouts. This is unfortunate for those in rural districts who have some difficulty in obtaining parts locally as it takes several days to secure. The item in question is a .5 mfd. fixed modenser indicated in figure 2, and connected across the oscillator B+ lead and A+ lead. We are indebted to Mr. Michael Diller of Buffalo, N. Y., for calling this to rurattention in his letter of January 15, artifice.
The trep included in this concluding artifice.
The trep included in this concluding post Z, is a space on the under ide of the baseboard. The condenser can be secured there with its terminals to the fide of the baseboard. The condenser can be secured there with its terminals to the fide of the baseboard. The condenser can be the to the +A bus where it goes utrend that no errors have been made in the other to the +A bus where it goes utrend that no errors have been made in the set.
We can all feel indebted to M. Joseph Murry, of Titusvile, Pa, for a first-class juggestion on soldering tinfol. To quote just letter of January 12. "Tind the opera-

to have been placed in position such that when the condenser plates are entirely out, the dials are at zero. **First Regeneration** Starting with the center dial, we find that as we rotate this dial there is no noticeable result until it is turned in to about 15 to 20, when a change is noted in the sound coming from the horn. If fol-lowed closely, this change will be noted to take place with a distinct thud, produced when the dial reaches a certain position. This thud denotes the fact that the first detector has been thrown into the oscil-lating condition, by result of over-suffi-cient feedback or regeneration. This is as it should be, and shows that we will be able to control the amount of regeneration (and volume) with this 3-plate condenser turned in far enough to produce the oscillating condition in the first detector, if we turn either of the other two dials we will note a series of distinct clicks as the dial is rotated, which in slow motion are noted to be individual whistles. These whistles are the result of the oscillations from the oscillator tube mixing with those present in either or both of the detectors, by rea-son of over sufficient feedback, or regen-eration, in either of the detectors. These are not carrier wave whistles and cannot be tuned in, and before any station can be tuned in, it will be necessary to adjust at least the second detector feedback to a point just below the oscillating condition. The special condenser built into the fifter coil is for controlling the feedback or regeneration in the second detector, and the adjustment of this condenser is the next thing to be explained. By setting the center dial on the panel at zero, we know that we are not producing oscilla-tions in the first detector, and in this position we can make the adjustment on the regeneration in the second detector. **Adjusting Second Regeneration** 

Adjusting Second Regeneration

Adjusting Second Regeneration Move the copper plate section of the socket. Referring back to the use of the C bat-tery, it has been found that with some transformers, this method will not pro-duce as good a result as if the C battery is not used. Therefore, we advise leaving out the C battery for the initial try-out, and if it can be found to be of advantage during later trials you may make, the C battery can be connected in. Now assuming that the set is com-pletely wired, and ready for the first try-out, the first thing to be done is to connect

Introducing Mr. E. T. Jones

Introducting IVIT. IL. I.Jones In THE next issue, Radio Digest will publish the first of a series of articles on Radio theory and practice, written by Edward T. Jones of New Orleans. The author of this series is a practical Radio man, much of whose knowledge was gained in the "ham amateur" days before 1912 and in service as a "brass pounder" on the United Fruit boats. His explana-tions and suggestions, as contained in these articles, can therefore be taken as facts, not theory, and may be followed without hesitation. During the war he was in charge of the Naval Radio School and later transferred to research work on underground anten-nas. Mr. Jones has written technical articles for nearly all the Radio publications and is the author of several books on Radio. Like other old timers, his favorite sport is ex-perimental work. Among the many

perimental work. Among the many attributes attached to Mr. Jones we might mention that Leatrice Joy, well-known motion picture star, is a cousin, and has set a high goal for Mr. Jones to live up to.

Dials Tune Together

As is the case with other regenerative sets, the feedback control should always

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mum capacity position, we gradually re-duce the regeneration, until at a certain point the tube will cease oscillating, which condition can be known by the loss of the whistles which were found when turning the oscillator condenser dial, and which are now absent. Having adjusted the feedback in the second detector to the point where the tube stops oscillating (a few trials will soft the apparatus and the rest of the panel. **Dials Tune Together** (Continued on page 20)



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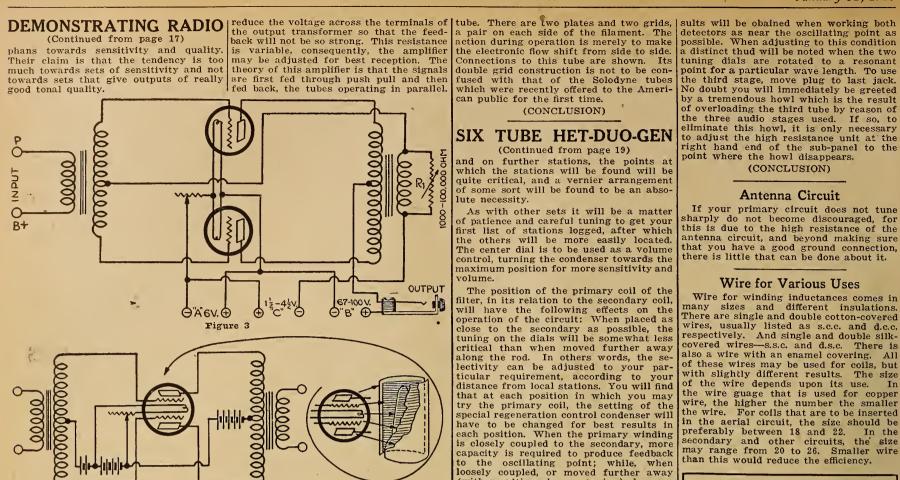


Figure 4 As usually operated, this amplifier is rather unstable. Vacuum tubes that are now on the mar-ket were originally designed for straight amplification only. There are a few Radio men in the country who have the appara-tus for experimenting with vacuum tubes. In figure 4 is a hint. It is a push pull

Figure The filament arrangement, it will be no-ticed, is out of the ordinary. In the fila-ment circuits, the tubes are connected in series in groups of two. This gives the same amperage through them, but requires a higher voltage across the A battery line. The total current draw for these six tubes is .18 amperes. Each tube requires across its filament terminals a drop of only 3 volts, but 3 volts of battery is not suffi-cient since the voltage of a cell diminishes with use. With tubes in series, and allow-ing 1½ volts for drop in the cells them-selves, due to internal resistance and deterioration, the line voltage should be only 7½ and only five cells. will be re-quired. With the usual arrangement, to obtain the same battery life operating the ane number of tubes, six dry cells are necessary. The series arrangement, then, results in a considerable gain in A battery economy.

economy. Storage Battery Pressure Another advantage of this filament ar-rangement is that a 6-volt storage bat-tery may be used. When the battery is nearly discharged, the ouput may not have the desired volume, but 6 volts is permis-sible for a storage battery since there is not an appreciable dropping off in the ter-minal voltage due to internal resistance and deterioration of the battery. Storage batteries, as previously mentioned in this series, when fresh from the charger often test over 7 volts. There has been developed within the

There has been developed within the past few months an audio frequency am-plifier from which good results may be obtained experimentally. It is shown in figure 3, except in this figure there is added a resistance  $R_1$ . Its function is to

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Type 401A—5 Volts, .25 Ampere Amplifier and Detector

Type 499-3-4 Volts, .06 Ampere Amplifier and Detector Type 499A—3-4 Volts, .06 Am-pere with Standard Base Amplifier and Detector.

Type 412—1½ Volts, .25 Am-pere Platinum Filament Amplifier and Detector.

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## **IndexYourSet** with



NOTHING else like it. By writing in your dial read-ings, RADEX is automatically cross-indexed five ways. Lists every broadcasting station in the United States, Canada, Cuba and Mexico. Gives stations by cities, dial readings, wave length, frequency and call letters. Any station can be instantly referred to. Your set automatically cali-brated by dial readings. Looks like a big dollar's worth—but sells for a half. New 1925 edi-tion now on sale at dealers or direct from us. cross-indexed five ways. Lists

Dealers and salesmen write for proposition E RADEX PRESS 213 Euclid Arcade Annex CLEVELAND, 0. THE

and on further stations, the points at which the stations will be found will be quite critical, and a vernier arrangement of some sort will be found to be an abso-lute necessity.

As with other sets it will be a matter of patience and careful tuning to get your first list of stations logged, after which the others will be more easily located. The center dial is to be used as a volume control, turning the condenser towards the maximum position for more sensitivity and volume. volume

maximum position for more sensitivity and volume. The position of the primary coil of the filter, in its relation to the secondary coil, will have the following effects on the operation of the circuit: When placed as close to the secondary as possible, the tuning on the dials will be somewhat less critical than when moved further away along the rod. In others words, the se-lectivity can be adjusted to your par-ticular requirement, according to your distance from local stations. You will find that at each position in which you may try the primary coil, the setting of the special regeneration control condenser will have to be changed for best results in each position. When the primary winding is closely coupled to the secondary, more capacity is required to produce feedback to the oscillating point; while, when loosely coupled, or moved further away (with resulting sharper tuning), less ca-pacity is needed. The sensitivity of the second detector is controlled by the second network in adjustment, best re-

PRICE

TROIT

## (CONCLUSION)

#### Antenna Circuit

If your primary circuit does not tune sharply do not become discouraged, for this is due to the high resistance of the antenna circuit, and beyond making sure that you have a good ground connection, there is little that can be done about it.

#### Wire for Various Uses

Wire for Various Uses Wire for winding inductances comes in many sizes and different insulations. There are single and double cotton-covered wires, usually listed as s.c.c. and d.c.c. respectively. And single and double silk-covered wires—s.s.c. and d.s.c. There is also a wire with an enamel covering. All of these wires may be used for coils, but with slightly different results. The size of the wire depends upon its use. In the wire guage that is used for copper wire, the higher the number the smaller the wire. For coils that are to be inserted in the aerial circuit, the size should be preferably between 18 and 22. In the secondary and other circuits, the size than this would reduce the efficiency.



# **Improvements** on De Forest Circuit

PINKEYDYNE FEED BACK HOOK-UP

## **Old Faithful Sure Fire Hook-up Gives Results**

While there are numerous circuits and methods of improving same are being placed on the market every day they nearly all hinge on the old De Forest

## WORKSHOP KINKS EARN A DOLLAR-

THERE are many little kinks worked out at home that would aid your fellow Radio worker if only he knew about them. There are new hook-ups, new ways of making parts and various unique ways of oper-ating sets that are discovered every day. Radio Digest is very much inter-ested in obtaining such material. Send them in with full details, including stamped envelope, so rejected copy may be returned. The work must be entirely original, not copied. RADIO KINKS DEPARTMENT Radio Digest, 510 North Dearborn St., Chicago

regenerative (Armstrong) and most of them use speech improvements with which cost prevents the mere novice from experimenting. This hook-up can be made by any one familiar with the common re-generative hook-up and can use a few tools.

by any. One familiar with the common fe-generative hook-up and can use a few tools. For quiet operation, clarity of music and speech, ease in construction, small first cost and up-keep, the pinkedyne cannot be exceeded for distances on loud speaker reception up to 1,500 miles. After the feed back that may be en-countered by too close placing of trans-formers, tubes, sockets, etc., in a set, the next most troublesome source is the B battery. When it is considered that the plate circuits meet at the B battery it is indeed not very difficult to understand that inter-action between stages is a fre-quent occurrence. If it were not for the cost it would be indeed better to use sepa-rate B batteries for each stage and tube. The arrangement of chokes and con-densers, as shown in the pinkedyne, will to a great extent solve this problem and is well worth trying by both the novice and DX hound. The chokes may be the ordinary primaries of the bell-ringing transformers. The condensers should be two mfd. capacity. The main function of the chokes CH is to prevent the audio-frequency currents from flowing into the B batteries, while they allow the direct current from the B battery to flow to the plate. The condensers C, by-pass the audio



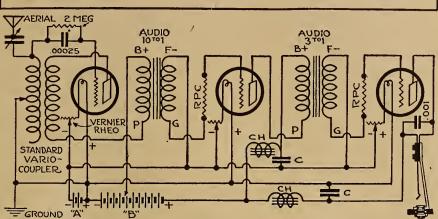
Than Dealer's Cost Marvelous 5 tube ra efficient TUNED RADIO FREQUENCY circuit. Approver America's Leading Radio Engineers and the Institut Standards. Easy to operate. Dials can be logged. Tune in y favorite stations instantly, on the same dial numbers ex time. No guessing. Mr. Howard, of Chicago, said. "Whi uses, basy to operate. Dials can be logged. Tune in your te stations instantly, on the same dial numbers even No gnessing. Mr. Howard, of Chicago, said, "While 5 o Broadcasting Stations were on the air, I tuned in 17 **'cown stations f**rom 400 to 1,000 miles away, on myloud r, very loud and clear, as though they were all in o." No gu nicago Bro out-of-to speaker Chics

Description: 5 tube set. Comes completely as-beautiful mahogany cabinet, size 25x7%x7%. Has 2 stages Tuned Radio Frequency, Detector and 2 stages Audio Frequency, Equipped with the highest quality, approved stand-and low-loss parts. Genuine Bakelito Panel. Bake-lite dals. Use any standard tubes and batteries.

**10 DAYS' FREE TRIAL** Don't mies this chance to buy this high grade 5 tube set direct from factory. Regular value \$100 00. Our factory price only **\$38.50.** Send no money. Sign and mail coupon. Pay only \$38.60 when delivered, (plus small transportation chargee). Try it 10 days. If you are not delighted with results -if you do not consider it equal or better than any \$100.00 set, send it back and we will cheerfully refund your money.

City .....

METRO ELECTRIC CO. 400 N. Michigan Ave., Dept. 79 Chicago, III. Gentlemen: Ship me on approval your 6 tube long dis-tance radio set. I will pay \$38,500 on arrival (pilus trans-portation charges) with the understanding that if I am not fully satisfied after 10 days' free trial, I may return it and you will refund my money.



frequencies that are choked by the chokes CH and allow them to reach the filament but without having to pass through the B battery to do so. The very small coils RFC are merely very small radio-frequency chokes placed in the grid circuits of the two amplifying tubes to block stray radio frequency currents that may reach the amplifier. These chokes are constructed by winding eighteen turns of number 26 wire on a lead pencil and attaching to a piece of cardboard or bakelite for mounting on baseboard or in center of lead concerned. A standard variocoupler has been used with wonderful results. Also a standard low loss 23-plate condenser is used in the areial circuit. A .00025 grid condenser is used with about a 2 meg. leak. It is worth the using of a vernier rheostat for the detector tube, while one rheostat may be used for the two amplifying rubes to a standard wet battery tube may be used which will detect in detector circuit and amplify in the amplifying circuit. S. Any standard wet battery for detector and 45 to 67½ in amplifying circuit. S. From 18 to 22½ volts B battery for detector at by trial. Six-volt wet battery is always preferred in this kind of a hook-up.—M. C. Williams, Rantoul, Illinois.

Remove Moisture in Coils Broad tuning and weak signals are often the result of moisture collecting in the insulation of the tuning coils. They may



Effarsee Portable Antennaecurtain shaped-can bE put up anywhere, indoors or out, in a jiffy, and they will work on all types of sets from superhetrodynes to crystals. Give loud speaker volume on distance with sensitive sets.

They improve reception by reducing static and noise. Give you real music. They avoid the trouble of erecting an outdoor aerial. Greatly increased volume is possible when Effarsee is connected in the circuit with outdoor antennae. Dealers use them for demonstrations. Much better than a loop or indoor wire aerial.

Three Sizes \$1.00, \$1.50 and \$2.50 If your dealer can't supply you send us the price and we will ship at once. Money back if not satisfied. The Fishwick Radio Company 512 Edwards Building

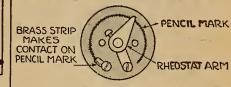


not feel moist to the hands, but the dampness is there just the same. You will be surprised at the improvement that follows a good drying out in the sunlight or by placing the apparatus near the stove.



## Adjustable Grid Leak Is Made from Rheostat

A very efficient grid leak can be made from a discarded rheostat by removing the resistance wire and putting a heavy



pencil mark in place of it. The arm will make a contact on the pencil mark as it rotates, thus varying the resistance.—G. Ross, Houston, Texas.

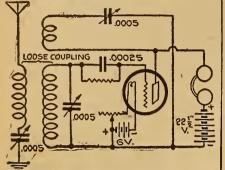
## **No More B Batteries** Make Your Own B Current Supply unit and run your set from regular A. C. house current. Easy to hook-up as a crystal set. Operating cost is negligible. Furnishes up to 125 volts B current. No A. C. hum! The Molliformer filters it out. Does not use tubes. Complete essential parts and in-structions to make \$18.50 .....\$18.50 Individual Parts Sold Separately Write for Literature C. E. JACOBS 2802 N. Kedzie Ave. Chicago The "Goode" Two-o-One Le Ton d'argent RY Guaranteed MAIL \$**2**.39 Postpaid 1 QUARTER AMPERE AMPLIFIER-DETECTOR RADIO TUBE **GUARANTEED SATISFACTORY** All "GOODE" Tubes Sold Direct to the Consumer-No Dealer Profits ONE—"Goode" \$2.39 The "Goode" Two-o-One A Tube smplifies or de-tects. It is a quarter smpere, five volts, standard base slivered tube. Send express or postal money order or New York draft to--

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Owensboro (Dept. A) Kentucky

## Ouestions Answers and

Weagant Circuit (10200) REM, East Strondsburg, Pa. A neighbor of mine has a 3-tube, one detector and 2 amplifier circuit. He does not get good results from New York city and New Jersey stations. I am going to build one of these sets and would like to know where I can get a hook-up or blue-print of this circuit, also what is the best tube to use? Will a shorter aerial help any in getting better results? Would



#### more turns of wire on the primary coil help?

help? A.—Herewith is shown the Weagant modification of the Armstrong circuit. Audio frequency can be added in the standard method, the output of the de-tector to the input of the amplifier.

Books! Radio Log! Auto Expenses! Fam ily Budget. 25c each postpaid. Roy Stacy ly Budget. 2: Rockford, Ill.

Prove your reception of those distant stations with Proof of Reception Cards. Send 25c for sample package of 12. Olay Radio Co., 30 North Michigan Ave., Chicago Chicago.

## PATENTS

Write for my free Guide Books "How to Obtain a Patent" and "Invention and Industry" and "Record of Invention" blank before disclosing inventions. Send model or sketch of your invention for instructions. Promptness assured. No charge for above information. Clarence A. O'Brien, Registered Patent Lawyer, 2006 Security Bank Building, directly across street from Patent Office, Wash-ington, D. C.

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TUBE

THE REAL UNITEX

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For Sure Results, Solder Up Your Set with SOLOX The scientific soldering solution that makes sound metallic joints a certainty, with freedom from acid, messy grease or resin. Easy and clean in use and cannot corrode. Most effective and economical of all preparations. Of your dealer or mailed for 50c by the inventors and manufacturers. The D. X. Radio Research Laboratories; Cruger-on-Hudson, N. Y. Money back guarantee. Dealers: Write for attractive proposition to our national distributors. THE CHARLES RAO10 CO., 154 Nassau St., N.Y.C.



## ALL SHOT

ALL SHOT

USE OF DETECTOR TUBES IN REFLEX CIRCUITS

USE OF DETECTOR TUBES IN REFLEX CIRCUITS Regarding the use of a tube detector in the reflex circuit a little information will clear up the difficulty. Builders of reflex sets discourage the use of the tube in place of the crystal. This is not done to sell crystals, but because of the fact that the circuits are design-ed for proper functioning when a crys-tal detector is used and cannot be ex-pected to function properly unless used. The function of a crystal in the re-fiex circuit is much more important than that of the ordinary rectifier, inas-much as it acts also as a stabilizer of the reflex stage. The constant or value

wires than a long single wire, say 125 feet? Will reception be as good? A.—We wish to advise that a neutro-dyne receiver will tune sharper on a short antenna of several wires than on an an-tenna composed of one single wire 125 feet long.

tenna composed of one single wire 125 feet long. There would probably be slightly more volume on the longer wire, but there might be more difficulty in separating stations.

It's your money and you can spend it for tubes or batteries if you want to; but I can show you how to bring distant sta-tions in on a simple crystal set. Same plans increase range of tube sets also. Copyrighted plans \$1.00. Complete parts for long distant crystal sets \$5.00. Leon Lambert, 501 Kaufman Bidg., Wichita, Kansas.



# Radiophone Broadcasting Stations

## Corrected Every Week-Part I

#### **United States**

United States A3, Denver, Colo, 440 meters, Fitzsimmons Gen. Hospital. (Educational Dept. U. S. Army), An-nouncer, John B. Crandall. Dally ex Sun, 12:30-1 pm, A3 a's Shelled Schocked Sterenaders. Mountain. A06, Canton, O. 425 meters. Hdqts, 135th Field Artillery O. N. G. A79, Fort Bragg, N. C. 435 meters. 500 watts. U. S. Government. Announcer, Lieut. James Y. LeGette. Slogan, "The Pioneer Broadcasting Station of the Field Artillery." Tues, Thurs, Sat, 8-9:55 pm, dance music, talks, bands, fights. Sun, 8-9 pm, service. Eastern.

music, talks, bands, fights. Sun, 8-9 pm, service. Eastern. V7, St. Paul, Minn. 400 meters. 6th Inf. Minn. Nat'l Guard, St. Paul Armory. Irregular schedule. Central.

Nat'l Guard, St. Paul Armory. Irregular schedule. Central.
AW5, Dayton, O. McCook Field, U. S. Army. Experimental work only.
KOBG, San Pedro, Calif. 146 meters. 100 watts. Thomas H. Ince private yacht "Edits."
KOKA, E. Pittsburgh, Pa. 309.1 meters. 1.000 watts. Westinghouse Elec. & Mfg. Co. Announcer, H. W. Artin. Slogan, "The Phoner Broadcasting Station of the World." Daily ex Sun, 9:45-10 am, 12-1 pm, mar-ket reports, music 6:15, music; 7:15-10, markets, news, features, concert; 9:35-10, time. Sun, 10:45-6:15, dinner concert; 7:30, church service. Eastern.
KOPM, Cleveland, O. 53-270-1817 meters. 500 watts. Westinghouse Elec. & Mfg. Co. Announcer, J. J. Francis.

Westinghouse Elec. & Mfg. Co. Announcer, J. J. Francis. KOPT, San Diego, Calif. 244 meters. 50 watts. Southern Elec. Co. Announcer, William O. Heath-cote. Slokani: "At the End of the Trail." Daily ex Sun, 1:30-2:30 pm. Tues, 8-9 pm. Thrs, Fril. Sat. 6:00-6:45 pm. Wed, 8:00-10:00 pm. Pacific. KDYL, Sait Lake City, Utah. 250 meters. 50 watts. Newhouse Hotel. Announcer, H. C. Mailander. Slogan, "Better Radio." Daily ex Sun, 3-4 pm. 6:30-8, news, music, entertainment. Mountain. KDYM, San Diego, Calif. 230 meters. 100 watts. Savoy Theater. KDYQ. Portland Ore. 213 meters. 100 watts. Sava Theater. KDZB, Bakersfield, Calif. 3:00 meters. 100 watts. FADB, Hacoln, Nebr. 240 meters. 200 watts. Nebraska Buick Auto Co. Announcer, Gavis, Parike KICA, Phoenix. Ariz. 3:60 meters. 100 watts. Nebraska

Burlek Auto Co. Announcer. Gayte Grubb. Mon. Wed. Fri, 7:30-9:30 pm. Sun, 4 pm, church services. Central.
KFAD, Phoenix Ariz. 360 meters, 100 watts. McArthur Brothers Mercantile Co. Announcer, Arthur C. An-derson. Slogan, "Where Summer Winters." Daily ex Sun, 7:30-8:30 pm, news, weather, stock reports, music. Mountain.
KFAE, Pullman, Wash. 330 meters. 500 watts. State College of Washington. Announcer, George Bayles. Slogan: "Your Service Station." Wed, Fri, Mon. 7:30 pm, talks, music. Pacific.
KFAE, Pohrer, Colo. 278 meters. 500 watts. Western Itadio Corp. Announcer, George D. Walker. Slogan: "Voice from the Rockles-Out Where the West Is."
KFAF, Bourder, Colo. 278 meters. 500 watts. Uset Is."
KFAF, Bourder, Colo. 278 meters. 100 watts. Univ. of Colo. Announcer, F. M. Orsborn. Tues, Thurs, Sat. 9 pm, time, music, addresses by faculty. Sat, 2:30-5 pm, sports. Mountain.
KFAF, Hollywood, Calif. 227 meters. 100 watts. Stu-dio Lighting Service Co.
KFAP, Hollywood, Calif. 230 meters. 10 watts. Balse H. S. Announcer, David Taylor. Slogan: "Intermountain Station." Daily ex Sat, Sun, 3:30-4:15 pm, narkets, weather, news. Mon, Fri, 8:-9 pm, concert. Mountain.
KFAB, Havre, Mont. 275 meters. 50 watts. F. A. Budi Den. Slogan: "Where There Is Always a Friend from Your Oid Home Town." Daily ex Sun, 4:30-7:30 pm, concert. Pacific.
KFBB, Havre, Mont. 275 meters. 50 watts. F. A. But-trey Co. Announcer, C. O. Boetiger. Daily ex Sun, 12:35 pm, markets, weather, reports. Mountain.
KFBC, Taoma, Wash. 250 meters. 50 watts. F. A. But-trey Co. Announcer, C. O. Boetiger. Daily ex Sun, 12:45 pm, markets, weather, reports. Mountain.
KFBG, Taoma, Wash. 250 meters. 50 watts. F. Sun, 2000 Daily. There, Jon Tour, Sun, 4:30-7:30 pm, concert. Pacific.
KFBG, Taoma, Wash. 250 meters. 50 watts. First Perchenceric Dourse Announcer Frenk Tate. Your KFBC, San Diego, Calif. 210 Interest 20 marks, aermon. Azbilt. Thurs, Sun, 8-9 pm, Bible lesson, aermon. Pacific.
KFBG, Tacoma, Wash. 250 meters. 50 watts. First Presbyterian Church. Announcer, Frank Tovey. Sun. 11-1 pm, 7:30-9. Pacific.
KFBK, Sacramento, Calif. 283 meters. 100 watts. Kim-ball-Upson Co.
KFBL, Everett, Wash. 224 meters. 20 watts. Lesse Bros. Announcer, R. H. Leese. Daily, 7:15-8:15 pm. Sun, 2-3 pm. Pacific.
KFBU, Laramic, Wyo. 270.1 meters. 50 watts. The Cathedral. Wed, 5:45 pm, chimes. Sun, 5 pm, 7:30, church service. Mountain.
KFGB, Phoenix, Ariz. 238 meters. 10 watts. Nielson Radio Supply Co. Announcer, E. A. Nielsen. Slogan: "When It's Wintertime in Michigan, It's Summer time Down Here." Daily. 7:30 pm. bedtime storles. Mountain.

Mountain. KFGC, Helena, Mont. 248 meters. 10 watts. The First Congregational church. Announcer, George C. Stocking. Sun, 11-12:15 pm, church service; 6:30, bedtime story; 7:30-9, service. Mountain. KFGF, Walla Walla, Wash. 256 meters. 100 watts. Frank A. Moore. Slogan: "The Valley They Liked So Weil They Named It Twice." KFGL, Los Angeles, Calif. 236 meters. 500 watts. Lesile E. Rice. KFI, Los Angeles, Calif. 469 meters. 1,500 watts. Earle C. Anthony, Inc. Announcer, Paul W. Reese. Stogan: "The Radio Central Station." Daily ex Sun, 5-6 pm, 6:43-58 pm, 8-11 pm. Ved, Fri, Sat, 8-12 midnight. Sunday, 10-10:45 am, 4-5 pm, 6:45-8, 8-12 midnight. Sunday, 10-10:45 am, 4-5 pm, 6:45-8, 8-11 Pacific.
KFIF, Portland, Ore. 248 meters. 100 watts. Benson Tech. Student Body.
KFIO, Spokane, Wash. 252 meters, 50 watts. North Central High School.
KFIQ, Yakima, Wash. 256.3 meters, 100 watts. First Methodist Church. Announcer, Dr. I. M. Miller. Wed, 7:30 pm, organ. Sun, 11 am, 7:30 pm. Pacific.
KFIU, Juneau, Alaska. 226 meters, 100 watts. Bensom Deit. Mon. Wed, Fri, 7-8 pm. Alaska.
KFIX, Independence, Mo. 278 meters. 250 watts. North Schotz, Announcer, Antru B. Church. Tues, Thurs, 9 pm. Sun 11 am, 7:30 pm. Central.
KFIZ, Fond du Lac, Wis. 273 meters. 100 watts. Daily Commonwealth and Seyfert Radio Corp. Announcer, Albert Mayer. Daily ex Sun, 5 pn, maisch, news, markets. Tues, Fri, 3:30 pm. Central.
KFI, Marshalltown, Iowa. 248 meters. 10 watts. Matshall Elec. Co. Announcer, Tined Hand, Slogan: "Marshall Concert. Sun, First Baptist church. Central.
KFIF, Oklahoma City, Okd. 261 meters. 225 watts. National Radio Mfg. Co. Announcer, Tired Hand, Slogan: "Radio Headquarters." Daily ex Sun, 9:30 am, 12:15 pm, markets. 7 pm. Daily ex Sun, 9:30 am, 12:15 pm, markets. 7 pm. Daily ex Sun, 9:30 am, 12:15 pm, markets. 7 pm. Daily ex Sun, 9:30 am, 12:15 pm, markets. Sun, First Baptist church. Central.
KFI, Astoria, Ore. 245.8 meters. 10 watts. E. Marsh and Liberty Theater. Announcer, Libert Marshailtown, the Sun, 9:30 am, 10:31 pm, markets. Contral.
KFI, Shristow, Okja. 233 meters. 10 watts. Delane Madio & Ches. Co. Daily ex Sun, 3:40 pm. Sun, 10:30-11 pm. Pacific.
KFIK, Bristow, Okja. 233 meters. 10 watts. Delane Madio & Elec. Co. Daily ex Sun, 3:40 pm. 10:30-11 pm. Pacific.
KFIK, Bristow, Okja. 233 meters. KFGL, Los Angeles, Calif. 236 meters. 500 Watts. Legite E. Rice.
KFCP, Odgen, Utah. 360 meters. 25 watts. Ralph W. Flyggas.
KFCV, Houston, Texas. 360 meters. 10 watts. Fred Mahañev, Jr. Dally ex Sun, 7:30-8 pm, entertain-ment. Sun, 2-3 pm, entertainment. Central.
KFCZ, Mountan, Neb. 258 meters. 50 watts. Central H. G. Mahanev, Arnold Cisier, Daily ex Sat. 3-5 pm, orchestra, organ. Mon, Tues, Thurs, 7:30-9 pm. Sat, midnicht program. Central.
KFDD, Boise, Idaho, 275-1 meters. Io watts. St. Mich-ael'a Episcopal Cathedrai. Announcer, Paul Roberts. Sun, 11:15-12:30 pm, 7:30-9:15. Mountain.
KFDH, Tueson, Artz. 268 meters. 50 watts. Univ. of Ariz. Announcer, Max Voss Kuehler. Irregular schedule.

Ariz Announcer, Max Voss Kuehler. Irregular schedule.
 KFDJ, Corvallis, Ore. 254 meters. 50 watts. Oregon Agri. College. Announcer, Jacob Jordan. Mon. Fril, 7 pm, college news. Pacific.
 KFDM, Beaumont, Tex. 313.6 meters. 500 watts. Mag-nolia Petroleum Co. Announcer. Magnolene Mike. Slogan, "Kall for Dependable Magnolene." Tues, Fri, 8 pm, concerts. Every other Sun, 9 pm. Central.
 KFDX, Shreveport, La. 250 meters. 100 watts. Flrst Baptist Church. Announcer, Jn. E. Dodd. Wed, 9-10 pm, muslo, talks. Sun, 11 am, 7:45 pm. Central.

Central, CFDY, Brookings, S. D. 273 meters. 50 watts. S. D. State College. Announcer, G. A. Rietz, Daily ex Sun, 12:15 pm, livestock markets. Tues, 11 am, music, lecture. Thurs, 8-9 pm, music, lectures.

ex Sun, 12:19 Jun, Artes, 8-9 pm, music, lectures. russic, lecture. Thurs, 8-9 pm, music, lectures. (KFDZ, Minneapolia, Minn. 231 meters. 10 watts. Harry O. Iverson. KFEC, Portland, Ore, 248 meters. 50 watta. Meier & Frank Co., Inc. Daily ex Sun, 12 m, weather, reports; 4-5 pm, music; 6:30 pm, weather, ercop, marketa, re-porta. Thurs, 9-10 pm, concert. Sat, 11 am-12 m. ehildren's hour. Pacific. KFEL, Denver, Colc. 254 meters, 50 watts. The W. L. Winner Radio Shop. Announcer, Capt. W. L. Win-ner. Daily ex Sun, 9 am, 10, 11, 2 pm, 3:4. Tues, 8-9 pm. Thurs, 10-12 m. Fri, 8-9 pm. Sun, 9-10 am. Mountain. KFEQ, Oak, Nebr. 268 meters. 100 watts. J. L. Scrog-glin. Announcer, Clarenco Koch. Fri, 9-10 pm. Central. Arris Arbeity Theater, Announces, 20, 2030-11 pm, Wed, Fri, 10-11 pm, organ. Sun, 10:30-11 pm, Pacific, K. Bristow, Okja. 233 meters. 110 watts. Delano KFJK, Bristow, Okja. 233 meters. 110 watts. Delano radio & Elec. Co. Daily ex Sun, 3-4 pm, music. Thurs, 3-9:30 pm, music. Sun, 7:30 pm, church services. Central.
KFJM, Grand Fords, N. D. 278 meters. 100 watts. Unit Educational Center of the States. 100 watts. Unit Educational Center of the States. Ashley C. Dixon & Son, Son, Son Yalts, Iowa. 258 meters. 50 watts. Iowa

KFEQ, Oak, Nebr. 268 meters. 100 watts. J. L. Scrog-rin. Announcer, Clarenco Koch. Fri, 9-10 pm. Central.
 KFER, Fort Dodge, Ia. 231 metera. 10 watts. Auto Electric Service Co. Announcer, H. E. Giltner. KFEV, Caaper, Wyo. 263 meters. 250 watta. Caspor Radio Club.
 KFEX, Minneapolis, Minn. 261 meters. -100 watts. Augsburg Seminary, Temporarily closed.
 Kon. Kordar Falis, Iowa. 258 meters. 50 watts. lowa State Teachera' Colloge. Educational programs. KFJY, Fort Dodge, Iova. 246 meters. 50 watts. Tun-ular, 5:45 pm, markets, news, weather. Wed, 9 pm, orchestra. Thurs, 6 pm, agriograms., weather bullenin, newa. Sun, 11 am, 7:30 pm, church serv-lees. Central.

Walter C. Clark. Slogan: "Voice of the Coeur D'Alene." Mon. Wed, Sat, Sun, 7:30-8:30 pm. Pacific.
KFEZ, St. Louis, Mo. 248 meters. 250 watts. Asso-clated Engineering Societies. Announcer, Frank H. Schubert. Slogan: "Lend Your Ears to the Engineers." Wed, 8:30-9:30 pm, Engineering program. Central.
KFFP, Moberly, Mo. 266 meters. 50 watts. First Baptist Church. Announcer, Granville Ray Boote. Slogan: "The Gospel Messenger of the Alt." Sun, 14 an: 7:30 pm. Central.
KFFR, Sparks, Nev. 226 meters. 10 watts. Jim Kirk. Thuurs, 7-3 pm, "Sagebrush Canarles." Pacific.
KFFV, Lamonl, Ia. 250 meters. 100 watts. Grace-land College. Announcer, R. A. Cherille. Mon, 7:30 pm, musicale. Thursday, 7:30-8:30 pm, educational program. Sun, 11 an 2:15 meters. 50 watts. Pin-cus & Murphey, Inc. Mon, Thurs, 7-8:30 pm. Central KFGG, Baton Rouge, La. 254 meters. 100 watts. Louisiana State University.
KFGB, Chickasha, Okia, 252 meters. 200 watts. Okia. College for Women. Announcer, J. A. Teeters. Tues, Thurs, Sat, 8 pm, musical zz program. Central.
KFGH, Stanford Univ., Calif. 273 meters. 500 watts. Leiand Stanford Junior University. No regular sched-ule.
KFGG, Boone, Ia. 226 meters. 10 watts. Crary

KFGQ, Boone, Ia. 226 meters. 10 watts. Crary Hardware Co. Announcer, Harold E. Wilcox. Slogan: "Daniel Boone Station." Wed, 8-9 pm. Sun, 3-4 pm. Central.
KFGX, Orange, Tex. 250 meters. 500 watts. First-Presbyterian Church. Announcer, C. A. Doane. Sun, 11 am. 7:30 pm, church services. Central.
KFHA, Gunison, Colo. 252 meters. 50 watts. West-ern State College of Colorado. Announcer, E. Rus-sel Wightman. "Where the Sun Shines Every Day." Tues, Fri. 6:30 pm, bedtime story; 7:30 pm, mu-sicale; 10:30, orchestra. Mountain.
KFHL, Oskaloosa, Iowa. 240 meters. 10 watts. Penn College.

by comparison to other so-called ac-curate Radiocast directories and lists. That's just how sure Radio Digest is that this Radiophone station di-rectory is correct! To make the chal-lenge fair for everyone, Radiocast stations and their employes are barred from this offer. Why? Be-cause the Radiocasters are the source of all the data given herein. They are (or should be) interested enough to answer the inquiry sent them every time data on their station ap-pears. This inquiry contains a proof of their last listing and must either be corrected or O K'd as correct and returned to the Digest. Nevertheless, sometimes the stations are careless and mistakes are made. But Radio Digest is so sure of the exactness of this directory that this challenge is made unconditionally.

Kalinger, Ida. 360 meters. 10 watts. Bunker Mining & Con. Co. Announcer, J. Mon. Wed, Sat. Sun, 7:30-8:30 pm. Surface. Mon. Math. Math.

KFHR, Seattle, Wash, 263 meters, 100 watts, 164
 KFHR, Seattle, Wash, 263 meters, 100 watts, Star Elec. & Radio Co. Announcer, R. Mattmueller, Slogan: "The Voice of the Charmed Land." Daily ex Sun, 4:30-5:30 pm. Mon, Wed, Fri, 6:30-714, 000 pm. Sun, 1-30
 KFLZ, Atlantic, Iowa 273 meters, 100 watta, Atlantic Automobile Co. Slogan: "The Garden Spot of Iowa" Weld, 6-7;15 pm, dinner program; 9-11, music. Sat, 9-11:30 pm, dance music. Sun, 4 pm, church service. Central.
 KFMB, Little Rock, Ark. 254 metera. Christian churches of Little Rock.

**CHALLENGE!** ONE DOLLAR will be paid to the Radiophan submitting the most errors in any one station's list-ing. Letters must reach Radio Digest office not later than one week from date of issue corrected. Readers are not limited to correcting one station, but such corrections must be certified by the stations themselves, and NOT by comparison to other so-called ac-curate Radiocast directories and lists. That's just how sure Radio Digest

With reference to the directory: It appears in five parts, serially con-tinuously; the first four parts are station data listings, arranged alpha-betically; the fifth part is a state, city index of stations. The informa-tisting is given in the following order: Call letters, city, state, wave length using is given in the following order: Call letters, city, state, wave length used, watts antenna input, owner's name, announcer's name, slogan used if any, name of listener in "club," schedule of operating hours, and kind of time used, as "Central," "Moun-tain," etc. The successive issues of Radio plete and accurate list of Radiocast stations obtainable. This service is original with this publication, and has been maintained from the start. Right of reproduction without contained herein is denied.

of many stations, errors in wave lengths will not be considered eligi-ble for the dollar offer until further notice. Once the changes are made permanent this ban will be removed.)

KFMQ, Fayetteville, Ark. 275 meters. 500 watts. U. of Arkansas. Announcer, C. V. Bulien. Tues, 9 pm. Thurs. 7:30 pm. Central.
KFMR, Stoux City, Ia. 261 meters. 50 watts. Morn-ingside College. Announcer, Jesse C. Ducommun. Tues. Thurs. Frl. Sat, 8:55 am. Tues. Thurs. Sat, 12 m. Central.
KFMT, Minneapolis, Minn. 261 meters. 100 watts. Dr. Geotse W. Young. Announcer, Dr. George W. Young. Slogan: "Always Young." Mon, 7 pm; Thurs, 8 pm. sun, 1:30-3:30 pm. Central.
KFMW, Houghton, Mich. 266 meters. 50 watts. M. G. Sateren (Announcer). Dr. Bruno Melnecke. Wed, 9 pm. Sun, 3-4:30 pm.
KFMK, Northfield, Minn. 233 metets. 500 watts. Carleton College. Announcer, Dr. Bruno Melnecke. Wed, 9 pm. Sun, 7 pm. Central.
KFNF, Shenandoah, Ia. 266 meters. 500 watts. Henry Field Station in a Friendly Town." Daily ex Sun, 12:25-125 pm. Daily ex Sun, Tues, 6:30-3;30 pm, concert. Sun, 3 pm, services; 6:30-8, sacred song service. Central.
KFNG, Coldwater, Miss. 254 meters. 10 watts. Wooten's Radio Shop. Announcer, S. D. Wooten. Slogan, "The Most Powerful 10 Watt Station in the World." Sat, 9:30-10:30 pm. Sun, 4-5 pm. Central.
KFNJ, Warrensburgh, Mo. 234 meters. 50 watts. Central Missourf State Teachers College. Announcer, John McNay.
KFNY, Santa Rosa, Calif. 240 meters. 10 watts. Central Missourf State Teachers College. Announcer, Netw. Date Stater, Calif. 240 meters. 10 watts. Central Missourf State Teachers College. Announcer, Slogan, "The Hone of the Nut." Mon, 8-10 pm. music. Pacific.
KFNV, Santa Rosa, Calif. 234 meters. 5 watts. L. A. Drake, Datib 2:3 pm ; 6:6:30, news, music. Pacific.

Slogan, "The Most Powerful 10 Watt Station in the World." Sat, 9:30-10:30 pm, Sun, 4-5 pm, Central, MrRM, Fort Sul, Okla. 263 meters. 10 watts, James John MeNay.
KFNJ, Paso Robles, Calif. 240 meters. 10 watts, The Boland.
KFNV, Paso Robles, Calif. 240 meters. 50 watts. L. A. Drake, Daily 2-3 pm; 6-6:30, news, music. Pacific.
KFNV, Relena, Mont. 248 meters. 50 watts. V. Kenn, Roberts, Experimental station.
ReFAZ, Burlingame, Calif. 221 meters. 20 watts, Radio Sales Co. Announcer, Calif. 211 meters. 50 watts. Currist Radio Sales Co. Announcer, Calif. 211 meters. 20 watts, Radio Sales Co. Announcer, Calif. 211 meters. 20 watts, Pacific.
KFOA, Scattle, Wash. 455 meters. 500 watts, Rhodes Dept. Store, Announcer, Calif. 231 meters. 500 watts, Rhodes Dept. Store, Announcer, Calif. 231 meters. 100 watts. First Gaido Snop.
KFOA, Scattle, Wash. 455 meters. 100 watts. Rhodes Dept. Store, Announcer, Calif. 234 meters. 100 watts. First Gaido Snop.
KFOO, Whittier, Calif. 236 meters. 100 watts. The Rddio Snop.
KFOO, Wallace, Idaho. 224 meters. 100 watts. The Rddio Snop.
KFOI, Moberly, Mo. 246 meters. 10 watts. The Rddio Snop.
KFOI, Moberly, Mo. 246 meters. 5 watts. Leslie Mr Behalbuch.

KFON, Long Beach, Callf. 240 mctors. 100 watts. Echophone Radio Shop. Slogan, "Where Your Ship Comes In." Tues, Wed, Thurs, Fri, 2:30-4 pm; 7:30-10. Mon, 8-10 pm. Sat, 2:30-5 pm; 7:30-10. Sun, 11-12 m., 8-9 pm. Pacific.
KFOO, Salt Lake City, Utah. 261 meters. 10 watts. Latter Day Saints University. Announcer, Don C. McRae.
KFOR, David City, Neh. 226 meters. 20 watts. David City Tire & Elec. Co. Slogan, "The Voice of David City," Announcer, Howard A. Shuman.
KFOT, Wichita, Kaneas. 231 meters. 50 watts. Col-lege Hill Radio Cub. Announcer, Leon Garmett. Slogan, "Radiocasting Church." Sun, 11-12:30 pm; 7:30-9, church services. Mon, 9-10:30 pm, music. Central. Central. KFOU, 1 Hom Central. KFOU, Richmond, Callf. 254 meters. 100 watts. Honmel Mfg. Co. KFOX, Omaha, Neb. 248 meters. 100 watts. Board of Education, Technical High. Announcer, H. E. Hennett of Education, Bennett, KFOY, St. Paul, Minn. 252 metera. 50 watts. Beacon Radio Service. -Central. Radio Service. -Central. **KFOZ**, Fort Smith, Ark. 233 meters. 20 watts. Leon Hudson Real Estate Co. Mon, Fri, Sun, evening program. Central. **KFPB**, Seattle, Wash. 224 meters. 15 watts. Edwin J. Brown.

KFPB, Seattle, Wasn. 223 meters. 19 watts. Edwin J. Brown.
KFPG, Los Angeles, Calif. 238 meters. 100 watts. Garretson and Dennis.
KFPH, Salt Lake City, Utah. 242 meters. 50 wstts. Harold Charles Malander.
KFPL, Dublin, Tex. 252 meters. 15 watts. C. C. Baxter, announcer. Mon, Thurs, 8 pm; Sat, 10-11 pm; Sun, 7-8 am. Central.
KFPM, Greenville, Tex. 242 metera. 10 watts. The New Furniture Co. Announcer, Dave Ablowich, Jr. Slogan, "The New Furniture Co., the Home of Good Furniture," located at Greenville, Texas, where you ind "The Blackest Land, the Whitest People." Daily ex Sun, 2 pm, music. Tues, Wed, Thurs, Fri, 7:45 pm. Sun, 11 am, services; 7:15 pm, irregularly. Central.

Central. KFPP, Olympia, Wash. 236 meters. 20 watts. G. & G. Radio and Elec. Shop. KFPR, Los Angeles, Calif. 231 meters. 500 watts. Los Angeles Co. Forestry Dept. Irregular schedule. KFPT, Sait Lake City, Utah. Announcer Charles H. Hays. Mon, Wed, Thurs, Sat, 8 m. Tues, Fri, Sun, 9 pm. Mountain.

9 pm. Mountain. This, Sat, 8 pm. Tues, Fri, Sun, KFPV, San Francisco, Calif. 236 meters. 50 watts. Heintz & Kohlmoos, Inc. Announcer, Raiph H. Heintz. Slogan, "Ain't We Got Fun." Sun, 7-8:30 pm. Pacific. KFPW, Carterville, Mo. 263 meters. 20 watts. St. John M. E. Church, S. Slogan, "Keeping Pace with Christ Means Progress." Wed, Fri, 8-10 pm, popular program. Sun, 1-3 pm, chapel service. Central. KFPX, Pine Bluff, Ark. 242 meters. 50 watts. First Presbyterian Church. Announcer, Howeli L. West-brook. Sun. 11 am, 12 m, 7:30-8:30 pm, church & KPY, Spokanc, Wast. 265. and the service.

brook. Sun. 11 am, 12 m, 7:30-8:30 pm, church services. Central.
 KFPY, Spokanc, Wash. 265.3 meters. 100 watts. Symons Investment Co. Announcer, E. B. Craney. Daily ex Sun, 3-4 pm. music, markets. Tues, Wed, Thurs, Fri, 6:15-7 pm. Tues, 8:30-9:30 pm. Fri, 9:30-11:30 pm. Pacific.

nivestment Co. Announcer, E. B. Craney. Daily ex. Sun, 3-4 pm. music, markets. Tues. Wed. Thurs. Fri, 6:15-7 pm. Tues, 8:30-9:30 pm. Fri, 9:30-11:30 pm. Pacific.
KFQA, St. Louis, Mo. 261 meters. 50 watts. The Principia.
KFQB, Fort Worth, Tex. 254 meters. 150 watts. The Searchlight Pub. Co. Announcer, Y. M. Cornelius. Sun, 11 am. 7:15 pm, church services. Tues. Wed. Thurs. Fri, 8 pm, music. Sat, 8 pm. concert, Bible lecture. Central.
KFQC, Taft, Calif. 231 meters. 100 watts. Kidd Bros. Radio Shop.
KFQC, Taft, Calif. 231 meters. 100 watts. Kidd Hors. Radio Shop.
KFQC, Colorado Springs, Colo. 224 meters. 5 watts. Dickinon-Henry Radio Laboratories.
KGCH, Los Angeles, Calif. 229 meters. 100 watts. Southern Calif. Radio Assn.
KFQC, Muskogee, Okia. 252 meters. 20 watts. Albert Sherman.
KFQC, Austin, Tex. 268 meters. 20 watts. Albert Sherman.
KFQM, Austin, Tex. 268 meters. 50 watts. Texas Highway Bulletin. Announcer, George M. Baker. Dail, Nuelling Contral.
KFQN, Austin, Tex. 268 meters. 50 watts. Texas Highway Bulletin. Announcer, George M. Baker. Daily ex Sun. 7 pm. 9. Central.
KFQN, Austin, Tex. 268 meters. 50 watts. Third Baptist church. Wed, Fri, 8-9 pm. Sun. 9:45-10:30 am: 9-10 pm. Pacific.
KFQR, Oklahoma City, Okla. 250 meters. 10 watts.
Kerger, Oklahoma City, Okla. 250 meters. 10 watts.

ani, 9-10 pm. Facinc.
KFQP, Iowa City, Iowa. 224 meters. 10 watts. George S. Carson, Jr., Wed, 8-9 pm. Sat, special programs. Central.
KFQR, Oklahoma City, Okla. 250 meters. 10 watts. Walter La Fayette Ellis.
KFQT, Denison, Tex. 252 meters. 10 watts. Texas National Guard. Announcer, Robert Cox.
KFQU, Holy City, Calif. 234 meters. 100 watts. W. Riker. Announcer, Arthur J. Landstrom. Daily ex Mon, 9-10 pm. Sun, 11-12 m., 9-10 pm. Pacific.
KFQW, North Bend, Wash. 215.7 meters. 50 watts. The Photo Radio and Elec. Shop. Announcer, Carl F. Knlerim. Slogan, "At the Western Entrance of Snoqualmie Pass." Mon, Wed, Fri, 9-11 pm. Pacific.
KFQX, Seattle, Wash 238 meters. 1500 watts. American Watts. 10-11. Sat, 11-12. Pacific.
KFQY, Belden, Neb. 273 meters. 10 watts. Farmers State Rank, Announcer, A. H. Abts. Slogan, "Where Com Is King, Carver, Minn. 240 meters. 250 watts. Marvin S. Olson.
KFRG, San Francisco, Calif. 278 meters. 50 watts. Hall Brothers. Fri, Alexandria, La. 242 meters. 10 watts. Watts. Radio.
KFFR, Alexandria, La. 242 meters. 10 watts. W. R. Brown.

KFRF, Alexandria, La. 242 meters. 10 watts. W. R. KFRH, Grafton, N. D. 268 meters. 10 watts. The Radio Shop. Radio Shop. KFRJ, Conway, Ark. 250 meters. 10 watts. Guy Sim-mons, Jr. KFRM, Fort Sill, Okla. 263 meters. 50 watts. James

### RADIO DIGEST-Illustrated

Section of the Section

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