Drilling and Assembly Layouts for "Traveler"; How to Put up Aerial Masts; Last Minute Play-by-Play Football Schedules; WJR, at Detroit, in Pictures

Kau

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SATURDAY, OCTOBER 17, 1925

No. 2

ERECT POWERFUL AERIAL

MANY SILENT NIGHT **REASONS ARE GIVEN**

WRITER POINTS OUT NEEDS FOR PERIODS OF REST

Stations Would Benefit Along with Fans If Suggested Plans are Fol-lowed, Is View

Editor's Note .- The following manuscript, "Why the Silent Night," by Pierson W. Banning, was submitted prior to the practical settlement of the Chicago silent night question, when all Chicago area stations, with the exception of WOK, the Neutrowound Radio company's station, agreed to keep silent every Monday night. However, the argument here pre-sented is worth consideration in other localities, such as New York city, where congestion demands a silent night.

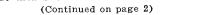
By Pierson W. Banning
NTIRELY different reasons are given here for the need of a silent night on the air.

So many stations means too strenuous competition among stations, requiring placing of the same artists and talent on the air, altogether too often for their own good, and the fullest enjoyment of the listening public.

This tension causes program managers

This tension causes program managers to grow stale. This likewise applies to announcers and the technical staff, who become mechanical, losing their finer qualities of execution. Under these conditions no station can continue indef-initely to maintain the constantly increas-ing tension and interest, the majority of patrons require, to continue to hold their

It means that the concerns financing





RUGBY MASTS WILL RISE UP 820 FEET HIGH

Towers Weigh 300 Tons

Trials of British Transatlantic Commercial Telephone Station to Begin in November

LONDON.-In the new year Britain

will be able to talk to the world without any intermediaries. The Radio station at Rugby is then scheduled to open. Meanwhile trials start in November. Everything at Rugby station has been planned on a gigantic scale. The aerial masts weigh 300 tons each, and are the tallest in the British empire—820 feet high, nearly as high as the Woolworth building.

high, nearly as high as the Woolworth building.

Never before has the height of the Eiffel tower aerial been so nearly approached, and although that is 900 fee the tower's aerial lines run from the sum mit to the ground, and do not maintain the high level of the Rugby aerial throughout their length.

The Rugby aerial will be one and one-half miles long and one-half mile wide, and the twelve giant masts, of which the tops are often veiled with louds, span the countryside. Within the next year Britain will be in the front rank among the European powers in the matter of world-wide Radio communications. Every continent will be conducted up to (Continued on page 2)

(Continued on page 2)



Radio becomes more interesting to the men every day. Especially is this true when they hear voices of stars they know are as pretty as the three pictured here. In the center is Tillie Urkov, a contralto on the regular WTAS, Elgin, staff. To the left is Ina Mitchell Butler, Hollywood queen, a regular at KFWH, the motion picture broadcaster of Warner Brothers. Vera Meyers, right, is pictured here. ner Brothers. Vera Meyers, right, leading lady in the Proctor Players and she has pleased many with musical comedy offerings from WHAZ, Rensselaer Polytechnic Institute at Troy, N. Y.

RADIO OPERA STARS PROGRAM APPROVED

GOVERNMENT HEADS VOICE VIEWS ON KENT TIE-UP

Hoover Believes Future of Broadcasting Depends on Improvement of Programs in This Manner

WASHINGTON.—Gratification over the announcement by A. Atwater Kent, Radio manufacturer of Philadelphia, that the world's leading grand opera soloists and concert artists will be heard over the Radio in a series of Sunday evening concerts this winter, is expressed by government officials who are fostering the development of Radio broadcasting.

The concerts are strongly in accord with Secretary Hoover's appeal for better Radio programs, it was said at the depart-

Radio programs, it was said at the department of commerce here.

The department has given much thought to the improvement of programs that go out on the air. Secretary Hoover is said to feel that in view of the millions of individuals it reaches, Radio should not be regarded simply as a luxury and something to play with, but that it should render a distinct public service in the character of programs it carried into the home, and that the influence should be uplifting. Expressions of approval are heard in many quarters that influence different phases of our national life. The department has given much thought

ferent phases of our national life.

Dr. John J. Tigert, United States commissioner of education, expressed the belief that the bringing of the best class of music into homes, which the series will do, would be of great educational value to Radio audiences.

Dr. J. C. Gilbert, of the bureau of agricultures and the commissioner of the bureau of agricultures.

Dr. J. C. Gilbert, of the bureau of agricultural economics, of the department of agriculture in Washington, said he thought the new program would probably mean more to the farmer than to the city man. Through the county agents of the department of agriculture, Dr. Gilbert has made a survey of Radio on the farm, and he knows the farmer's attitude.

SILENT NIGHT REASONS

(Continued from page 1)

these programs all too frequently do not hold their audiences in a way they would wish. This is evident from the way various large concerns have discontinued to broadcast. This indicates there is a growing feeling that there is far less pulling power to many programs using the same talent so often, when used as an adver-tising medium. This applies to practically every large broadcast station in

A continuance of this means the loss by discontinuance of many fans these stations originally counted on to such an extent, especially from among the classes who have money to spend with their ad-

Psychologically the whole thing is in favor of the stations, if they will now cease in surfeiting their audiences, and instead withhold from them regularly each week one entire night's entertainment. What is good for the audience is good for the stations as well good for the stations as well.

And again, it permits DX hounds an opportunity to reach out for programs elsewhere. The psychology of this again works in favor of the local stations, for by allowing these DX hunters the opportunity they seek, it will make them stronger boosters for the local stations which they receive with so much better quality than elsewhere. This tends to add these distance seekers to the list of local prospects as potential customers for the concerns presenting local programs.

Bedridden Are Considered

For those who are bedridden, one silent night a week, while it will be missed, will not prove fatal especially as the stations can bend their efforts towards giving each of you that much better programs the remainder of the week. This will be your contribution towards helping obtain the best possible programs for everyone.

Each Radio district by agreement might divide its stations into two classes; those above a certain halfway wave length and those below that halfway wave length. The stations above the dividing wave length would, on the silent night, remain off the air from 6:30 to 9:30 o'clock one week. Those below the dividing wave length, would remain off the air the same hours of the same night the next week. This would permit distance hunters a brief time to reach out, yet permit programs by half the stations just the same. This would be a makeshift and to use only to try out the other suggestions offered.

Local stations have nothing to lose but everything to gain by adopting a uniform silent night. Stations—don't kill the interest of your audience by overdoing your artists and talent. By killing the interest of your broadcasting audience in your programs you lessen your broadcasting value as an avertising medium for

WHEN OPERA RECOGNIZED RADIO



A historical scene in the annals of Radio is portrayed by the above picture, in which noted opera stars are seen signing contracts to broadcast on the Sunday night Atwater Kent programs from WEAF and linked stations. Twenty-five of the world's best singers and musicians have thus been made available to the listening audience through the philanthropy of A. Atwater Kent. Left to right, the photo shows Anna Case (signing), Mme. Louise Homer, Renauld Werenrath, A. Atwater Kent, Tosca Seidel and Hilda Lashenska, all of whom, among others, are signing the contracts with Mr. Kent.

your patrons. That automatically works against your securing the continued support of your present business houses and others.

Your aim should be to try to whet, not dull the appetite, and interest for your programs. Already the interest is rapidly dulling among many you cannot afford to lose from a financial standpoint. Self-preservation should dictate what your first interest should be in this matter.

S.S. Malolo Boats Have Radio PHILADELPHIA.—The S.S. Malolo, which is to be the largest and fastest which is to be the largest and fastest large passenger steamship ever built in the United States, will carry as part of her lifeboat equipment two 30-foot steel motorboats fitted out with the most up-to-date Radio transmitting and receiving sets. The apparatus will consist of a 500-wart transmitting set and a sensitive long. watt transmitting set and a sensitive long distance receiver.

CONTENTS

Radio Digest, Illustrated, Volume XV, Number 2, published Chicago, Illinois, October 17, 1925. Published weekly by Radio Digest Publishing Company, 510 N. Dearborn Street, Chicago, Illinois, Subscription rates, yearly, Five Dollars; Foreign Postage One Dollar additional; single copies Ten Cents. Entered as second class matter at the post office at Chicago, Illinois, under the Act of March 3, 1879.

All the Live News of Radio.... Station WJR, Detroit, "Where Joy Reigns".... Advance Programs for the Week..... Editorials, Indi-Gest and Condensed by Dielectric Complete Data for British Circuit Questions and Answers .. Directory of Radiophone Broadcasting Stations, Part III

Looking Ahead

The Days of Wild Goose Chases around the dials are fast disappearing. Radio fans now pick their selections in much the same manner that they formerly chose a record to play on the talking machine. To aid the fans in their selection of the numbers there will be a new program index system installed in the next issue. This will tell you exactly at what hours and where you can hear women's talks, dance music, including the orchestra's name, and classic and popular concerts and who gives them and popular concerts and who gives them.

We Dimly Remember Milwaukee having been made famous by something other than a broadcasting station, but what it was has slipped our mind. However, the fame of the past is being supplanted by that brought on by Station WHAD of the Milwaukee Journal and Marquette university. The persons who make it go and the things with which they make it go will be described in picture and story next week.

Super-Heterodyne Fans Will Be Pleased with the Grand Prix receiver to be Is in It and Why," will be printed in next week's edition. Watch for this series, and if you wish a set that will reach out for real DX, be prepared to built the Grand Prix.

The Five Tube R.F. Fans will be told how to wire the "Traveler," John G. Ryan's contribution to the deluxe sets of the year. Different colored covered wire and numbers on each wire and connection will insure you against hooking up wrong.

Newsstands Don't Always Have One Left

WHEN YOU WANT

YOU WANT IT!

BE SURE OF YOUR WEEKLY COPY BY SUBSCRIBING NOW

SEND IN THE BLANK TODAY

Publisher Radio Digest, 510 N. Dearborn St., Chicago, Illinois.	
Please find enclosed check (Six, Foreign) for One Radio Digest, Illustrated.	M. O. for Five Dollars Year's Subscription to
Name	
Address	***************************************
City	State

Radio Trust Probe Is to Start October 20

WASHINGTON.—The Federal Trade commission has set October 20 as the date on which to begin hearings in New York city in connection with its case against the Radio Corporation of America and

the Radio Corporation of America and others as an alleged monopoly.

Edward L. Smith will be chief attorney for the commission and David H. Sibbett will sit as examiner in the case. It is expected that the taking of testimony in New York will take several weeks, following which hearing will be held in other cities which have not yet been decided upon.

upon.

A naval officer connected with the Radio service of the navy department has been requested by Secretary of the Navy Wilbur to attend the Federal Trade commission's hearings in New York. The mission's hearings in New York. The commission has requested the secretary to make such information available to it as seems desirable. Both the army and navy are more or less interested in these hearings inasmuch as it has been contended by officials of the Radio Corpora-tion of America that the organization was originally begun at the request of the navy department at the conclusion of the war.

New Toronto Air Voice to Divide Time with Old One

TORONTO.—New call letters from TORONTO.—New call letters from Toronto were heard recently when CKNC, Canadian National Carbon company, took the air for the first time. A splendid program was prepared for the inaugural, including selections by the CKNC Salm orchestra, a vocal quartet, an instrumental trio and a number of soloists.

The station in the future will use part of the time schedules allocated to CHNC.

The station in the future will use part of the time schedules allocated to CHNC, Toronto Radio Research society. CHNC's studio and station is located in the Canadian National Carbon company's plant. Mr. Combs, who directs CHNC, will also direct CKNC.

GIANT BRITISH STATION

(Continued from page 1)

(Continued from page 1)
the tapping key under the finger of a man at the general post office.
Five other stations are being built in Britain simultaneously with Rugby. They are Bodmin, Bridgewater, Skegness, Grimsby and Dorchester.
Under a recent arrangement the government is keeping in its own hands all communications with the colonies, while allowing private enterprise to link Britain up with foreign countries.

A novel program illustrating the growth of ragtime from the syncopated negro spiritual and song up to the present day was transmitted from Station 2LO. Old favories like "Alexander's Ragtime Band," and "Whistling Russus" and "Whistling Rufus" were broadcast.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION. ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

Of Radio Digest, Illustrated, published weekly at Chicago, III, for October 1, 1925.

CIRCULATION, ETC.. REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

Of Radio Digest, Illustrated, published weekly at Chicago, Ill. for October 1, 1925.

State of Illinois, County of Cook, Ss.—Beforo me, a notary public in and for the State and county aforesaid, personally appeared E. C. Rayner, who, having been duly sworn according to law, deposes and says that he is the publisher of the Radio Digest, Illustrated, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 445, Postal Laws and Regulations, printed on the reverso of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, E. C. Rayner, 2353 Commonwealth Arc., Chicago, Ill.; Managing Editor, None; Business Manager, V. E. Huffer, 5220 Cornell Ave,, Chicago, Ill.; Managing Editor, None; Business Manager, V. E. Huffer, 5220 Cornell Ave,, Chicago, Ill.; owned by an individual his name and address of each, should be given below; if the publication is owned by an individual his name and address of rowned by a corporation the name of the corporation and the names and addresses of the stockholders owning or holding one per cent or more of the total amount of stock should be given.) E. C. Rayner, 2333 Common eath Ave., Chicago, Ill.; George Seaman, 230 Parkway, West Chicago, Ill.; George Seaman, 230 Parkway, West Chicago, Ill.; George Seaman, 230 Parkway, West Chicago, Ill.; D. R. Seaman, 29 Codar Ave., Chicago, Ill.; George Seaman, 29 Codar Av

E. C. RAYNES. (Signature of publisher.) Sworn to and subscribed before me this 2nd day of October, 1925.

(SEAL.) (My commission expires October 1, 1928.)

KDKA ADDS COURSES TO ITS AIR COLLEGE

MORE LIKE UNIVERSITY AS SCHEDULE GROWS BIG

Poultry Raising, Physics, Crime, Radio, Travel, All to Be Covered in Special Courses

PITTSBURGH .- Radio colleges are not uncommon on the air nowadays, but Station KDKA here, can now qualify for the name of "university of the air" as it is broadcasting work in different collegiate lines on regular schedule. A series of courses especially designed for those interested in agriculture and home ecointerested in agriculture and home economics are given in cooperation with the Pennsylvania State college and the National Stockman and Farmer. Other series, prepared by faculty members of the University of Pittsburgh, will deal with physics, criminology, travel, and

Poultry Comes First

Poultry keeping will be the first of the Radio courses to be offered in cooperation with the State college and the Stockman

and Farmer during the coming winter.

A member of the college correspondence A member of the college correspondence department will explain the course and give instructions for enrolling at the October 15 farm program from the Stockman and Farmer studio, and the lectures will begin the following week. This course will extend over eight weeks. It will be given by the different poultry specialists given by the different poultry specialists at the college, one instructor giving a lec-ture on feeding, another on diseases, and still another on other subjects that will

still another on other subjects that will be taken up in the course.

Another course wil be given as soon as the poultry course is finished. Various specialists of the college are now engaged in preparation of the Radio correspondence lessons. Each of the talks presented in the courses will be written and given by an authority on the presented in the course will be written. and given by an authority on the particular subject.

The Physics Series
The Physics department, University of Pittsburgh series, will be broadcast as

Tuesday, October 20: "The Nature of

X-Rays," Dr. Worthing. Tuesday, October 27: ture," Dr. Sieg. "Crystal Struc-

Tuesday, November 3: "Structure of the Atom," Dr. Sieg.

Tuesday, November 10: "Relativity," Dr. Sieg.

Criminology Series Too "Criminology" is the subject of the second series. Dr. W. T. Root, Jr., will

give this series treating the subject from the point of view of the causes, control and treatment of crime.

The remaining lectures are:

Wednesday, October 21: "The Cause of Crime."
Wednesday, October 28: "The Feeble-

wednesday, October 25. The Freehe-minded Offender."
Wednesday, November 4: "Historical
Development of Penal Institutions, Re-form and Punishment."

Wednesday, November 11: "The Essentials of Prison Reform."

A university travelogue will be broad-cast on Thursday evenings during Octo-

ber.
An added feature to the university An added feature to the university broadcasts this year will consist of Radio chats to be given every other Friday night by Prof. George A. Scott, who conducts the Radio courses given by the department of physics at the university. The purpose of Professor Scott's talks will be to instruct in fundamentals of be to instruct in fundamentals of Radio and to discuss in a popular way

the general problems connected with it.

The university studio will continue its policy of issuing, at the conclusion of a series, Radio publications containing the talks just as they have been given over the Radio, together with lists of sug-gested reading references for those who may wish to do further study.

Oklahoma City Plans Large New Broadcasting Station

OKLAHOMA CITY.—The prospect that Oklahoma's voice will soon be on the air again louder and more powerful than ever loomed bright here recently, when directors of the Oklahoma state chamber of commerce, meeting here, voted to inof commerce, meeting here, voted to inaugurate a campaign to finance the \$200,-000 budget needed to give the state a 5,000-watt station equal to the best Radio broadcasting centers in the country.

New Amateur Call Book

WASHINGTON, D. C.—The Radio section of the department of commerce has just published a list of amateur and special land Radio stations as of June 30, 1925. These may be secured from the government printing office for 25 cents in coin or money order.

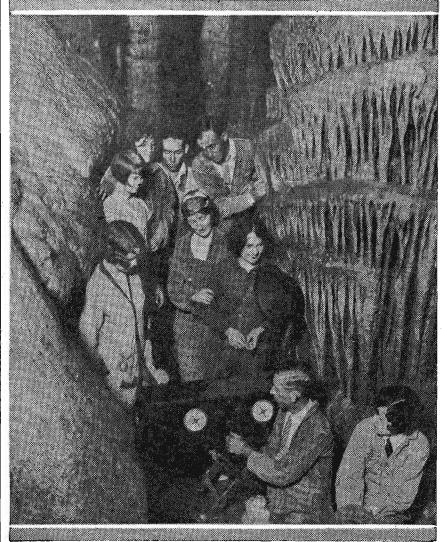
WHOA, ORGAN, WHOA IS OFT HEARD ORDER

HICAGO .- "Whoa, Organ, stand still," is the command often given to the studio organ by Frank Westphal, director of the All-American station, WENR, here, while filling a request number on this popular instru-ment. The swelling notes of the mighty organ that Radio fans enjoy ome from an instrument no larger than an ordinary suitcase. In fact, the instrument is intended for portable use and when Mr. Westphal pedals vigorously, the organ starts to move across the studio.

COYOTE HEARS CALL OF WILD OVER RADIO

ENVER.—And now KOA, the Rocky Mountain broadcasting station, has had a coyote added to its host of listeners. Kenneth Buchanan, a university student in Salt Lake City, has informed the station that he and his pet coyote (named Oscar for some undisclosed reason), are regular listeners to this station. Kenneth says he and Oscar are reminded of their home in the wilds of western Colorado every time they tune in on a program and that Oscar begs to go back home again.

LISTENERS HEAR 1,000 FEET DOWN



OT SPRINGS, Ark.—Breaking into the silence of the centuries, strains of Radio music and the voice of the announcer of KTHS, the New Arlington hotel, Hot Springs National Park, on the night of October 10, furnished a weird thrill to a Radio party grouped around the loud speaker 1,000 feet underground in the famous Diamond Cave, near Jas-

per, Ark.
The special test program was put on by the New Arlington hotel station in cooperation with Mr. J. A. Cantrell, dean of Radio fans of that section, who has the distinction of having owned one of the first two sets operated in Arkansas.

The photograph showing the members

of the Radio party tuning in to Hot Springs was taken a mile and a half back of the entrance and 1,000 feet down. The assembling of the equipment and placing it for the test was a difficult undertak-ing, as in some places there is barely room for one person to walk. Mr. Cantrell ls shown in the foreground tuning in.

He took tests from several sections of the cave after the Radio party broke up, and expects to compile his observations for general and scientific use.

Diamond Cave is considered by many experts to hold first place in this country for beauty. The test was arranged through the cooperation of Burton Bunch of Lead Hill, Ark.

New Stations

Illinois adds two new stations this week to its already overflowing quota. WJAZ, a 1,500-watt broadcaster owned by the Zenith Radio corporation, has its superpower station at Mt. Prospect. The wave length is 322.4 meters. The William Gushar'l Dry Goods store at Decatur opens a 500-watt station operating on 270 ineters.

Detroit added another superpower sta-Detroit added another superpower station to its list last Saturday night, when WGHP went on the air with 1,500 watts. On a wave of 270 meters, once again the voice of C. D. Tomy, long famous as chief of the Red Apple club and manager of WCX, may be heard. He is the chief announcer of this new station.

Other new broadcasters of the week are: ters; WDCH, Hanover, N. H., 100 watts, 266 meters; WFRL, Brooklyn, N. Y., 100 watts, 205.4 meters; KFXM, Beaumont, made by Mr. Crosley.

Tex., 10 watts, 227 meters; WPRC, Har risburg, Pa., 100 watts, 215.7 meters.

KFBU of Laramie, Wyo., recently rewys., recently reported off the air, has renewed its license. WFKB, a 100-watt Chicago station which has a good record for distance, has increased in power to 400 watts. The University of South Dakota has the new call, KUSD.

KFRU, the 500-watt station located at Bristow, Okla., has changed ownership. his broadcaster is now operated by Stephens College, Columbia, Okla. The wave length is 506.

Crosley Heads International Week

CINCINNATI.—Powel Crosley, Jr., has been appointed chairman of International Radio week. Tests will be conducted in broadcasting between Europe and Amerca in the week beginning January 26. The new American superpower stations should result in better reception than has ever before been attained in transoceanic

'ARCTIC FROM AIR' IS MACMILLAN SPEECH

SEVEN STATION LINK TO GIVE EXPLORER'S TALK

Will Tell of Extensive Airplane Trips Over Frozen Near-Pole Snowclad Lands

NEW YORK.—Capt. Donald B. Mac-Millan, who represented the United States in his recent expedition to the far north, will give his thrilling lecture, "The Arctic From the Air," on Sunday, October 18, at 7 p. m., eastern time, from WEAF, New York, and six other stations. This chain will consist of WEEI, Boston; WCAP, Washington; WJAR, Providence; WWJ, Detroit; WCTS, Worcester, Mass., and WCAE, Pittsburgh, Pa.

The name of Donald B. MacMillan is familiar to all who read the newspapers or use the Radio. Since his first trip with Peary, he has repeatedly returned to the north and many thousands have heard his thrilling stories and have seen his motion pictures taken at the top of the world. During his winter in Baffin Land in 1921-22 and in North Greenland in 1923-24, he was the first Arctic explorer to use Radio and thousands of members of the Amateur Radio league of America listened in for his massagers. of the Amateur Radio league of America listened in for his massages.

The MacMillan expedition this last summer made extensive use of the airplane in exploration. Throughout the entire time they were in touch with civilization by means of their Radio equipment, giving detailed descriptions from time to time of their adventure. time to time of their adventures. The expedition which left Wiscasset, Me., in June had for its purpose the exploration

of the vast unknown space between the north pole and Alaska.

It was under the auspices of the National Geographic society with the coperation of the U. S. navy department, the latter furnishing three giant planes of the new amphilian type with pilots and the latter furnishing three giant planes of the new amphibian type with pilots and mechanics to man them. These were carried north by the S. S. Peary, MacMillan's new ship which was built in France for a mine-sweeper, but never used for this purpose. It was accompanied by the schooner Bowdoin, used in MacMillan's two previous trips. The Radio audience have a treat in store for them in the explorer's first talk since his return.

NOVEMBER 9 IS DATE SET FOR RADIO MEET

Hoover Calls Conference on Principal Broadcast Problems

WASHINGTON, D. C.—The fourth annual Radio conference has been officially called by Secretary of Commerce Hoover to convene in this city on November 9. "The conference has been called," says the secretary, "for general discussion and consideration of matters affecting Radio communication in the United States from the viewpoint of the public interest. The conference will include representatives of all Radio activities. While consideration will be given to Radio activities generally, the principal problems will be those affecting broadcasting."

WFAV Former Programs Heard from Station KFAB

LINCOLN, Neb.—The Buick station here is now operating its new 1,000-watt transmitter. Another item of interest is the discontinuance of WFAV of the University of Nebraska and the broadcasting of all mineral transmitters.

of all university programs through KFAB.

This includes five daylight programs and one evening program. The evening program is scheduled for Tuesday. The most important feature of fall broadcatsing will be the play-by-play broadcast of all University of Nebraska football contests.

Sports Editor Teacher of
WSB Radio Sunday School
ATLANTA, Ga.—Since The Atlanta
Journal station, WSB, here, began relaying the Agoga class program every Sunday morning at 9:30 from the Baptist
Tabernacle, Sunday schools throughout the daylight range of "The Voice of the South" have begun calling off their own programs and tuning for the Atlanta exercises, which are led by Morgan Blake. ercises, which are led by Morgan Blake, Journal sports editor and evangelist.

KTCL Specializes on Parades

SEATTLE, Wash.—KTCL, "The Charmed Land" broadcasting station here, Charmed Land" broadcasting station here, have taken it upon themselves to broadcast parades. Both the Fourth of July and the Knight Templar's parade were broadcast by KTCL. They were voted successes, especially by listeners from sick beds, who had not heard parade music for years. sic for years.

NEWS BRIEFS FROM THE BROADCASTERS

SARAGOSSA SEA ANIMALS SUBJECT OF LECTURE

Texas Comes to Georgia; Galaxy of Stage Stars to Be Heard from KOA Soon

Strange animals met on the Beebe expe dition to the Saragossa sea will be described from KDKA by J. F. W. Pear-son of the University of Pittsburgh and a member of the expedition, on two Thursdays, October 15 and 22. The Sara-gossa sea has long been the mystery spot of the Atlantic.

Fans tuning in for WSB lately were surprised to hear the "Hired Hand" of WBAP announcing. He also amazed Atlanta by arriving at the head of a delegation of 500 Texans, all wearing fivegallon sombreros and armed with cowbells.

A galaxy of stage professionals under the auspices of the widely known Denver Community players will appear at KOA Friday, October 23, in a headliner pro-gram of dramatic presentations. They are E. J. Reed of Mrs. Fiske's company; John Connerow, who played with John John Conneroy, who played with John Barrymore in Hamlet; Katherine Ommanney, dramatic coach at North Denver high school; Jessie Pringle, formerly with Frank Bacon in "Lightnin;" and Roy Bankson and Sidney Morris, ex-motion picture directors. The plays to be given are: "The Man in the Stalls," "The Wonder Hat" and "Her Tongue."

Lambdin Kay of WSB is not only popular with listeners but he is also liked by other announcers. The week of October 12 he was heard in St. Louis. Monday, October 19, he hopes to arrive in Chicago and take charge of George Hay's microphone at WLS while the latter is spending the week with Ford and Glenn at WFAA, Dallas. Texas. Dallas, Texas.

The Sunday schedule of WOC has been changed so that the Atwater Kent opera program at WEAF may be included. WOC church services commence at 6:30 p. m., central time, instead of 8. The concert by the Little Symphony orchestra now begins at 9:45.

The Burroughs Adding Machine company has anonunced another special concert Wednesday evening, October 21, from WJR, the Detroit-Pontiac station. Many unusual vocal, orchestral and harp combinations will be heard.

The pleasing music of the Marshall Field and company string quintet hereto-fore only heard by late shoppers in the tea rooms of this big department store may now be enjoyed by fans tuning for WGN, Chicago, between 4 and 4:30, central

Eight characters of the city and ten people from a small town, all members of the KGO dramatic players, will tell the story of "The Fortune Hunter," Winchell Smith's famous stage play, before the KGO microphones Thursday night, October 22, between 8 and 10 p. m., Pacific time.

The Rev. Dr. S. Parkes Cadman, pastor of the Central Congregational church of Brooklyn, N. Y., has resumed his popular Brooklyn, N. Y., has resumed his popular Sunday afternoon series of addresses at the men's conference in the Bedford branch, Y. M. C. A., in Brooklyn. The program begins at 3:45 p. m., eastern time. The addition of WEEI, Boston; WCTS, Worcester, Mass.; WCAE, Pittsburgh, and WSAI, Cincinnati, to WEAF means a great extension of Dr. Cadman's audience.

From WOR comes announcement of the addition to their regular Monday evening programs of Frances Williams and AI Wohlman who are now featured in conjunction with a half hour of concert music from 7:30 to 8 p. m., eastern time, by Eddie Elkins' Ciro orchestra playing direct from the Smart Supper club on West Fifty-sixth street, New York city.

The 1925-1926 season opens up at Westinghouse Station KYW with a number of attractions that appeal to the listener in. One of the stellar features that will be an exclusive one with KYW is the Loos Brothers harmony pair, whose singing and playing in the past has never failed to strike the responsibe chord of their Radio audience.

Archie Slater's Palais D'Or orchestra has opened its fall and winter season at WOR and will be heard regularly again on each late Monday evening program.

In order to satisfy the fans who found his verses given over the Radio real in-teresting, Eugene Konecky, WOAW poet laureate and announcer E-K, has had them

RADIO HYMN CHEERS MAN NEAR TO DEATH

HICAGO.—As the strains of the hymn, "Safe in the Arms of Jesus," floated through the Radio in a home in Benton Harbor, Mich., on a recent Sunday, George Leroy Miller, a recent Sunday, George Leroy Miller, 40, an invalid for sixteen years, in a wheel chair fourteen years and for nine years blind, passed on to the great beyond. The last words of the dying man were of thanks to the Lord that made Radio an instrument of service even in death. Shortly before he sensed that the end was near he requested his nurse to notify the Chicago Gospel Tabernacle of Station WH' Gospel Tabernacle of Station WHT and request the choir to sing his favorite hymn. The choir was immediately assembled and with all the fervor and feeling at their command sang the hymn. After it was finished Chaplain Paul Rader preached a short benedic-tion, but Mr. Miller heard no more.

But How About Yodelers?

PITTSBURGH.—Did you ever hear of a location which in midsummer is free of static; where in the middle of July one may listen in on distant stations as undisturbed by this pest of Radio reception as on the most favorable winter night? Such a Utopian place actually exists.
The place is on the slope of the famous Jungfrau mountain in Switzerland, a peak of the Bernese Oberland mountains.

Souvenirs Swamp KOA Radio Plant

Fans Reward Favorites with Everything from Toy Balloons to Gold Nuggets for Programs

DENVER .-- Found! A souvenir hunter's

For instance, if your hobby is nick. nacks such as toy balloons, pin cushions, foreign coins, pencils, pictures of bathing beauties or blotters-get a job at a broad On the other hand, yours may be a

desire for complimentary tickets to dog shows, picnic resorts, theaters, cafes, dances, rodeos and county fairs. Still, however, the answer is simple—get a job at a broadcasting station.

Finally, if your souvenir hoarding fancy runs to metallurgy, gold nuggets, tin whistles, brass paper weights or galena crystals, then, according to the school of experience at Denver—KOA—get a Job at a broadcasting station.

station boasts a trunk full of listeners' tokens. Most valuable of these, it is said, is a gold nugget, believed to be the first souvenir of its kind ever sent to a broadcaster. Accompanied by an unsigned California letter yesterday, this nugget was extended "as a token of appreciation for KOA's fine programs."

Meanwhile, members of the Denver broadcasting staff admit they are in a quandary to know what disposition to make of an increasing flow of Radio keepsakes which includes flowers (waxed, artificial, cut and pressed), "good luck" stones, old coins, chewing gum, road maps, scenic views and a host of photographic snapshots showing listeners, their homes, receiving sets, canoes, dogs and

Lost Twenty Years; Found

By Radio Music Programs

NEWARK, N. J.—Broadcasting of the
Hotel Shelton dinner music is safely entrenched as a feature of WOR programs
each evening during the "music while you
dine" period from this New Jersey station.

get a Job at a broadcasting station.

Persist in Showering Station

There are no ifs or ands about it, according to Radio experts. As long as broadcasting stations continue serving the public, listeners, they say, will continue singling out and awarding their favorite ethereal voice with a memento of one kind or another.

After ten months on the air, the Rocky Mountain General Electric broadcasting



Station WJR, Detroit, "Where Joy Reigns"



Radio and Phonograph company, has been on the air just two months, yet it has made many friends in the Radio audience. It expects to make many more. It has plans for the winter months that will undoubtedly make many more friends.

The station started broadcasting on August 15, a very unsatisfactory time to make any great impression upon the listening public. Even with this handicap, the station has been heard from coast to coast, and it is becoming one of the old reliables.

Just recently, Leo Fitzpatrick, who is known to hundreds of thousands of the Radio audience as the "Merry Old Chief," joined the staff of WJR as program conductor. Since then, his cheery voice and appropriate pleasantries have been heard regularly from the station. His ability and originality will always be an asset to the station's broadcasting. The policy of the station has been to give the public what it wants, when it wants it and the way it wants it. The mail received from the Radio audience has been the barometer of the program construction and the building of features since the station opened, and it will continue to be the guilding hand.

The station operates on a wave length of 517 meters—a wave length that is advantageously removed from other

JR, the 5,000-watt broadcasting station of the Jewett bands on which high-powered stations operate, which, of course, facilitates in tuning in and giving the Radio public a chance to relax from the real careful tuning that is required on many of the wave lengths in the broadcasting band. The equipment used by the station is the latest 5,000-watt design. No detail has been neglected, either in the construction of the station, the remote control rooms in the Book-Cadillac hotel, Detroit, or the studios, which might make for greater ease and

precision in handling the broadcasting which is sent out daily.

The manager and chief engineer of WJR is Howard E.

Campbell, a man who has had many years of experience in both the commercial and broadcasting branches of Radio. He is an engineer of recognized standing. The assistant manager and program director is Corley W. Kirby, who was formerly Radio editor of a metropolitan newspaper and associated with one of the country's pioneer broadcasting stations.

Jean Goldkette, musical director of the station, has had a great deal of experience in arranging musical features for broadcasting stations, and has at his command the best musical talent available in or near Detroit. Miss Deora L. Wolfe, studio hostess and accompanist, is a thoroughly trained musician, a sympathetic accompanist and a pleasing personality around the studio.

For the benefit of the late listeners, WJR will inaugurate a Joint program in the near future, to be known as "The Jewett Jesters." It will be broadcast three nights each week—Monday, Wednesday and Saturday—with "The Merry Old Chief," the master of ceremonies, presiding over the microphone with his



Above, Jean Goldkette, musical director of the Jewett Radio and Phonograph company's station, WJR, also director of his own orchestra. Below, two of the motor generators required to furnish power to the transmitting tubes, which are located in the room farther below, where you see the operator's desk, speech input equipment and part of the transmitter.



LONG RELAY TAKES **GENEVA TO ENGLAND**

LEAGUE OF NATIONS TALK HEARD IN BRITISH ISLES

Land Lines and Radio Plants Hook Up to Carry Political Talk All Over Europe

LONDON, Eng.-The first experiment in all-Europe broadcasting has just been carried out with singular success. Through the enterprise of the British Broadcasting company the most important of the proceedings at the present meeting of the League of Nations are being broadcast throughout Europe. This constitutes a unique record, and marks the beginning of an era which may place Radio in the forefront as a powerful influence in yet another sphere—that of international politics.

The first item broadcast from Geneva was M. Painleve's address. At Paris, the Eiffel Tower station broadcast the speech. This was again picked up at the B. B. C. experimental post at Hayes, sent by land line to 2LO and 5XX, and reproadcast to listeners—a remarkable feat. In London it was possible to understand nearly every word of the talk.

Difficulties on Land Line

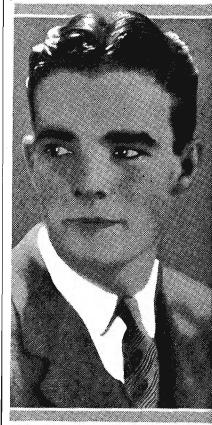
Difficulties in relaying on the long land line between Geneva and Paris were encountered, but recent experiences support the conclusion that relaying over long distances can have satisfactory results. For example, on August 23 the new Swedish station at Boden was relayed by land line to all Swedish stations, but also as far away as Copenhagen. Despite the distance the transmission had to travel by land line (1,100 miles), the reception was perfectly clear.

M. Painleve's address was also relayed to German and central European stations.

Scandinavian Hams Organize

COPENHAGEN.—The Radio amateurs in Scandinavian countries now possess an international organization covering the Baltic area, the S. R. R. L., or Scandinavian Radio Relay league, with headquarters in Stockholm. Membership is open to all amateur senders in Scandinavian all amateur countries.

FORSAKES MIKE FOR FOOTLIGHTS' GLARE



HE footlights have claimed another HE footlights have claimed another Radio favorite! Vernon (Tex) Rickard, popular tenor and assistant announcer at WGN, the Chicago Tribune station, for many moons, has forsaken the "mike" for grease paint and powder box, and as "George Shelby" is scoring a hit in the Duncan sisters' show, "Topsy and Eva."

Vernon, so charmed the "Duncs" with his singing of "Rememberin'," and others of the favorite songs from "Topsy and Eva" that they made "Tex" a full-fledged thespian. Rickard went through his first performance like a veteran, and the Dun-

Home Economics Course by Radio to Busy and Active Western Housewives

sort to Radio as first aid in solving her culinary and home economics problems.

This belief, as expressed by the broadcasting staff of KOA, General Electric station at Denver, is based on recent observations in connection with a newly inaugurated series of table talks for house-

The discussions are designed to provide timely hints on cooking and are heard as the closing feature of KOA's Tuesday, Thursday and Friday matinees.

Will Tell Art of Entertaining
Following widespread requests from
women in many western cities and rural
sections, announcement is made that the housewives' discussions will likely be enlarged before fall to include expert advice on entertaining in the home. Such a course would prove of special value dur-

ing the winter social season, it is said.

Courses in cookery over KOA are ar-

can sisters proclaimed their "find" from the housetops. He is now with the show making cities in the middle west.

Rickard was one of the most popular of the WGN artists. He proved himself equally at home in jazz, songs from light opera and musical comedy, and sensational ballads. His pleasing voice soon earned him a large personal following among Radio enthusiasts and requests like "let's have more Rickard" were found in every mail at WGN. The recognition accorded him by the Duran sisters will doubtless mail at WGN. The recognition accorded him by the Duncan sisters will doubtless be applauded by his large audience of listeners. He will probably broadcast from Radio stations in the cities where "Topsy and Eva" shows.

don't need "B" Batteries if you use the **FRESHMAN** MASTER"B" Battery Eliminator A COMMITTEE OF THE PARTY OF THE

Connects from any electric light socket right to your radio set;that's all there is to it.

With the Freshman Master "B" Eliminator your set will always be supplied with constant and uniform power. Noiseless in operation; your reception will not be marred by the snap and crackle due to chemical action in "B" batteries.

A. C. Model \$20.00 for alternating current Freshman Rectifying Tube is required for operation of the A. C. Model. Price \$2.50

D. C. Model \$17.50 Costs less than one-tenth of a cent

per hour to operate. Sold by AUTHORIZED FRESHMAN DEALERS only

Chas. Freshman (O.Inc. Radio Receivers and Paris FRESHMAN BUILDING 240-248 WEST 40TH ST.-NEW YORK.NY CHICAGO OFFICE — 2626 W WASHINGTON BUY.

BECAUSE her daylight hours are split ranged by the Morey Mercantile company three ways by family responsibilities, business cares and club activities, the modern woman may shortly reof Denver. They are given under the personal supervision of a prominent society and club matron of Denver, whose name, for the present, is being withheld and who speaks under the "Nom de Radio" of "Clara Hoover."

Radio Culinary Hints Define Cooking

'Culinary hints by Radio will do much to remove guesswork from cooking, if numerous comments from women are any criterion," Mrs. Hoover declares. "They will help the western housewife to cut down the number of hours she spends over a range or in a hot kitchen. Likewise they should prove a valuable aid in conserving energy and balancing menus—all without inflating the family budget."

Mrs. Hoover emphasized that her table talks were to be regarded by women as a supplement to text books and other publications devoted to cooking and domestic e**c**onomics.



For EVERY Radio Set

A stunning piece of furniture that restores order in the room where you have your Radio! No more cluttered table-tops, nor litter of equipment un-

der-foot.

No unsightly horn in evidence, either! This console has its own loudspeaker, inbuilt. It's out of sight, but with very apparent Non-Vibrant Ceramic tonal superiorities. For it has
the highest-developed type of veloped type of

unit. With horn built of special non-vibrating, extra-hard, ceramic material. Produces clear non-vibrant tone.

There's ample room for everything; space for largest A and B wet batteries—or battery eliminator—required for any home set; and for a big charging outfit, too.

Finished in mahogany, or walnut color. Dainty design of parqueterie on two front panels. Top, 38 in. x 18 in. Substantially built; the product of a 40-year-old furni-

The price, forty dollars, is for the complete console and includes the loudspeaker horn and unit. Thousands of dealers are showing this artistic addition to home radio

Rear View-Set Hooked Up

Price. \$40 West of Rocky Mts., \$42.50 Windsor Furniture Co.

1434 Carroll Ave.

Chicago, Ill.



Your set is capable of far more than you are getting out of it! Five minutes of tuning after you have equipped your set with Dialogs prove this.

prove this.

Smooth, easy vernier control, such as only Dialog can give, permits adjustment to the minute capacity variation necessary to successfully separate close stations. And there is nothing in Dialog to wear out! No extra drilling to install on any set.

\$1.25 with black bakelite knob and black dial plate.
\$1.25 with black bakelite knob and silvered dial plate.
\$1.50 with brown bakelite knob and gold finished dial plate.

0-100 or 100-0 dial readings.

—And the new WALNART Station Selecting CONDENSER

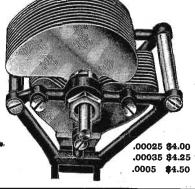
The Walnart Condenser is not a straight line wave length nor a straight line frequency—but, a station-selecting condenser! Exactly what you have hoped for. Uncrowds all the stations making it easy for anyone to turn to the right condenser setting for any station.

Daking to any station, condenser setting for any station.

Put Walnut Station-Selecting Condensers your set. Radio will mean more to you—fr

WALNART EURETRIC MFC. CO.

308 So. Green St. CHICAGO "Makers of Good Goods Only"



FARMER TO BENEFIT BY NEW WLS CHANGE

LESS TIME ON AIR, BETTER PROGRAMS, NEW PLANS

Sears-Roebuck Foundation to Open 5,000-Watt Plant Soon to Serve Rural Districts

CHICAGO.—Less time on the air but better and stronger farm programs during the time on, is the keynote of the winter schedule of WLS, Sears-Roebuck station here, according to an announcement by Edgar L. Bill, director.

With its new 5,000-watt station ready for use within a month, the American farmer will receive an agricultural Radio service such as neither WLS nor any other station has been in a position to render heretofore, says Mr. Bill.

Better Market Reports

Market reports and weather forecasts

Market reports and weather forecasts will be greatly enlarged in the cold weather season, and only leaders in entertainment and farm information will find places on the station's winter program, designed mainly for the farmer.

A full-time staff of seven, assisted by suggestions and criticisms of the memberabin of the Radio Farmers Democracy.

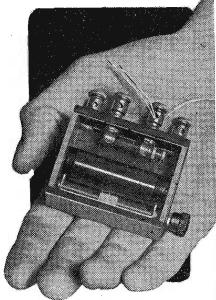
suggestions and criticisms of the membership of the Radio Farmers Democracy, will build and execute this plan. So popular has the idea of the organization become that a branch of the democracy has been organized southwest of the cotton belt where the agricultural foundation broadcasts through Station WFAA at Dallas, Tex.

To Have New Studios

Simultaneous with the opening of the new superpower WLS at Crete, Ill., the station will also move into its new headquarters in the new Hotel Sherman. Here will be "twin" studios, a little theater and

will be "twin" studios, a little theater and reception room for visitors, as well as the offices of the station.

Hardly a Handful



Women, too, entered sets in the prize contest for amateur set builders during the New York Radio World's Pair. This interesting miniature crystal set was interesting miniature crystal set was built by Helen Giles, and it worked.

So This Is Venice

VENICE.—Radio amateurs in Venice have hit on a particularly bright idea; many of them, fortunate possessors of private gondolas, have fitted them up with receiving sets, and with small loud speakers, go floating about the canals of

Kansas College Gives Credit in Air Course

High School and University Subjects Are Broadcast Regularly

MANHATTAN, Kan. — Station KSAC, the mouthpiece of the Kansas State Agricultural college, a pioneer institution in the harnessing of Radio for disseminating higher education, went on the air October 5 with an education program, a prediction of which would have appeared visionary

A rural schools program is scheduled A rural schools program is scheduled at 9 o'clock each morning. It consists of opening exercises, a music lesson, talks on nature study, travel, lives of great men, books to read and current events. Five minutes are devoted to an agricultural primer, discussing in turn poultry, crops, dairying, horticulture and livestock. Calisthenics concludes the program.

gram.

High school credit courses are broadcast regularly, in addition to a football lecture course. A year's college credit cast regularly, in addition to a football lecture course. A year's college credit may be earned through the courses which include general psychology, business English, community organization, educational psychology, economics, English literature, journalism, sociology, vocational education and educational sociology. Radio lectures are supplemented by home study and regular examinations are taken by the students under the direction of county superintendents. superintendents.

superintendents.

Forty extension courses, covering the fields of agriculture, engineering, home economics and general science are given without college credit. Lecturers answer questions phoned to the station. Telephone exchanges have agreed to give their subscribers a certain number of free calls and the complete telephone conversation is broadcast. is broadcast

Give the set a weekly sun bath to keep out the moisture.

RADIO TO HELP IN 'IRONSIDES' DRIVE

Station WEAF to Present Special Program to Assist During Constitution Week

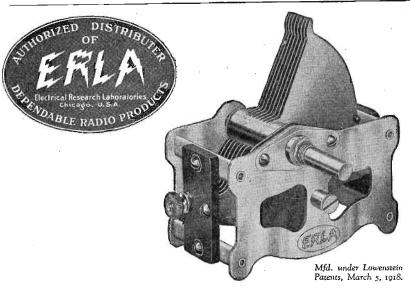
NEW YORK.—In an effort to preserve the historic "Old Ironsides," the famous ship of the American Revolution, and to celebrate Constitution Week, WEAF will present an old Ironsides program on Saturday preceding (October 17) in which Robert Hilliard, distinguished Shakespearian actor and tragedian, and Secretary of the Navy Wilbur will make speeches in Washington, D. C., which will be heard from WEAF, New York, via direct lines. Robert Hilliard is one of the best known actors of the old school and stage, and his recitation of the famous poem,

and his recitation of the famous poem, "Old Ironsides," should stir the heart of

Secretary Wilbur will make an appeal to the American people for funds to preserve for posterity the most famous ship in American history, which, at the present time, is rotting away in Boston navy yard.

"John Speaks for Himself" and Is Accepted via Radio

CAMBRIDGE, Mass.—A romance which spanned two continents and resulted in a Radio proposal and Radio acceptance cul-minated recently with the announcement of the marriage in Maine of John Alden, Jr., a Cambridge newspaper man, and Miss Margaret Thomas, daughter of the Rev. and Mrs. George H. Thomas of Chicago. Last week, while the steamship Samaria was heading toward Boston from Theorem Normal Alden, who is a son of the Europe, young Alden, who is a son of the late John Alden, author, sent a Radio proposal of marriage to Miss Thomas. Miss Thomas sent acceptance winging through the air.



Equi Space Gives Ideal Tuning at all Wave Lengths

Spreads low wavelength stations without crowding those from 50° to 100°. Lightweight and compact in style.

HERE is a new con-denser that surpasses all present-day types. The conventional straight line frequency condenser spreads stations on the low wavelength proportions on the dial but it also brings stations between 50 and 100 too close together. On the higher wavelengths are many highpowered stations that are extremely difficult to sepa-

The Erla *Equi Space makes allowance for this. It gives maximum spreads

over the entire range of the dial. Specially designed plates make this possible.

Now all stations, low frequency as well as high frequency, are spaced on the dial to insure the best results. Tuning is made far sharper. Sensitivity is greatly increased, reducing losses to an unprecedented minimum. Plates of special spring brass are scientifically spaced and give maximum conductivity. Scientific tests show a resistance far lower even than costly laboratory types.

Special Erla Features

Minimum capacity only 10 m.m.f. Ratio of maximum to minimum capacity 35 to 1. Total resistance of only 3 ohms at 1000 cycles.

at 1000 cycles.
Four riveted cross members supporting stator plates provide rigidity unapproached.
Single-hole mounting makes it easy and quick to attach.

easy and quick to attach. Light weight plates of special spring brass appreciably reduce bulk and weight, and tremen-dously reduce tendency toward misalignment from rough usage.

Equi Space is small and compact, requiring little space. Very light but having extreme rigidity because of four riveted cross

Go to any radio store and see this amazing con-denser today. It will make a striking difference in any

Send your name and address today and we will mail free, news of the latest radio discoveries and inventions.

trueen stations *Trade Mark Registered Electrical Research Laboratories CHICAGO, U.S.A.

2500 Cottage Grove Ave., Chicago, Ill. Tell me what's new in radio.
Name
Address
City
County

It's open season all the year

-for new and distant stations-with the

whole radio world your preserve when you make

AERO $rooled{Tooled}$

your trail-blazer and path-finder

Now is the time to replace obsolete equipment with the "Loop-within-a-Loop" that is everywhere giving such marvelous results.

The stationary inner loop acts as a "booster" while the outer loop is adjusted by rotation.

Used with-or to replace-outside antennae.

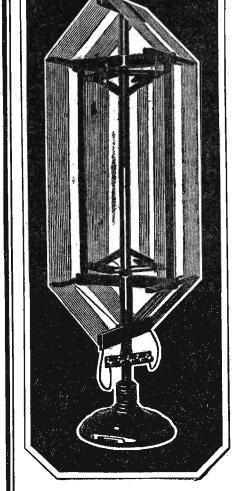
Sells for \$12.50. Askyour dealer. If he does not carry it yet, we will ship direct, express prepaid, on receipt of price. Be sure to specify the set with which it is to be used and please give dealer's name.

Write for 12-page Descriptive Diagramma-

SCOTT SALES COMPANY

National Distributors 443 SOUTH SAN PEDRO STREET LOS ANGELES, CALIFORNIA

UTT-WILLIAMS RECTRICAL PRODUCTS CO SANTA ANA, CALIFORNIA



\$12.50 Beautifully finished in mahogany.

Dimensions 30 in. x 8x 7 in.

FRENCH-SPANISH NIGHT AT PWX, HAVANA

Saturday, October 17

Saturday, silent night for: CFCA, CHIC, CHNC, CNRA, CNRC, CNRE, CNRM, CNRR, CNRT, CNRY, CNRW, KFAU, KFDM, KFMQ, KFMX, KLDS, KOA, KOB, KTAB, KUOM, KWSC, WBAP, WBZ, WCAU, WCTS, WCX, WEAO, WEBJ, WGCP, WHAD, WHB, WHO, WJAR, WKAQ, WLIT, WOS, WSMB, WSUI, WTIC, WWJ.

Eastern Time Stations

CNRO, Ottawa, Can. (435), 8 p. m., Chateau Laurier concert orchestra; 9, Marjorie Carr, soprano; Phil Bora, harmonica soloist; Richard Pentland, tenor; Louis Durocher, saxophonist; Edna Dunning, contralto; S. J. Daly, reader; Chateau Laurier dance orchestra.

Bora, harmonica soloist; Richard Pentland, tenor; Louis Durocher, saxophonist; Edna Dunning, contralto; S. J. Daly, reader; Chateau Laurier dance orchestra.

KDKA, Pittsburgh, Pa. (309.1), 8:30 p. m., Westinghouse band; Griffith Weish quartet.

PWX, Havana, Cuba (400), 8:30-11 p. m., concert; song, Gustavo Aragon; Nena Castellanos, Elodia Rivero, Nena Canal, artists; Spanish talk; duet, Luis Diuz and Nestor de la Torre; Cuca Moran, Dulce Maria B. de Cardenas, Natalia Arostegui de Suarez, artists; talk; quartet.

WAHG, Richmond Hill, N. Y. (315.6), 12-1 a. m., Benton Harbor orchestra.

WBBR, New York, N. Y. (272.6), 8 p. m., Fred Ehrenberg, musical saw soloist; 8:10, L. Marion Brown, soprano; 8:20, Bible questions and answers, Judge Rutherford; 8:40, L. Marion Brown, soprano; 8:20, Bible questions and answers, 100, Cross football game.

WEZ, Springfield, Mass (333.1), 3 p. m., Harvard-Holy Cross football game.

WCAE, Pittsburgh, Pa. (461.3), 6:30 p. m., dinner concert, William Penn hotel; 8:30, concort.

WCX, Detroit, Mich. (517), 6 p. m., dinner concert, William Penn hotel; 8:30, concort.

WEAR, Cleveland, Ohio (389.4), 7 p. m., Marjorle Moore's Melody Maids.

WGBS, New York, N. Y. (315.6), 6-6:30 p. m., Uncle Geebee; 6:30-7:30, Dulcimerlans orchestra; 9-9:15, Rosella Sheiner, violinist; 9:30-10:20, program, Warner's theater; 10:30-11:30, Arrowhead Inn orchestra.

WGCP, New York, N. Y. (315.6), 3-5:30 p. m., musical program.

program.

WGY, Schenectady, N. Y. (379.5), 3 p. m., Navy vs.
Notre Dume; 8:15, Army school bank program, Major
Gen. Charles P. Summerall, commander; 9:30, Hotel

Notre Dame; 8:15. Army school bank program, Major Gen. Charles P. Summerall, commander; 9:30, Hotel Van Curler orchestra.

WGR. Buffalo, N. Y. (319), 2:45 p. m., Army-Notre Dame football game, WEAF.

WHAR. Atlantic City, N. 1. (225), 7:30 p. m., lecture period; 8. Scaside hotel (225), 7:30 p. m., Dal Ruch and his Arcadians; 6:05, Beniamin Franklin concert orchestra; 8. sports' corner, Dr. Francois D'Eliseu; 8:15, the Music of the World; 10:05, Benjamin Franklin dance orchestra; 11:05, organ recital, Germantown theater, WIR. Detroit, Mich. (5:17), 7 p. m., Jean Goldkette orchestra; 9. Jean Goldkette's serenaders; 10, Jean Goldkette's Victor Recording orchestra.

WLIT. Philadelphia, Pa. (394.5), 2:30 p. m., Agnes Land, soprano; F. G. Barock, baritone, Marcella Land, soprano; G. Barock, baritone, Marcella Corne, Color, New York, N. Y. (326), 7-7:30 p. m., Chatheau Four; 7:30-7;35, police alarms; 7:35-8; Chatheau Four; 3-8:95, football scorres; 8:05-8:45, song recitals; 8:45-0, violinist; 9:15-9:30, instrumental novel philadelphia, Pa. (508.2), 7:30 p. m., Hotel McCollegue and property and property and police quartet; 10:10-10:30, talk, board of education,

WOO, Philadelphia, Pa. (508.2), 7:30 p. m., Hotel Adelphia Roof Garden orchestra.

WOR, Newark, N. J. (405.2), 6:15-7:15 p. m., music hour, Hotel Shelton; 7:15-7:30, sports talk, Bill Wathey; 7:30-8:30, Zit's Casino orehestra; 11-11:30, Ciro's orehestra.

WPG. Atlantic City, N. J. (299.8), 6:45 p. m., Arthur Scott Brook, organist; 7. Hotel Traymore dinner music: 8, program; 9, Chalfonte-Haddon hall evening concert; 10:30, the Silver Slipper.

WRC. Washington, D. C. (488.5), 2:30 p. m., Navy-Princeton game; 7:30, Hotel Washington orchestra; 8, Bible talk; 8:15, musical program; 10:30, Crandall's Safurday Nighters.

WREO, Lansing, Mich. (285.5), 10-12 midnight, Speed-Wagon screnaders.

WTAM, Cleveland, Ohio (389.4), 9-12:30 p. m., novelty program, Ev Jones and Coo Coo club; Joe Ferte, tenor,

WWJ, Detroit, Mich. (352.7), 3 p. m., Detroit News orchestra.

Central Time Stations

KFAB, Lincoln, Nebr. (340.7), 5:30-6:30 p. m., Buick Little symphony; Belshaw's orchestra; 8:30-9:30, pro-gram, Schmoller and Mueller Piano company.

KFNF, Shenandoah, Iowa (266), 7 p. m., Scotch trio. KFVE, University City, Mo. (240), 10 p. m., dance night, Gene Witachker's orchestra.

KMA, Shenandoah, Iowa (252), 6-7 p. m., popular concert, chimes, William Howie; 9-11, program. KPRC, Houston, Texas (296.9), 5:30 p. m., Bible class, lev. Claud L. Jones; 7:30, twllight organ concert, Mrs. E. G. Rountree; S. Relph and Virginia Helm Pulley; 8:30, Augleton fiddlers.



Phil Baxter is the director of a singing or-chestra. When Phil and the Phil and the orchestra are going full swing at KTHS, Hot Springs National Park, a frolicsome Sunday 2 vening is enjoyed by southwestern fans. He plans to He plans to be at KTHS all winter.

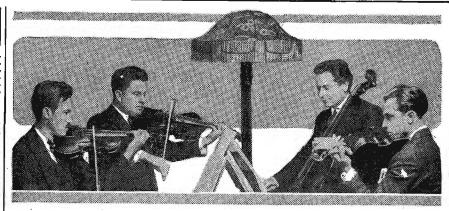
KSD, St. Louis, Mo. (545.1), 7 p. m., Grand Central

KTHS, Hot Springs National Park, Ark: (374.8), 9:10-9:20 p. m., Lawson Reid, organist; 9:20-9:30, Mrs. Harry A. Jones, soprano; 9:30-10, 10-piece New Arlington hotel orchestra; 10:10, Louis Davis, baritone; Dick Powell, tenor; Princess King, planist; 10:40-11, dance tunes.

KYW, Chicago, III. (536), 7-7:30 p. m. dinner concert, Congress hotel; 8-9, Arthur Wellington, bartlone; Sallie Menkes, pianist.

WAMD, Minneapolis, Minn. (243.8), 7 p. m., Fred Roble, Robert Melchor, uke duo; Julia Barr. soprano; Merle Fuller, planist; 10:30, Radisson Rondevoo.

WBBM, Chicago, III. (226), 8-11 p. m., Sanovar orchestra; Sunset male quartet; Blue Deuces; M. L. Jones, celeste bells; Babbe and Barr; Jimmy Eggert; 11-1, Jim Gleason, character singer; Lew Russell;



The Hart House string quartet has recently been engaged by the Canadian National Railways to sing during the autumn and winter from the C. N. R. stations. October 26 they may be heard at CNRT.

Paul Small; Marie Morgott, harpist; Clem Dacy; Joseph Raieff, pianist; Harmony Girls; George Marbach, tenor; Pete Kulles; 1-2, Hotsy Totsy hour; Samovar orchestra; Charlie Garland; Eddic Loftus, Nate Caldwell.

Nate Caldwell.

WCCO, Minenapolis-St. Paul, Minn. (416.4), 2:15 p. m., football game, Minnesota vs. Wabash; 6:15, dinner concert; 8, fireslde philosophies, Rev. Roy L. Smith; 8:15, musical program; 10:05, St. Paul Community chest song; 10:10, dance program.

WDAF, Kansas City, Mo. (365.6), 6-7 p. m., piano tuning-in numbor on the Duo-Art; address, Roger W. Babson; Trianon ensemble; 11:45-1 a. m., Merry Old Chief, Plantation players; Johnmie Campbell's Kansas City club orchestra; Earl Coleman's orchestra; Eddic Kuhn's Kansas City Athletic club orchestra.

WEBH, Chicago, Ill. (370.2), 7:30-8:39 p. m., Oriole

webh. Chicago, III. (370.2), 7:30-8:39 p. m., Oriole orchestra; Howard Neumiller, pianist; 9:30-10:39, Oriole orchestra; Marle Kelly, reader; Kay Ronayne, songster; I1:30-1 a. m., Oriole orchestra; Frank Grief, tenor; Blanche and Rudi Baie; Wayne Myers, reader.

WENR, Chicago, III. (266), 6-7 p. m., Rauland lyric trio; 8-10, All-Amercian Pioneers; James Beaumont, hanioist; Walter Peterson, Kentucky Wonder Benn; 12-2 a. m., midnight frolie, Frank Westphal and his All-Amercian Pioneers; Tommy Smith, tenor; Hal Laige, saxophonist.

Laige, saxophonist.

WFAA, Dallas, Texas (475.9), 6:30-7:30 p. m., Ford and Glenn, Solemn Old Judge; 8:30-9:30, Mozart choral club; 11-12, Adolphus hotel orchestra.

WGES, Oak Park, Ill. (250), 7-9 p. m., Frank Greif, tenor; Franklin Horstmeier, bass; Bryce Talbot, baritone; 11-2 a. m., Kanpus Kollegians orchestra; Phil Wilcox, Erwin Schmidt, Parrish and Ward, Phil Flenning, Lew Butler.

WGN Chiegon III, (270.2), 6:20.7.00.

WGN. Chicago, III. (370.2), 6:30-7:30 p. m., Drake concert ensemble, Blackstone string quintet; 8-9, WGN string trio; 10-11. jazz scamper program, Jack Chapman's and the Blackstone dance orchestras.

WHAD, Milwaukee, Wis. (278), 6-7 p. m., Arthur Richter, organist. WHAS, Louisville, Ky. (399.8), 4-5 p. m., Music Box studio; 7:30-9, concert, Mrs. Harry R. Moore, Mrs. Dora Blandford.

Doru Blandford.

WKRC, Cincinnati, Ohio (422.3), 10 p. m., Marion McKay and his orchestra.

WLS. Chicapo, III. (344.6), 7 p. m., lullaby time; 7:25, national barn dance; 10, dance music, Hotel Sherman orchestra; 11, Joe Brens minstrels, Grace Wilson, WLS studio trio; Ideal quartet, Tony Corcoran, Ralph Emerson.

WLW, Cincinnati, Ohio (422.3), 7 p. m.. Johanna Grosse, organ soloist; instrumental trio, violin, cello and plane; 7:35, Seckatary Hawkins; 8, organ and trio concert.

trio concert.

WMAQ, Chicago, III. (447.5), 2 p. m., football; 6, Chicago theater organ; 6:30, Hotel LaSalle orchestra; 8, Daw and Pratt; 8:30, "The Salvation Army Around the World," Col. Damon; 9, Chicago theater review.

the World," Col. Damon; 9, Chicago theater review.

WMBB, Chicago, III. (250), 7-8 p. m., Trianon duo;
Beatrice Teller, Lindsey McPhail, M. Morgan, Hazel
O'Neil, Jean Ballard, Paul Cadleux, John Everett;
9-11, Trianon orchestra, Dell Lampe, conductor; Edward Hines, Jinnny Eggert, Woodlawn theater orchestra; Armin Hand, conductor; Clyde Hager, Dave
Williams and Elsie White; gala-syncopation program.

WMC, Memphis, Tenn. (499,7), 8:30 p. m., program,
sponsored, Hugh Sandidge.
WOAW, Omaha, Nebr. (526), 6 p. m., Rigito orchestra; 7, orchestra; 7:30, speakers' hour; 9, program,
Omaha Printing company; 11, Arthur Hays, organist.

WOK, Hemewood, III. (217:3), 6-7 p. m., Robert York,

Offiniar Frinting company; 11, Arthur Hays, organists. WOK, Homewood, III. (217.3), 6-7 p. m., Robert York, tenor; Harriet Doty, contrallo; Banks Kennedy, organist; LeRoy North, pianist; 10-1, Fred Witmer, planist; Harold Morava, tenor; Herman Slinniko, violinist; WOK string trio; Harriet Lee, contralto;

Ada Tilley, soprano; Bill Hay, bass; Banks Kennedy, organist; LeRoy North, planist; Sandy Meck, tenor; Harry Sosnik, planist; Carl Karmeyer, violinist; Mr. Conover, cellist.
WORD, Batavia, III. (275), 8-10:30 p. m., Webster hotel

WORD, Batavia, II. (275), 8-10:30 p. m., Webster hotel ceneert.

WOC, Davenport, Iowa (483.6), 9-10 p. m., Robert Lynch, bartione; Howard A. Carroll, tenor; Herbert Silberstein, violinist; L. Emery Wass, reader; I1-12, LeClaire botel orchestra; Peter MacArthur, baritone.

WOS, Jefferson City, Ma. (440.9), 2:30 p. m., Rolla-Missouri football game.

WQJ. Chicago, III. (447.5), 7-8 p. m., concert, Ralph Williams and his Rainbo Gardens orchestra; Maria lone; Kane McDuffee, whistler; 10-2 m. Ralph Williams and his Rainbo Skylarks; Jerr Sellivan; Ione; Kane McDuffee, whistler; 10-2 m. Ralph Williams and his Rainbo Skylarks; Jerr Sellivan; Rose Vanderboech, soprane and planist; Hal Lansing and his ule; Bert Davis, Mclodiams; Everett Opte, character reader; Clarence Theders, tenor; Sandy Meck, Scotch tenor; Harry Sosnick, planist; Williamson Brothers, sted gultarists; artists.

WSAI. Cincinnati, Ohio (326), 7:45 p. m., children's storles, WSAI Story lady; 8, chimes, Robert Badşley; S:15, Bicycle Playing Card sextet; popular song, Jack Little.

WSUI, lowa City, lowa (483.6), 2:30 p. m., Iowa-Illinois.

Mountain Time Stations

KFWA, Ogden, Utah (261), 9-12 midnight, Olie Reeves and his orchestra.

Pacific Time Stations

KFOA, Scattle, Wash. (454.3), 8:30-9:30 p. n., program; 9:30-11:30, Eddie Harkness and his orchestra. gram; 9:30-11:30, Eddie Harkness and his orchestra.

(FWB, Hollywood, Calif. (252), 7:30 p. m. microphone
brevities; 8-9, Mildred Masser, female baritone; Margatet Grewar, soprane; Henry Lord, basso; Fred
Hayn, flutist; 9-10, Warner Brothers, syncopators;
Lavonia Somes, whistler; Bill Blake, tenor; 10-11,
Warner Brothers frolle, direction Norman Manning.

warner Erothers frolic, direction Norman Manning.

KGO, Oakland, Calif. (361), 4-5:30 p. m., concert orchestra, Holel St. Francis; 8:10, Sherman, Clay and company; "Barber Shop Ballads," Joseph Henry Jackson; California male quartet; "The Music of South America," Mrs. J. Del Valle, pianist; Virginia Graham, soprano; Pasmore instrumental trio; 10-12, dance music, Hotel St. Francis.

KGW, Portland, Ore. (491.5), 10-12 midnight, Indian Grill.

Grill.

KHJ, Los Angelos, Calif. (405.2), 5:30-6:30 p. m., Leighton's Arcade cafeteria orchestra, Jack Cronshaw, leader; 6:30-7:30, history story, Prof. Walter Sylvester Hertzog; Jack Searle, screen juvenlic; E. K. Barnes; 7:30, Sizer instrumental trio of Long Beach; 8-10, Coast Enameling and Plating company program; 10-11:30, Art Hickman's Biltmore hotel dance orrhestra, Frank Ellis, leader; 11:30-2 a. m., Lox Angels of KHJ with Walter Biddick, E. K. Barnes, O. G. Pirie and Lost Angel orchestra.

KJR, Seattle, Wash. (384.4), 8:30-10 p. m., L. C. Warner company studio program.

KNX, Hollywood. Calif. (336.9), 5:30-6:15 p. m.

ner company studio program.

KNX. Hollywood, Calif. (336.9), 5:30-6:15 p. m.,
Wurlitzer pipe organ studio, Town Tattler; 6:15, travel
talk, W. F. Alder; 6:30-7, Atwater Kent Radio
orchestra, Paul Finstein, leader; 7-8, Warlitzer pipe
organ studio; 8-10, program. Westlake Business Men's
association; 10-11, Ray West's Coccanut Grove dance
orchestra from Ambassador hotel; 11-2 a. m., Hollywood night featuring some of the screen's famous
people.

people.

KPO, San Francisco, Calif. (428.3), 6:35-7:30 p. m., Waldemar Lind and the States Restaurant orchestra; 8-12, Cabira cafe orchestra.

KTCL, Seattle, Wash. (305.9), 6:50-7:15 p. m., Hermie King and his super-soloists; 8:30-12, Uncle Hal and his stars of Radio.

Sunday, October 18

Sunday, silent night for: CHIC, CHNC, CNRA, CNRC, CNRE, CNRM, CNRO, CNRR, CNRT, CNRV, CNRW, KFAB, KFAU, KFMQ, KFOA, KFWA, KOB, KSD, KWSC, WAHG, WBAP, WCAU, WCEE, WCX, WDAF, WEAO, WEBJ, WFI, WHAD, WHAS, WJR, WLIT, WMC, WOK, WOO, WOR, WORD, WRC, WSAI, WSMB, WTAM, WTIC.

Eastern Time Stations

KDKA, Fittsburgh, Pa. (309.1), 4 p. m., Dr. Charles Heinroth, organist; 4:45, vesper service, Shadystice Presbyterian church; 6:30, Pittsburgh Athlette association; 7:45, church service, WBBR, New York, N. Y. (272.6), 9 p. m., I. B. S. A. choral singers; 9:10, Watchtower violin choir; 9:20, I. B. S. A. choral singers; 0:10, Watchtower violin singers; 0:10, Watchtower violin choir; 10:20, I. B. S. A. choral singers; 0:10, Watchtower violin choir; 10:20, I. B. S. A. choral singers; 0:10, I. B. S. A. choral singers

singers.

WBZ. Springfield, Mass. (333.1), 10:55 a. m., Trinity church; 8. farm talk, Dean Roscoe Pound.

WCAE. Pittsburgh, Pa. (461.3), 2:45 p. m., People's Radio church; 3:45, pr. S. Parker Cadman; 6:30, dinner concert, William Penn hotel; 7:20, Capitol theater gang.

ner concert, William Penn hotel; 7:20, Capitol theater gang.

WCTS, Worcester, Mass. (268), 3:45-5:30 p. m., men's conference, Bedford branch Y. M. C. A.; Dr. S. Parkes Cadman; 7-7:20, "The Artic from the Air," Donald R. MacMillan; 7:20-9:15, Major Edward Bowes and the Capitol gang.

WCX, Detroit, Mich. (517), 10:30 a. m., services, Central Methodist Episcopal church.

WEAF, New York, N. Y. (491.5), 2-3:45 p. m., "Sunday Hymn Sing," Fedoration of Churches; 3:45-5:30, men's centerence, Bedford branch, Y. M. C. A.; Millan; 7:20-9:15, "Capitol Gang," Capitol theater; 9:15-10:15, Atwater Kent Radio hour.

WEAR, Cleveland, Ohio (389-4), 12:01 a. m., First midnight concert, Goodyear concert orchestra; 3:30 p. m., Goodyear concert orchestra; 3:30 p. m., Goodyear concert orchestra; 3:30 p. m., Goodyear concert orchestra; Transical instrumental quartet.

WEEL, Beston, Mass. (348.6), 3:45 p. m., men's con-

WEEI, Boston, Mass. (348.6), 3:45 p. m., men's conference, Y. M. C. A.; Dr. S. Parkes Cadman; 7:20, Major Bowes, and his Capitol theater family; 9:15, musicale.

WGBS, New York, N. Y. (315.6), 3:30-4:30 p. m., program, Warner's theater; 8-9, opera in conjunction with

WGCP, New York, N. Y. (315.6), 8-11 p. m., musical

program.

WGR. Buffalo, N. Y. (319), 3 p. m., vesper service, Rev. John P. Sala, University Church of Christ; 7:45, Central Presbyterian church service, Rev. John Richelson. D. D.; 9:15-10:15, jointly with WEAF, Atwater Kent Radio artists, featuring Madame Louise Homer.

Homer.

WGY. Schenectady, N. Y. (379.5), 11 a. m., Grace Episcopal church; 12:39 p. m., Rivoli theater; 8, Graco Episcopal church; 9, Godfrey Ludlow, violinist.

WHAR, Atlantic City, N. J. (275), 2:15 p. m., Seaside hotel trio; 7:50, Chelsea Baptist church; 9. Seaside hotel trio; 1:15, Strand theater organ recital.

WHN. New York, N. Y. (361.2), 2:30-3:30 p. m. Christian Endeavor program; 5-5:30, Rosland dance orchestra; 7:30-10, services, Calvary Baptist church; 10:45-11:15, Janssen's Hofbrau orchestra.

WIP, Philadelphia, Pa. (508.2), 10:45 a. m., Holy Trinity church.

orenestra; 7:39-10, services, Calvary Baptist church; 10:48-11:15, Janssen's Hofbrau orchestra.
WIP, Philadelphia, Pa. (508.2), 10:45 a. m., Holy Trinity church.
WJAR, Providence, R. I. (305.9), 7:20 p. m., Capitol theater gang, WEAF; 9:15, WEAF Atwater Kent hour, Mmc, Louise Homer.
WLIT, Philadelphia, Pa. (394.5), 2:15 p. m., Arcadia cafe concert orchestra.
WLVL, New York, N. Y. (288.3), 8 p. m., services, sermon, benediction; Paulist choristers.
WMCA, New York, N. Y. (288.3), 8 p. m., services, sermon, benediction; Paulist choristers.
WMCA, New York, N. Y. (340.7), 6-7 p. m., Recmer's Homer's; 7-7:35, Ernie Golden and his Hotel McAlphn string ensemble.
WNYC, New York, N. Y. (526), 9-11 p. m., program, Brooklyn Mark Strand theater.
WOO, Philadelphia, Pa. (508.2), 2:30 p. m., Sunday school session, Bethany Sunday school; 6, Clarence K. Bawden, organist; 7:45, Bethany Presbytcrian church; 9:15, Mmc. Louise Homer contractor, Presbytcrian church; 9:15, Mmc. Louise Homer contractor, Organist; 9, Hotel Ambassador concert orchestra; 10, Arthur Sectt Brook, organist.
WFG. Atlantic City, N. J. (299.8), 4:15 p. m., St. Paul's Episcopal church; William Stansfi: do organist; 9, Hotel Ambassador concert orchestra; 10, Arthur Sectt Brook, organist.
WFG. Lansing, Mich. (285.5), 10 a. m., Belfry Plymouth Congregational church; 10:30, First Baptist church; 7 p. m., Central M. E. church.
WJ. Detroit, Mich. (352.7), 11 a. m., St. Paul's Episcopal cathedrai; 2 p. m., Detroit News orchestra; 7:20, Capitol theater gang.

Central Time Stations

KFAB, Lincoln, Nebr. (340.7), 4-5 p. m., vesper service, KFDM, Beaumont, Texas (315.5), 8-9 p. m., sacred FMX, Northfield, Minn. (337), 7-8 p. m., college vesper service. (KFNF, Shenandeah, Iowa (266), 10:45 a. m., First M. E. church; 2:30 p. m., Golden Rule song service; 3, men's gospel team; 6:30, Golden Rule Circle; 7:30, Christian church services.

Mrs. George Spaulding is a member of the Seed House bunch presid-ed over every evening by Henry Field, the most ren evening by
Henry Field,
the most popular announcer of the West.
Mrs. Spaulding sings oldfashioned songs in an
old-fashioned way at KPNP,
Shenandoah.



KFVE, University City, Mc. (240), 10 p. m., sermon, "Friendship," Rev. C. W. Davis, Bethlehem Congregational church; sucred selections.

KLDS, Independence, Mc. (441), 11 a. m., Stone church services; 9, Pauline Becker Etzenhauser, organist; Vina May Jenner and Arthur Storms, violinists; Albert Brackenbury, bass; Florence Koehler Campbell, piamist; sormon, Dr. Frederick M. Smith.

KMA, Shenandoal, lowa (252), 4-6 p. m., vesper service.

KPRC, Houston, Texas (296.9), 11 a. m., South End Christian church; 8 p. m., Trinity Lutheran church; 9:30, Julian Paul Biltz and his Hotel Brazos crehestra.

KTHS, Hot Springs National Park, Ark. (374.8), 11 a. m.-12:30 p. m., services, Central Methodist church, Rev. J. J. Stowe, pastor; Arthur Platz or ganist; 9-10, DeLuxe orchestra concert, Meyer-Davis ensemble; Lon Chassy, conductor; cornet, violin and cello solos and ducts; 10-11, frolic, Phil Baxter and his Original Singing orchestra.

(Continued on page 9)

(Continued on page 9)

Headliners of the Week

PWX announces a program of French and Spanish music Saturday night. Operatic selections from Lucia Di Lammermoor, Carmen and La Boheme will be sung by Nena Canal, Mrs. Sofia Barreras de Montalvo and Mrs. Natalia Arostegui de Sugraz de Suarez.

Through the courtesy of the At water Kent company, musicians of international reputation will be heard from WEAF and linked stations this winter. Mme. Louise Homer, who as chicago Civic opera companies, is well known to music lovers, will be the artist this Sunday. WDAF, the Kansas City Star station, goes up in power to 1,000 watts and dedicates the new equipment Sunday. Herbert Hoover will be the speaker of the evening.

"What an artist means by art is always a problem to the layman. The lecture on "International Art," by Homer Saint-Gaudens, director of the Fine Arts at Carnegie institute, at KDKA will contain many little hints on understanding masterpieces. KGO listeners will hear some interesting things about the origin of lighthaired and dark-haired people when Roscoe D. Wyatt discusses Monday, "Why It Pays to Analyze Character."

A hand-shaking vocal duet best describes what Bob Groenske and Jim Mischler, Hello Boys, will do to en-tertain Tuesday night at WLW, Cin-

Wednesday is an important day in the history of science for this is the day the great Edison was born. WGY, WJZ and eighteen other broadcasters throughout the country will transmit electric night pro-grams.

Opera now has its definite place in Opera now has its definite place in Radio. It is no longer a question of whether jazz or classical music shall be featured. Both have their place. Thursday evening is opera WBZ. Madame Vinello-

Johnson is sponsoring the program.
WTIC invites you to listen in Friday night to a popular half hour for distant listeners. The farther away the more urgent the invitation becomes. Graduates of the University of Minnesota will not need to be reminded that WAMD is broadcasting a football "Pep" fest on Friday, at 8 p.m. central time.

HEAR LOUISE HOMER ON WEAF CHAIN

Sunday, October 18

(Continued from page 8)

KYW. Chicago, III. (535.4), 11 a.m., Central church service; Rev. F. F. Shannon, pastor; musical program, Daniel Protheree, director; 4, concert, Edwin Harper, director; 7, Chleago Sunday Evening club; choir of 100 voices.

AMD, Minneapolis, Minn. (243.8), 6 p. m., George Osborn's orchestra; 9:30, Marion Latta, contralto; Merle Fuller, pianist; Eldridge Meagher, musical saw soloist; George Donavan, tenor; 10:30, Radlsson Rondevoo.

soloist; George Donavan, tenor; 10:30, Madisson Rondevoo.

WBBM, Chicago, Ill. (226), 4-6 p. m., Harmony Giris; Edith Carpenter, Grace Ingram, Frank G. King, Jr. and his Yankee band, Charlle Garland, Nate Caldwell, Eddie Loftus, Corrine Jordan, Blue Deuces, Harold Anderson; 8-10, Frances Ingram, Metropolitan opers contralto; Joseph Raleff, duo art pianist; Jeanee St. Anne, French baritone; Ted Coleman, cellist; Sunset male quartet; 12-2, Nutty club.

WGAU, Philadelphia, Pa. (277.6), 5 p. m., Hopte Craig Wyncoop, pianist; 5:15, Radio church service, Rev. John V. Stockwell; 5:25, Second Gospel book, Rev. John V. Stockwell; 5:25, Fectlat; 5:45, 'Making the Best of Things,'' Rev. I hn V. Stockwell; 6, Pennsylvania hotel concert ord estra.

WGBD, Zion, Ill. (344.6), 8 p. m., mixed quartet, brass quartet; J. D. Thomas, soprano; Mrs. LaRose, contralio; vocal trio; George Beem, Carl Newcomer, marimba duct; Susle Barton-Smith, reader; Josephine Martin, pianist.

WCCO, Minneapolis-St. Paul, Minn. (416.4), 10:20 a. m., Plymouth Congregational church; 4:10 p. m., House of Hope Presbyterian church; 8:15, station WEAF, Atwater Kent program; 9:20, classical concert.

WDAF, Kansas City, Mo. (365.6), 4-5 p. m., Orpheus male quartet; 5-5:30, Sunday school lesson, Dr. Walter L. Wilson.

WEBH, Chicago, III. (370.2), 7-9 p. m., artist pro-

WENR, Chicago. III. (266), 2-4 p. m., Bauland lyric trlo; Russell Hendrickson, cellist; O. T. Norum, tenor; 9:30-11:30, All American Pioneers.

9:30-11:30, All American Pioneers.

WFAA, Dallas, Texas (475.9), 6:30-7:30 p. m., Radlo Bible class, Dr. William M. Anderson; 8-9, First Methodist Episcopal church; 9:30-11, Durward Cline and his Collegians orchestra.

WGES, Oak Park, Ill. (250), 7-9 p. m., John Stamford, tenor; Franklin Horstmeier, bass; Marguertte Ray, contraits; Frances Barge, violinist; Elise Barge, Parist; 11-2 a. m., Eleanor Kaplan, violinist; John Rankel, baritone; Ruth Kathoff, soprano.

ist, 11-2 a. m., Elemin Rapian, Violinias, com Rankel, baritone; Ruth Kalthoff, soprano.

W6N, Chicago, Ill. (370-2), 1 p. m., program, Chicago theater; 9-10, Drake concert ensemble.

WHAS, Louisville, Ky. (399-8), 9:57 a. m., organ prelude; 10, Broadway Christian church; 4:30-5:30, Christian church choral service.

WHB, Kansas City, Mo. (365-6), 9:40-10:45 a. m., services, Linwood Christian church; Dr. Burr Jenkins, minister; 8-9:15 p. m., evening services; 11:15-1, organ selections, Morrell Moore; dance music, Gary's School of Dancins, Iowa (526), 11 a. m., University church service; sermon, Dr. C. S. Medbury; 7:30-8:30 p. m., Resse-Hughes orchestra.

WKRC, Cincinnati, Ohio (422-3), 6:45 p. m., Walnut Hills Christian church; 10, Gene Schmitt, barltone; Gene Parazzo, planist.

WIS Chigno. Ill. (344.6), 6:30 n. m., Ralph Emer-

Malter Bridge, tenor; Merrell Schwarz, baritone; Gene Parazzo, planist.

WLS, Chicago, Ill. (344.6), 6:30 p. m., Ralph Emerson, organist; 7, WLS Little Brown church.

WLW, Cincinnati, Orio (422.3), 9:30 a. m., school, editorial staff of Sunday school publication, Methodist Book concern; 11, services, Church of the Covenant, Dr. Frank Stevenson: 7:30 p. m., services, First Presbyterlan church, Dr. Frederick McMillan, minister; 8:30, concert, H. & S. Pogue concert; Walter Esberger, director; soloist, George Muhhauser.

WMBB, Chicago, Ill. (250), 3-5 p. m., Trianon orchestra, Dell Lampe, conductor; Billie Hoff, Walter Duffy, Geraldine Doyle; Woodlawn theater orchestra. Armin Hand, conductor; 7-8, Trianon duo, J. Bodewalt Lampe, director; Beatrice Teller, Hazel O'Nell, Joel Lay, Florence Rush, semi-classical program; 9-11, Trianon orchestra, Armin F. Hand. conductor; Harold Stokes, Charles Agne, M. Alswang; Woodlawn theater orchestra, Armin F. Hand. conductor.

WOAW, Omaha, Nebr. (526), 9 a. m., chapel service, Rev. R. B. Brown; 9, chapel service.

WCC, Davenport, Iowa (448.6), 6:30-7:30 p. m., church service, Rev. John L. Daleiden; 8:15-9:15, Atwater Kent Radio artists; 9:45-11:45, Palmer little symphony.

WORD, Batavia, III. (275), 9 p. m., hymns and sacred songs, I. B. S. A. choral singers; 9:10, address, B. F. Hollister; 9:30, Lela Hammer, planist; I. B.

songs, I. B. S. A. choral singers; 9:10, address, B. F. Hollister; 9:30, Lela Hammer, planist; I. B. S. A. choral singers.

WOS, Jefferson City, Mo. (440.9), 9:30 a. m., Christlan church; 7:30 p. m., Presbyterlan church, WQJ, Chicago, Ill. (447.5), 9:30-11:30 a. m., sermon and service, People's church; 100 voice choir; Clarence Eddy, organist; 3-4 p. m., concert; Salda A. Ballantine artists; Elizabeth Green, violinist; Helen Keller, planist; Bernice Smith, Mezzo-soprano; Paco Escalara, tenor; Garfield Stedner, baritone; Honri Blancai, cellist; Countess Vichy, contralto; 101a Juhl, soprano; 8-10, Ralph Williams and his Rainbo Gardens orchestra; G. B. Roe, baritone; Maude Couse, lyrle soprano; Lavina Price, planist; Sheppard Levine, tenor; Helen Reed, accompanist; Gertrude Quentin, soprano; Frederick Mueller, German tenor; Kathryn Diepenbrodk, planist and accompanist; Fontella trio.

WSAI, Cincinnati, Ohio (325.9), 2:45-4:30 p. m., address, Capt. Donald B. MacMillan, WAAF; 7:45, chime concert, Robert Badgley; 8. sermonette, Rev. J. P. Love; 8:15-9:15, WEAF program, Mme. Louise Homer, famous contralto.

WSUI, lowa City, lowa (483.6), 9:15 p. m., Iowa City Welsh quartet.

Mountain Time Stations

KOA. Denver, Colo. (322.4), 10:35 a. m., First Unitarian society; Mrs. Faye Roswell, organist; 7:45, First Unitarian society; Mrs. Faye Roswell, organist; 7:45, First Unitarian society; KUOM, Missoula, Mont. (244), 9:15 p. m., English Lutheran cholr; talk, Rev. Henry Kumnick.

Pacific Time Stations

KFWB, Hollywood, Callf. (252), 9-11, p. m., late news and Warner Brothers movle frolle; Charles Beauchamp, tenor; Babe Brown, ukelele; Frank Stever, baritone; Al Myer's Aeolians; Frances St. George, the jazz-

mania giri.
KGO, Oakland, Calif. (361), 11 a. m., Seventy-fifth
anniversary service, First Unitarian church; 3:30 p. m.,
KGO Little symphony orchestra; 8, First Unitarian

anniversary service, First Unitarian church; 3:39 p. m., KGO Little symphony orchestra; 8, First Unitarian church.

KGW. Pertland, Ore. (491.5), 10:25 a. m., First Prespoterian church.

KHJ. Les Angeles, Calif. (492.2), 6-7 p. m., Leighton's Arcade cafeteria orchestra, Jack Cronshaw, leader; 7-7:30, Arthur Blakely, organist; 8-10, de luxe program, arranged and presented by J. Howard Johnson, KNX, Hollywood, Calif. (336.9), 2-4 p. m., City of Los Angeles, Westlake park; 7-8, First Presbyterian church, Rev. Stowart P. MacLennan, pastor; 8-9, Ambassador hotel concert orchestra, Josef Rosenfeld, director; 9-10:30, program, Beverly Hills nurseries, Russian string quartet, Calmon Luboviski, concert violinist. KPO, San Franelseo, Calif. (428.3), 5-6 p. m., Marshall Giselman, organist; 6, Waldemar Lind and the States restaurant orchestra; 6:35, concert orchestra, Palace hotel; 8, Palace hotel concert orchestra, Palace hotel; 8, Palace hotel concert orchestra, Prisce Prof. Linsley; 11, church service; 7:45 p. m., church service; 9:30, late concert.

KTAB, 'Oakland, Calif. (215), 10 a. m., Bible lecture, Prof. Linsley; 11, church service; 7:45 p. m., church service; 9:30, late concert.

KTCL, Seattle, Wash. (305.9), 7:50-9:10 p. m., First Church of Christ, Scientist; 9:10-10:10, International Bible Students association.



Monday, October 19

Monday, silent night for: CNRA, CNRC, CNRE, CNRM, CNRO, CNRR, CNRV, CNRW, CNRT, KFDM, KFMQ, KFMX, KHJ, KLDS, KTCL, KYW, WBBM, WCBD, WEAO, WEBH, WEBJ, WENR, WFI, WGBS, WGES, WGN, WHAS, WIP, WKAQ, WLS, WMAQ, WMBB, WOC, WORD, WQJ, WRC, WREO.

WGES, WGN, WHAS, WIP, WKAG, WLS, WMAQ, WMBB, WOC, WORD, WQI, WRC, WREO.

Eastern Time Stations

CHIC. Toronto, Can. (336.9), 10 p. m., Queen City Novelty instrumental troupe.

CKNC, Teronto, Can. (356.9), 8 p. m., Charles E. Hodley and his orchestra; Sydney Walsh, tenor; Charles Shearer, barltone, Charles Shearer, Charles S

sonnel association; 9, A. & P. Gypsles; 11, Loew's Aldine theater.

WCAU, Philadelphia, Pa. (277.6), 8 p. m., "Music Appreciation," Maude Hanson-Pettit; 8:10, R. Langdon Stewart instrumental trio; 9, Amsterdam Girl; 9:10, song hits, Danny Dougherty; 9:30, popular songs, Freedman & Travaline; 9:45, James Loughrey; 10, Jaffe's Collegians.

WCTS, Worcester, Mass. (268), 8 p. m., concert program

WCTS, Worcester, Mass. (268), 8 p. m., concert program.
WCX, Detreit, Mich. (517), 6 p. m., dinner concert, Book-Cadillae hotel; 8, musical program.
WEAF, New York, N. Y. (491.5), 4-4:15 p. m., Loralne Osborne, contralio; Winfred T. Barr, accompanist; 4:15-4:30, Margaret Williams, reader; 4:30-4:45, Sylvia D. Lyons, pianist; 4:45-5, "Book Chat." W. Orton Tewson; 6-7, dinner music, Waldorf-Astoria; 7-7:15, Ernest Wendell Nichel, whistier: 7:15-8:30, program. Mark Strand theater; direction, Joseph Plunkett; 8:30-8:45, Vec Lawmiurst, planist; 8:45-9, Tower health talk; 9-10, music, A. and P. Gypsles; 10-10:30, "Your Hour"; 10:30-11:30, Ben Bernle and his orchestra.

orchestra.

WEE1, Boston, Mass. (476), 6:30 p. m., Big Brothers club; 7:15, musicale; 7:30, John E. Borhek, boy soprano; 7:45, Boston Chamber of Commerce organ recital; 8:30, J. Garfield Stone, tenor; 8:45, Tower health talk; 9, A. & P. Gypsies; 10, Marimba band

neauh taik; 9, A. & P. Gypsies; 10, Marimba band and orchestra.

WGBS, New York, N. Y. (315.6), 6-6:30 p. m., Uncle Geebee; 6:30-7, Premier Club orchestra; 7-7:15, "New Astrology," Belle Bart; 7:15-7:45, orchestra.

WGCP, Now York, N. Y. (315.6), 8-5:30 p. m., muslcal program: 8-11, muslcal program: 8-11, muslcal program: 8-10, muslcal program: 8-10, muslcal program: 1-1, muslcal program: 1-1,

Louise Homer, contralto of the Chicago Civic Opera company, is the guest, Octo-ber 18, of Atwater Kent on the WEAF chain.

pianists; literary appreciation series, William L. Widdemer.
WHAR, Atlantic City, N. J. (275), 7:30 p. m., stories for little folks, Mildred C. Hagan; 8, Seaside hotel

WHAR, Atlantic City, N. J. (275), 7:30 p. m., storles for little folks, Mildred C. Hagan; 8, Seaside hotel trio.

WHN, New York, N. Y. (361.2), 7-7:30 p. m., Marlboro State trio; 7:30-8, Swanee club orchestra; 8-8:05, talk, H. B. Shontz; 8:05-8:30, Roseland dance orchestra; 11-11:30, Marsh McCurdy, organist; 11:30-12, Silver Slipper revue and orchestra; 12-12:30 p. m., Ted Lewis and orchestra.

WIAR, Providence, R. I. (305.9), 8 p. m., Berry Spring time; 8:45, "Home Care of the Sick," Gertrude Harrop; 9, WEAF A, and P. Gypsies; 10, Kobert W. Powers Hudson-Essex orchestra.

WIR, Detroit, Mieh, (517), 7 p. m., studio orchestra, Jean Goldkette; 9, "Palge Six and Jewett Six."

WLIT, Philadelphia, Pa. (394.5), 7:30 p. m., Dream Daddy; 9, Stanley Hour of Music; 10, Arcadia cafe dance orchestra; Fay's Knickerbocker theater.

WMCA, New York, N. Y. (340.7), 6-6:30 p. m., Olcott Vall and his Hotel McAlpin string ensemble; 6:30-7:30-8, lullaby music; 8-8:30, Loulse Judson, soprano; Theodore Mattman, cellist; 9-10, lecture, Christian Science.

WNYC, New York, N. Y. (526), 7-7:10 p. m., market

Theodore Mattman, censs; 5-10. Account Science.

Science.

WNVC, New York, N. Y. (528), 7-7:10 p. m., market high spots; 7:10-7:30, Stony Brook orchestra; 7:30-7:35, police alarms; 7:35-8, Stony Brook orchestra; 8-8:30, German lessons, V. Harrison Berlitz; 9-9:10, piano soloist; 9:30-9:50, male quartet; 9:50-105, violinist; 10:10-10:30, Jecture, board of education; 10:35-11:30, Harold Stern's Hotel St. George orchestra.

Volitisty, 10:35-11:30, Harold Stem's Hotel St. George corchestra.

WOO. Philadelphia. Pa. (508.2), 8 p. m., Mark Strand theater; 8:30, Vee Lawmhurst, planist; 8:45, Walter H. Preston, baritone; 9, A. and P. Gypsles; 10, your hour; 10:30, Ben Bernie and his orchestra: 11, Hotel Ritz Carlton orchestra.

WOR, Newark, N. J. (405.2), 6:15-6:17 p. m., "Words O'tten Mispronounced;" 6:17-7:15, music, Hotel Shciton; 7:15-7:30, sports talk, Bill Wathey; 7:30-8, Club Ciro's orchestra; 8:30-9:30, Al Reid's hour; 9:30-9:45, talk, Edward H. Bierstadt; 11-11:30, Archle Slater's Palais D'Or orchestra.

WPG, Atlantic City, N. J. (299.8), 4:30 p. m., Chalfonte-Haddon hall afternoon tea music; 6:45, Arthur Scott Brook, organist; 7, Hotel Morton trio dinner music; 8, "World-Wide Excursions," Alfred James P. McClurc; 8:15, studio program; 9, Hotel Traymore concert orchestra; 10, studio program; 10:30, Silver Silpper.

McClure; 8:10, status postania (10:30, Sliver solipper, concert orchestra; 10, studio program; 10:30, Sliver slipper.

WRC. Washington, D. C. (468.5), 7 p. m., Shoreham hotel orchestra; 8, Wurlitzer musicale, WIZ; 9, musical program; 10, "Over the Seven Seas—Life Aboard Ship," WJZ; 10:30, W. Spencer Tupman and his Hotel Mayflower orchestra, WJZ.

WTAM, Cleveland, Ohio (339.4), 8-11 p. m., excerpts from opera, "Pirates of Penzance"; favorite artists; Willard symphony; Walter Logan, director.

WILC, Hartford, Conn. (475.6), 6:30 p. m., Emil Heimberger's Hotel Bond trio; 7:45, talk; 8, dinner music.

WJ, Detroit, Mich. (352.7), 3 p. m., Detroit News orchestra; 6, dinner concert; 8, Detroit News orchestra, A. & P. Gypsies.

A. & P. Gypsies.

Central Time Stations

KFAB, Lincoln, Nebr. (340.7), 5:30-6:30 p. m., Buick
Little symphony; Belshaw's orchestra; 8:30-10:30.

American Legion program; Belshaw's orchestra; Mart
Grauenhorst, banjoist.

KFNF, Shenandeah, lowa (266), 7 p. m., Smith-Beld-

Lopez Hotel Statler dance orchestra, Harold Gleser, director.

WGY, Schnectady, N. Y. (379.5), 6:30 p. m., Hotel Van Curler orchestra; 7:30, Mary Zoller, xylophonist; Erlau Wilcox, pianist; Henry Gratton, James Willis, KMA, Shenandoah, lowa (252), 9-11 p. m., chimes, Willis, KMA, Shenandoah, MA, Chimes, Willis, KMA, Shenandoah, MA, Chimes, Willis, Wi

llam Howie; Bobble Riddle, 6 year old singer, clog dancer; program, Mrs. Gertrude May.

KPRC. Houston, Tex. (296.9), 7.30 p. m., Record's Ramblers dance orchestra; 8.15, Seger Ellis, Victor record artist; 8.30, Kiwanis glee club; 9.15, Humble Oil and Refining company band; 10, Frank Tilton, pianist.

KSD, St. Louis, Mo. (545.1), 9 p. m., Negro music, St. Louis branch.

KSD, St. Louis, mu. (940.17), 5 p. in., Ark. (374.8), 9-9:45 p. m., concert, New Arlington orchestra; violin solos, Lon Chassy; string quartet; 9:45-10, organ solos, Lawson Reid; 10-11, Rainbow Garden 555 frolic.

WAMD, Minneapolis, Minn. (243.8), 6 p. m., George Osborn's orchestra; 7, "A Trip Around the World, Sweden," Loreta Reitz Lunde, soprano; John Nyborg, tenor; Lawrence Berg, baritone; 10:30, Radisson Rondevoo.

Sweden," Loreta Reitz Lunde, soprano: John Aydolfs, tenor; Lawrence Berg, baritone; 10:30, Radisson Rondevoo.

WBBM, Chieago, Ill. (226), 6-7 p. m., Stewart-Warner studio, Hattle Bell Shields, cellist; Doris Ryan, pianist; Lew Russell: Montmartre orchestra.

WCCO, Minneagolis-S. Paul, Minn. (416.4), 6:45, p. m., F. & R. Family 7:39, Minneagolis Community fund talk; 7:45, poultry raising, lesson 1; 8:15, Hamiln Hunt, organist.

WDAF, Kansas City, Mo. (365.6), 6-7 p. m., piano tuning in number on the Duo-Art; dialect readings, C. M. Ragor; Tell-Me-a-Story lady; Trianon ensemble; 8-9:30, Ivanhoe band, Walter French, director; Ivanhoe glee club; address, Herbert Hoover; 11:45-1 a. m., Merry Old Chief, Carl Norherg's Plantation players; Ted Meyn, organist; Eddie Kuhn's Kansas City Athletic club orchestra.

WFAA, Dallas, Tex. (475.9), 6:30-7:30 p. m., Artic Collins and his orchestra; 8:30-9:30, Sears-Roebuck agricultural foundation program.

WHAD, Wilwaukee, Wis. (278), 6-7 p. m., Arthur Richter, organist; 8:10, Marquette university studio program.

WHB, Kansas City, Mo. (365.6), 7-8 p. m., popular

Richter, organist; 8-10, Marquette university studio program.

WHB, Kansas City, Me. (365.6), 7-8 p. m., popular music, Sweeney orchestra.

WHO, Des Moines, Iowa (526), 7:30-8 p. m., program, advanced students of the Drake Conservatory of Music; 8-9, faculty program, Drake Conservatory; 11-12, Corn Sugar orchestra,

WKRC, Cincinnati, Ohio (422.3), 6 p. m., Alvin Rochr's Hotel Alms orchestra; 10, Freda Sanker's orchestra; 11, program, Robert E. Bentley Post, American Legion; 12, theaterical stars, Wesley Helvey's Troubadours.

WLW, Cincinnati, Ohio (422.3), 12.15 p. m., noon-day service, Rev. George H. Kase; 4, student recital, classes of Lee Stoffregen; 7, dinner hour concert, Hotel Gibson orchestra, Robert Visconti, director; 8,

Senora Lolita V. de Cintron of Lima, Peru, brings Latin romance with her when she sings at WTIC, Hartford. She wears her native dress and sings Spanish songs.

concert, Crosley Salon orchestra; 8:30, 30-minute program advanced artists; Cincinnati Conservatory of Music; tenor, Howard Hafford,
WMC, Memphis, Tenn. (499.7), 8:30 p. m., Britling's cafeteria orchestra.

WOAW, Omaha, Nebr. (526), 6 p. m., Phyllis Griswold, organist; 6:30, popular song period, Lillian Madsen, director; 7, Randall's Royal Fontenelle orchestra; 9, De Luxe program.

De Luxe program: August Fonteneile orchestra; 9, De Luxe program; Wok, Chicago, III. (217.3), 6-1 p. m., Jimmy Watson, baritone; Ada Tilley, soprano; Paul Small, tenor; Jimmy Cairns, tenor; Lew Butler, baritone; Herman Sinaiko, violinist; Harlan Merrill, musical saw soloist; Harry Sosnik, pianist; Sandy Meck, tenor; Harriet Lee, contraito.

WOS, Jefferson City, Mo. (440.9), 8 p. m., "Europe As 1 Saw It," George W. Reavis; Christian college music.

WSAI, Cincinnati, Ohio (325.9), 8 p. m., A. and P. Gypsles, WEAF; 9, Iliah Clark, soprano; Richard Gray, baritone; Wilhelmina Bixler, pianist; Truman Boardman, violin.

WSUI, Iowa City, Iowa (483.6), 7:30 n. m. college of

WSUI, lowa City, lowa (483.6), 7:30 p. m., colleg the air, Mahan, Mott, Shimek, Reuter; 9, muslc.

Mountain Time Stations
KFAU, Boise, Idaho (278), 8 p. m., program, Payette
chamber of commerce
KFWA, Ogden, Utah (261), 9-10 p. m., music, Fashion

KFWA, Ogden, Utan (2017, 9-10 p. 10., musco, accession, shop.

KOA, Denver, Cole. (322.4), 6:30 p. m., dinner concert, Herbert White and his Silver State orchestra; 8, scientific football, Herbert White and his Silver State orchestra; 8:10, program, Robert Schumann, Franza Schubert; biographical sketches, May West Owen; Mrs. Burton Clamage, pianist; Kathleen Walker, incompanist; Mrs. Kate R. Walker, accompanist; Mrs. M. J. Krohn, contraito; Clarence C. Moore, baritone; Betty Gundler and member of KOA orchestra; Mrs. Henry Harrison, reader.

(Continued on page 10)

HOOVER TO SPEAK SUNDAY AT WDAF



Alice Buresh, dramatic reader at WBCN, Chicago. She not long ago won a gold medal in open competition for the best interpretations.

Monday, October 19

(Continued from page 9)

KOB. State College. N. M. (348.6), 7:30-8:30 p. m., "This Year's Cattle Feeding at Tuoumcari," Mr. Lantow; "Results of 1925 Club Contest," Mr. Elser; "Forest Fire Facts," J. C. Kircher, KUOM, Missoula, Mont. (244), 8 p. m., Missoula City band, Charles Lauvenson, director.

Pacific Time Stations

Pacific Time Stations

KFOA, Seattle, Wash. (454.3), 6:45-8:15 p. m., Sherman, Clay and company program; 8:30-10, Times studio program.

KFPG, Hollywood, Calif. (238), 5-6 p. m., home hour. Georgia Simmons with the naborhood children; 8-9, Maggio O'Shea, the blarney girl and her vaudeville entertainers; 9-10, Hollywood Athletic club orchestra. (KFWB, Hollywood, Calif. (232), 6-7 p. m., children's hour, big brother of KFWB; 7-7:35, question and answer period, K. G. Ormiston, technical editor; J. Stanley Fullright, tenor; 7:35-8, microphone brevities; 8-9, program, Star Motor Car company nillion dollar orchestra; Sol Hoopl's junior Hawaiian trio; Ashloy sisters, vocal duets; Dave Chudnow, planist; 9-11, program, Globe Ice Cream company and Weber Baking company, an Eskino Review; Bob Mayo's orchestra; Rogers Hawaiian trio; Hollywood string trio; Frank Stever, bacitone.

KGO, Oakland, Calif. (361), 3-4 p. m., program, Sherman, Clay and company studio; 6-7, dinner concert, Sherman, Clay and company; 8, "Physical Culture for the Family," Hugh Barrett Dobbs; "Talks on Constructive Selling," B. J. Williams; "Chats About New Books," Joseph Henry Jackson; "It Pays to Analyse Character," Roscoe D. Wyatt; "Preliminary Course in Commercial Law," M. W. Dobrzensky; Arion trio.

KGW, Portland, Ore. (441.5), 8-9 p. m., concert; 9-10, Hudson and Essex orchestra.

to Analyze Character," Roscoe D. Wyatt; 'Treimmary Course in Commercial Law," M. W. Dobrzensky; Arion trio.

KGW, Portland, Ore. (491.5), 8-9 p. m., concert; 9-10, Hudson and Essex orchestra.

KNX, Hollywood, Calif. (336.9), 5:30-6:15 p. m., Wurlitzer pipe organ studio, Town Tattler; 6:15, travel talk, W. F. Alder; 6:30-7, Atwater Kent Radlo orchestra, Paul Finstein, leader; 7-7:30, Mutual Motors mirth contest; 7:30-8, program, Columbia Outfitting company; 8-9, program, L. W. Stockwell company; 9-10, program, Listenwalter & Gough, Ellittin, Louise Sullivan, soprano, Rola quartet; 10-11, Goodrich Silvettown Cord dance orchestra, Lilyan May Challenger, contralto; 11-12, Ray West's Cocoanut Grovo dance orchestra from Ambassador hotel.

KPO, San Francisco, Calif. (428.3), 6:40-7 p. m., Waldenar Lind and the States restaurant orchestra; 7-7:30, Rudy Seiger's Fairmont hotel orchestra; 1-10, program, Uda Waldrop, organist; 8:45. "How to Gain Weight," Wilcy Winsor; 10-11, Waldemar Lind and the States restaurant orchestra.

KTAB, Oakland, Calif. (215), 9 a. m., prayer service, Rev. Spaunding: 4 p. m. women's club notes; 8, program, Western States Life Insurance company.

KWSC, Pullman, Wash. (348.6), 7:30-9 p. m., songs, Vay Kerns; Evelyn Sparlin, violinist; "Potato Seed Production West of the Cascades," George L. Zundel.

Tuesday, October 20

Tuesday, silent night for: CFCA, CHIC, CHNC, CNRC, CNRE, CNRM, CNRO, CNRW, CNRT, KFAU, KFWA, KOA, KOB, KUOM, KWSC, WAHG, WAMD, WBBR, WEAO, WGCP, WHAD, WKAQ, WLIT, WOR, WOS, WSMB, WSUI, WTAM.

Eastern Time Stations

CNRA, Moncton, Can. (291), 7 p. m., juvenile program, Prof. C. M., Wright: 8:45, 84, Mary's hand; CNRA orchestra: Mrs. J. Clyde Stevens.

KDKA, Pittsburgh, Pa. (309.1), 6:35 p. m., dinner concert; 7:45, "The Nature of X-Rays," A. G. Worthing; 8:30, world cruise by Radio, Ross H. Skinner: KDKA Little symphony orchestra; 9, KDKA Little symphony orchestra; Margaret Libeterman, planist; 11:10, midnight concert; 11:35, concert, Grand theater.

theater.

WBZ. Springfield, Mass. (333.1), 6:30 p. m., Leo Relsman's Hotel Lenox ensemble; 7:05, musical program and talk, American Coach company, Inc.; 8:15, Charles R. Hector's orchestra; 9:30, Mary Zoller, xylophonist: 9:45, to be announced; 10, Mary Zoller.

WCAE. Pittsburgh, Pa. (461.3), 6:30 p. m., dinner concert, William Penn hotel; 8, program from New York; 8:30, Gold Dust Twins; 9, Eveready hour; 10, grand opera.

grand opera.

WGAU, Philadelphia, Pa. (277.6), 7:30 p. m., Mildred Matthews, soprano; J. R. Stewart, tenor; Virginia Kieln, accompanist; S. talk, Home Building and Loan association; 8:10, Philadelphia Radio minstrels, Harry J. Hawden, director; 9, What Does Psychology Teach the Practical Many' Rev. John W. Stockwell; 9:15, Harry Tippins, boy soprano; Frances McLoughlit, rianist; 9:30, Harry Link and Willie Horowitz; 10:30, Billy Hayes and his Cuttay Tea Garden orchestra.

WCTS Worcester Mass. (289), 8:20, p. Rec. Com.

WCTS. Worcester, Mass. (268), 8-8:30 p. m., Ross Gorman and his Earl Carroll Vanitics orchestra; 8:39-9, vocal selection, "Long and Broad"; 9-10, Eveready hour; 10-11, WEAF Grand Opera company.

WCX, Detroit, Mich. (517), 6 p. m., dinner concert, Book-Cadillac hotel; 10, The Red Apple club. WEAF, New York, N. Y. (491.5), 4-4:15 p. m., Grace Northrup, soprano; 4:15-4:30, Hazel Gruppe, planist; 4:30-5, somen's program; 6-7, dinner music, Walderf-Astoria; 7-7:10, William J. Fagan, tenor; 7:10-7:30, lecture, Columbia university; 7:30-8, Davis saxophone octet; 8-8:10, talk, Dudley F. Fowler; 8:10-8:30, Russ Gorman and his Earl Carroll Vanities orchestra; 8:30-9, Gold Dust twins; 9-10, "Everendy Hour;" 10-11, "11 Trovatore," WEAF Grand Opera company; 11-12, Meyer Davis' Lido Venice orchestra. WEAF, Clevoland, Ohio (389.4), 7 p. m., Vinneut Percy, organist; 8, Lesco entertainers; 9, State theater vaudewille; 10, studio program.
WEBI, New York, N. Y. (272.6), 7-7:30 p. m., Red Lion orchestra; 7:45-8, Sara V. Turito, soprano; 8:15-8:30, Sadie Goldfab, planist; 8:30-9, Royal Amphilons, direction, W. C. Inlefeld.
WEEI, Boston, Mass. (478), 6:30 p. m., Big Brother club; 7:15, talk, Malcolm E. Nichols; 7:30, Madelyn Verlyn, soloist; 8, Ross Gorman and his Earl Carroll theater orchestra; Gold Dust Twins; Evercedy hour; WEAF Grand Opera company; 11, talk, Malcolm E. Nichols.

Nichols.

WGBS. New York, N. Y. (315.6), 6-6:30 p. m., Uncle Gedbee; 6:30-6:50, Interview, Noel Coward; 6:50-7, dance lessons, Arthur Murray; 7-8, Arrowhead Inn concert orchestra; 8-9, Y. M. H. A. vocational forum; 10:30-11:30, Arrowhead Inn dance orchestra; 11:30-12, Larry Hart; Richard Rodgers; Herbert Fields.

WGCP. New York, N. Y. (315.6), 3-5:30 p. m., musical unogram.

Larry Hart; Richard Rodgers; Herbert Fields.

WGCP. New York, N. Y. (315.6), 3-5:30 p. m., musical program.

WGR, Buffalo, N. Y. (319), 2:30-4:30 p. m., Buffalo Radio Show program, featuring the Erlenhach orchestra; 6:30-7:30, Vincent Lopez Hotel Statler dance orchestra; Harold Gleser, director; 8-11, jointly with WEAF, including Gold Dust twins, Eveready Hour and grand opera program.

WGY. Schenectady, N. Y. (379.5), 6:30 p. m., dinner program, Hotel Van Curler orchestra; 7:30, "Accurate Mensurements of Electrons," Prof. Peter I. Wold; 7:50, program by Poughkeepsie, Charles Gilbert Spross, planist; Ivan Huff, soprano; Clara Hey, mezzo-soprano; Richard de Sylva, violinist; Hubert M. Spross, whistier; Dr. Henry Noble MacCracken, speaker; 10, travel talk, "Cruising Life Aboard Ship;" 10:30, spencer Tupman's Hotel Mayflower orchestra, WRC.

WHAR, Atlantic City, N. J. (275), 7:30 p. m., book review, Mrs. James Lord; 8, Seaside hotel trio; 11:15, Strand theater organ recital.

WHN, New York, N. Y. (361.2), 2:15-8:15 p. m., overture and vaudeville, Loews's State theater; 3:15-4:30, Lexington theater orchestra; 4:30-5, Uncle Robert and his pals; 7-7:30, Iceland orchestra; 7:30-8, Will Oakland's Chatheau Shanley; 10-1:130, Caravan elub orchestra; 11:30-12, Rodeo club orchestra; 12-12:30 a. m., Club Kentucky orchestra and revue.

WJAR, Previdence, R. I. (305.9), 7:30 p. m., musical

Farmer Dinner Concerts

Daily Except Sunday

KFNF, 12:15-1:35 (central time).

Radio Farm School WMAQ, 12:45 (central time); 12:10 on Friday. WOC, 12:30-12:40 (central time).

KMA, 11:30-12:30 (central time).

WCCO, 7:45 (central time) Monday and Friday.

WLS, 12 (central time).

WBBM, Chicage, III. (226), 6-10 p. m., Samovar orchestra; Fair and Warmer duo; Blue Deuces; George Marbach, tenor; 10-12, Stewart-Warner studio, Montarbach, tenor; 10-12, Stewart-Warner studio, Montarbach, tenor; Bert Davis, clown of the air; Bernard Gamson, violinist; Corrine Jordan and Vera Gilbert; Devon Comedy Four; Honky Tonk Gloom chasers; Devon Comedy Four; Honky Tonk Gloom chasers; Joseph Raieff, pianist; Leona Hayes, harpist.

WCBD, Zion, III. (344.6), S. D. m., cornet quartet; Messrs. Klowann and Studebaker, clarinet duettists; flute, viola and harp trios; Chester Bagg, baritone; allrium Hollingshead, flutist; Mrs. Carl Huth, harpist; Estber Rendall, soprano; Carey sisters, vocal duct; Lillian Detienne, reader; Grace Wedekind and Ruth Jones, piano duettists.

WCCO, Minneapolis-St. Paul; Minn. (416.4), 6 p. m., Dick Long's Nankin cafe orchestra; 7:30, program from WEAF, Gold Dust Twins, Eveready hour; 9-10, grand opera.

Diek Long's Nankin cafe orchestra; 7:30, program from WEAF, Gold Dust Twins, Eveready hour; 9-10, grand opera.

**DDAF, Kansas City, Mo. (365.6), 6-7 p. m., address, Tell-Me-a-Story lady; Trianon ensemble; 11:45-1 a. m., Merry Old Chief, Plantation players; Earl Coleman's orchestra; Eddie Kuhn's Kansas City Athletic club orchestra.

**WEBH, Chicago, III. (370.2), 7-8 p. m., Orlole orchestra; Lydia Lochner, contratlo; Uptown theater; 9-10, Orlole orchestra; Sandy Meek, tenor; Harry Sosnick, accompanist; Jack Penewell, twin gultarist, songs; Paul Small.

**WENR, Chicago, III. (266), 6-7 p. m., Rauland lyric trlo; 8-10, All-American Pioneers; Loretta Giles, popular songster; Philip Millville, baritone; Burt Davis, the Clown of the Air.

**WFAA, Dallas, Texas (475.9), 6:30-7:30 p. m., Baker hotel orchestra; 8:30-9:30, Virginia Wiley, pianist; Jack Andrews, marimbaphonist; 11-12, Majestic theater players; 12-1 a. m., Palace theater, Megs, Oak Park, III. (250), 7-9 p. m., Frank Ernest, pianist; Christine Nisted, violinist; 11-2 a. m., Novelly Broadcasters' orchestra; Phil Wilcox, Clarence Purrish, Pat Ward, Harber trlo, Sandy McTavish, Coyne Electrical school serenaders, Marle Wright, Coyne Electrical school serenaders, Marle Wright, WGN, Chicago, III. (370.2), 6:39-7:30 p. m., Drake Concert ensemble, Blackstone dance orchestras.

**WHAD, Milwalkee, Wis. (278), 6-7 p. m., Carl Zoeller's Melodists.

**WHAD, Milwalkee, Wis. (278), 6-7-7:30 p. m., Carl Zoeller's Melodists.

**WHAD, Milwalkee, Wis. (278), 6-7-7:30 p. m., Carl Coller's Melodists.

**WHAD, Milwalkee, Wis. (278), 6-7-7:30 p. m., Carl Coller's Melodists.

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**WHAD, Milwalkee, Wis. (265, 7-7:30-8 p. m., Raleigh program; 9-10, Submarine Hall dance muslc, popular vocal numbers

vocal numbers:

WHO, Des Moines, Iowa (526), 7:30-8 p. m., Raleigh quintet; 8-9, Bankers' Life trio; 11-12, Bankers' Life Little symphonic orchestra.

WKRC, Cincinnati, Ohio (422.3), 10 p. m., George Weber, tenor; Maxim Eastyluck, Russlan baritone;

KFPG, Hellywood, Calif. (238), 9:30-10 p. m., Sylvia Szymanski, the blind cook: 5-6, home hour with Georgia Simmons and the naborhood children; 8-9, Harold Hynes, the wandering Jew, and his minstrels: 9-10, Ruth Leonardi's golden melody hour.

KFWB, Hollywood, Calif. (25, 6-7 p. m., children's hour Big Brother of KFWB; 7, Howard Beall, talk on golf; 7:15, Dr. I. W. Schuster, on chiropractic methods; 7:30, fashion talk, Winona of Hollywood Life; 7:45, microphone brevities; 8-9, Joe Martin's Pamous Studie Six dance orchestra, Beatrice Igoe, soprano; 9-10, program, H. L. Crockett Hudson-Essex dealer, featuring H. L. Crockett, baritone; Way Watts and ukulele, Paul Jones, Hawalian guitarist; Bitte trio; 10-11, Warner brothers frolic, direction Norman Manning.

and ukulele, Paul Jones, Hawaiian guitarist; Elite trlo; 19-11, Warner brothers frolic, direction Norman Manning. (GO, Oakland, Calif. (361), 6-7 p. m., dinner concert, Sherman, Clay and company; 8, "Radio Breezes," KCB; 8:10, Theedore Strong, organist; Ellen Corlett, soprano; George Kruger, pianist, Joan Ray, contralto; Polytechnic high school orchestra; James Gerard, tenor. RGW, Portland, Ore. (491:5), 7:45-8 p. m., Union Savings and Loan association; 8-9, "Sound Investments," George H. Burr; style talk, Sage of Yambill county; Rose City trlo; 9-10, General Cord orchestra; 10-12, Indian Grill.

KHJ, Los Angeles, Calif. (405.2), 5:30-6:30 p. m., Leighnon's Arcade cafeteria orchestra, Jack Cronshaw, leader; 6:30-7:30, history story, Prof., Walter Sylvester Hettzog, weekly visit of Queen Titania and Sandman from Fairyland, Chas. Leslie HIII, readings; Louis F. Klein, auto-harp and harmonica; 7:30, talk on dogs, H. Robertson; 8-10, program, Universal Craftsmen, Council of Engineers; 10-11, Art Hickman's Biltmore total dance orchestra, Brank Ellis, leader.

KMA, Hollywood, Calif. (336.9), 5:30-6:15 p. m., Wurltzer pipe organ studio, Town Tattler; 6:15, travel talk, W. F. Alder; 6:30-7, Atwater Kent Radio orchestra, Paul Finstein, leader; 7-8. Don Clark and his La-Monica balltoun dance orchestra; 8-10, KNX feature program; 10-12, movie night at the Ambassador, Ray Wests Coccount Grove dance orchestra; 8-10, KNX feature program; 10-12, movie night at the Ambassador, Ray Wests Coccount Grove dance orchestra; 8-10, KNX feature program; 10-12, movie night at the Ambassador, Ray Rod, San Francisco, Calif. (428.3), 6:40 p. m., Waldemar Lind and the States Restaurant orchestra; 7-7.30, Rudy Seiger's Fairmont hotel orchestra; 8-3, 30th U. S. Infantry band; 9-10, Mona Motor Oil trlo; 10-11, Jack Coakley's Cabirlans.

Wednesday, October 21

Eastern Time Stations

Eastern Time Stations

CNRM. Montreal, Can. (411), 8:30 p. m., Markowski trio; Lucien Labelle, cellist; Oscar O'Brien.

CNRO, Ottawa, Can. (435), 8 p. m., Chateau Laurier concert orchestra; 9, French-Canadian artists, Rosalre Barrette. director; Chateau Laurier dance orchestra.

KDKA, Pittsburgh, Pa. (309.1), 6:15 p. m., dinner concert; 7:45, "Causes of Crime," W. T. Root; 9, Dry Sitz hour of music.

PWX, Havana, Cuba (400), 8:30-11 p. m., concert, Malecon band, Lieut. Armando Romen, band leader. WAHG, Richmond Hill, N. Y. (315.6), 7:30-7:45 p. m., John von Aspe, tenor; 7:45-8, Emery Deutsch, violinist; 8-8:15, Regina Diamond, soprano; 8:15-8-80, Emery Deutsch; 8:30-8:45, John von Aspe; 8:45-9, Regina and weather report; 10-10:15, Herman E. Frisher, reader; 10:15-11:15, Joe Zimmerman and His orchestra. reader: 10:15-11:15, Joe Zimmerman and His orchestra. (Springfield, Mass. (333.1), 6:30 p. m., dinner concert, Hotel Kimball trio; 7:95, W. Edward Boyle's Copley Flaza orchestra; 7:30, Radio nature league, Thornton W. Burgess; 8, Imperial male quartet; 8:45, James B. Nesworthy, harmonica soloist.

WCAE, Pittsburgh, Pa. (461.3), 6:30 p. m., dinner concert, William Pann hela! 7:30 "Radio Rus. Unilme Girt.

James B. Nesworthy, harmonica soloist.

WCAE. Pittsburgh, Pa. (461.3), 6:30 p. m., dinner concert, William Penn hotel; 7:30, The Sunshine Girt; 9, address, Pittsburgh Personnel association; 8:30, Peoley period; 9, Watermar's hour.

WCAU, Philadelphia, Pa. (277.6), 7:30 p. m., Lew Chapman and his Hotel Pennsylvania orchestra; 8, stage dancing lesson, Al White; 8:15, Richard Finley, tenor; Kathryn O'Boyle, pianlst; 9, Mr. Hill's instrumental trlo; 9:30, health talk, pr. Harry Lowenburg; 9:40, songs, Carl Zoehrn, Archie Fletcher; Micky Marr, planlst; 10:10, Morris Wage; 10:30, Melody Masters.

WCTS, Worcester, Mass. (263), 8 p. m., concert program.

WCIS, Worcester, mass. (2007), which work fram.

WCX. Detroit, Mich. (517), 6 p. m., dinner concert, Book-Cadillac hotel; 8, musical program.

WEAF, New York, N. Y. (491.5), 4-4.45 p. m., Ray Nichols orchestra; 4-35-5, talk, Paul V. Kellogg; 6-7, dinner music, Waldorf-Astoria; 7-7:30, services, United Synagogue of America; 7:30-8, concert, United States Army band; 8-8:30, "Huyler's Bon Bon Buddies'; 8:30-9, Paoley Period; 9-10, "Waternan's Points of Progress—Napoleon'; 10-11, Ipana Troubadours; 11-12, Ben Bernle and his orchestra.

WFAR Cleveland, Ohio (389.4), 7 p. m., Hotel Cleve-

WEAR, Cleveland, Ohio (389.4), 7 p. m., Hotel Cleve-

WEBJ, New York, N. Y. (272.6), 8-8:30 p. m., Aywon Comedy four; 9:15-0:30, Beatrice McCue, soprano; 9:30-10:30, Busoni's Neopolitan orchestra.

WEI, Boston. Mass. (476), 7:15 p. m., talk, Malcolm Nichols; 7:30, C. B. Collins, tenor; 7:45, Mary Zoller, xylophonist; 8, Huyler's Bon Buddles, New York; 8:30, General Electric; 9, WEAF; 11, talk, Malcolm E. Nichols.

talk, Malcolm P. Arichols, WGBS, New York, N. Y. (315.6), 6-6:30 p. m., Uncle Geebee; 6:30-7, Vincent Sorey's orchestra; 7-7:15, "Movie Sidelights," Norbert Lusk; 7:15-7:45, or-

WGCP, New York, N. Y. (315.6), 3-5:30 p. m., mu-slcal program; 8-11, musical program.

hout, pianist, made her Radio debut this year in a recital October 15 at WGY, Schenectady. Her appearance was so well applauded she has been scheduled for another cert to con-



WGR, Buffalo, N. Y. (319), 2:30-4:30 and 8-9 p. m., Buffalo Radio show program, featuring the Erlenbach orchestra; 6:30-7:30, two piano recital, Gospel Melodists; 9-11, iointly with WEAF, including Waterman's Points of Progress, "Napoleon." and the Inna Troubadours: 11-1 a. u., Vincent Lopez Hotol Statler dance orchestra, Harold Gieser, director: WGY, Schenectady, N. Y. (379,5), 6:34, Albany Strand, theater orchestra: Floyd H. Walter, organist; 7-45, cleertic night by Radio, WIJZ, WBAL, WGY; S. address, Gerard Swope, president, General Selectric company; 8:15, musical selections; 8:30, address, Herbert Hoover; 8:45, address, William N. Jardine; 9, musical bumbers; 9:30, WGY orchestra. (Continued on page 11)

(Continued on page 11)

Central Time Stations

Central Time Stations

KFAB, Lincoln, Nebr. (340.7), 5:30-6:30 p. m., Buick
Little symphony; Belshaw's orenestra; 8:30-10:30, University of Nebraska musical program.

KFMX, Northfield, Minn. (337), 9:30-10 p. m., Frederlek Locke Lawrence, pianlst.

KFNF, Shenandoah, lowa (266), 7 p. m., H. S. Symphony orchestra; Stephen LeMar, director.

KFVE, University City, Mo. (240), 10 p. m., concert, popular music, Brunswick-Balke-Collender company, Orchestra Romalno.

KLDS, Independence, Mo. (441), 8 p. in., Mrs. I. A. Smith, soprano; Thomas Holswerth, reader; Thelma Steele, pitanlst.

KMA, Shenandoah, lowa (252), 8-7 p. in., May Flower orchestra; June and Jim Taylor, Bobbie Ross; flower talk, Lina Ferguson; 9-11, May's Mandolin musicals.

Paramount Five; 9:30, Frank Tilton, pianist; 10, Earle J. Shay, tenor; J. Harry Kobusch, pianist. Dr KSD, St. Louis, Mo. (545.1), 6:45 p. m., Abergh's con-

Market Reports and Dairy Quotations Central Time (Daily Except Sunday)

KTHS, 12:30-1; KYW, 11, 6:02; WCCO, 9:45, 10:30, 11:30, 1:30, 3; WDAF, 5:50; WFAA, 11:30-12, 12:30-1, 1:30-2, 2:30-3; WHAD, 11, 5:50-6; WHAS, 4:50; WHAB, 8:25, 9:25, 10:25, 11:20, 11:56, 12:10, 1:25, 3; WMC, 9:45, 1:30, 8:30, except Wednesday; WOAW, 8:15, 10:30, 12:30, 1:45, 4; WOC, 2-2:10.

Eastern Time (Daily Ex. Sunday) KDKA, 9:45, 12, 3:20, 12, 7:10; WCAE, 4:30; WCTS, 11:15; WCX, 2; WEAR, 11:30, 4:30.

Index to Farmers' Programs

program, Janet Armour, director; 8:30, Gold Dust twins; 9, Eveready hour.

WJR, Detroit, Mich. (5/7), 7 p. m., studio orchestra, Jean Goldkette; 9, Jean Goldkette; 8 serenaders.

WLIT, Philadelphia, Pa. (394.5), 4:30 p. m., G. Logan Fitts, tenor; Lydia Pusey Wise, contraile, Ada Gillbee, pianist and accompanist; 7:30, Dream Daddy.

WLWL, New York, N. Y. (288.3), 8 p. m., question box, Rev. James Gillis; 2, Catholic study club; vocal and instrumental numbers.

WMCA, New York, N. Y. (340.7), 7-8 p. m., Jack Wilbur's personalities; 8:30-9, Sheppard-Knapp musicale, direction Madame Martha Braarud; 11-12, Ernie Golden and his Hotel McAlpin orchestra.

WNYC, New York, N. Y. (526), 7-7:10 p. m., market high spots; 7:10-7:30, the Canadians; 7:30-7:35, police alarms; 7:35-8, the Canadians; 8-8:15, baseball talk, John B. Foster; 8:15-9, song recitals; 9-9:30, instrumental trio; 9:30-10, musical program; 10:10-10:30, lecture, Board of Education.

WOO, Philadelphia, Pa. (508.2), 7:30 p. m., Davis Saxophone octet.

WOR, Nowark, N. J. (405.2), 6:15-6:17 p. m., "Words

WOO. Philadelphia. Pa. (508.2), 7:30 p. m., Davis Saxophone octet.
WOR. Nowark, N. J. (408.2), 6:15-6:17 p. m., "Words Often Mispronounced"; 6:17-6:45, Man in Moon; 7-7:30, music, Hotel Shelton. VPG, Atlantic City, N. J. (29.8), 6:45 p. m., Arthur Scott Brook, organist; 7. Hotel Morton trio dinner music; 8. Ethel Rattay Fowler's fashion flashes; 8:15, Ceelle Steiner, violinist; Margaret Irwin, planist; Scelle Steiner, violinist; Margaret Irwin, planist; Ocelle Steiner, violinist; Margaret Irwin, planist; Davis Margaret Irwin, planist; Ocelle Steiner, Violinist; Margaret Irwin, planist; Davis Margaret Irwin, planist; Davis Margaret Irwin, planist; Davis Margaret, Property Margaret, Property Margaret, Property Margaret, Property Margaret, One Conn. (478.9), 6:30 p. m., Hub Restaurant trio; 7. Thomas McCray; 7:20, dinner music; 8, instrumental music; orchestra; Allee Evans Wagner, contraito; 9:30, organ recital.
WWJ, Detroit, Mich. (352.7), 6 p. m., dinner concert; 8, concert from WEAF.

sicians.

KPRC, Houston, Texas (269.9), 7:30 p. m., Billie Mack

cert ensemble.

KTHS, Hot Springs National Park, Ark. (374.8), 99-45 n. m. symphonic jazz concert, New Arlington p. m., symphonic jazz concert, New Arlington -Davis orchestra; 9:45-10, Lawson Reid, or: 10-10:15, novelties, Meyer-Davis artists; 10:15-dance numbers.

KYM, Chicago, III. (535.4), 6:35-7 p. m., Walter Willson's bedtline stary: 7-7:30. Congress hotel dlimer concert; 8-8:20, unusleal program; 8:20-8:45, "Inexpensive Pork Dishes," Inex Willson, address: 8:45-9:20, musical program; 10-11:30, evening at home program; Applesance club, Ransum Sherman; Loos hothers, Art Linick, Lee Sins, Bobbie Brown and others.

George Egbers, tenor; Carolyn Schlosser, reader; Tommy Reynolds, Irene Downing.

WLS, Chicago, III. (344.6), 6:30 p. m., Ralph Emerson, organist; 7, Iuliaby time; 7:20, WLS trio present "A Trip to Ellis Island," Rex Maupin, director.

WLW, Cincinnati, Ohio (422.3), 12:15 p. m., Petrinella Trimbur, organist; 4, French lessons, Madame Ida Trimburdis; 6:30, twenty minute program artists, Arnold Frank Schroeder studio; 8, The Famous Lyric mate quartet; 8:30, Bob and Jim, the Crosley Hello Boys, in musical handshakes: 9, The Formica concert orchestra, Wm. Stoess, director.

WMAQ, Chicago, III. (447.5), 6 p. m., Chicago theater organ recital; 6:30, Hotel LaSalle orchestra; 8, "Literary Sidelights," Harry Hansen; 8:20, Gustave Donandern, Swedish tenor; 8:40, travel talk, Clara E. Laughlin; 9, U. of Chicago lecture; 9:20, program, Rudolph Magnus.

WMBB. Chicago. III. (250), 7-8 p. m., Trianon duo, Beatrice Teller, Lindsey McPhall, Clarence Jacobs, Mildred Mateika, Jean Ballard, Babbl and Barr; artists; 9-11, Trianon orchestra, Dell Lampe, conductor; A. Stephenson, Jimmy Eggert, Woodlawn theater orchestra; Armin F. Hand, conductor; Billie Hoff, popular program.

ular program.

WMC, Memphis, Tenn. (499.7), 8:30 p. m., program, William Newton; 11, midnight frolie.

WOAW, Omaha, Nehr. (526), 6 p. m., elassical; 6:30, orchestra; 7:10, Radio review. Neal Jones; 9, classical; 10, orchestra; 12, Rialto Alarm.

WOC, Davenport, lowa (483.6), 7:30-8 p. m., Gold Dust twins; 8-9, Eveready hour; 9-10, Harry Yeazelle Mercer, tenor; Mrs. A. P. Griggs, contraito; Jeanette Brewbaker, soprano.

WOK, Chieggo, III. (2(2,2), 6:70, p.m., Contraito; Jeanette

Brewbaker, soprano.

WOK, Chicago, HI. (217.3), 6-7 p. m., Genevieve Barry Burnham, soprano; Clement Laskowski, tenor; LeRoy North, pianist; Banks Kennedy, organist; 10-1, Kraft Harmony boys, harmony duet; Herman Sinaiko, violinist; Harriet Lee, contralto; Bill Hay, bass; Evelyn Johnson, contralto; Jack Armstrong, violinist; Wildey and Sheehan, harmony duet; Carl Steckenberg, harmonica soloist; Banks Kennedy, organist.

WORD, Batavia, III. (275), 8 p. m., Webster hotel concert tric; 8:15, World News digest; 8:30, Cosmopolitan School of Music; 9:30, Bible questions and answers.

answers.

WQJ. Chicago, III. (447.5), 7-8 p. m., Ralph Williams and his Rainbo Gardens concert orchestra; Henrietta Nolan, violinist; Clement Laskowski, tenor; Helen Holman, soprano; 10-1 a. m., Ralph Williams and his Ralnbo Skylarks; Jerry Sullivan; Rose Vanderbosch, soprano and pianist; Hal Lansing, ukuiele soloist; Everett Opie, character reader; Brank Blasko, tenor; Will Rossiter, Mack sisters, Bert Davis, Merrill Carder, Alma Adair and artists; 1-2 Ginger hour. Ralph der, Alma Adair and artists; 1-2, Ginger not Williams, the Gingerman and Little Skylarks.

WSAI, Cincinnati, Ohio (325.9), 7.45 p. m., chime concert, Robert Badsley; 8, Eveready hour, WEAF; 9, Clifford Cook, baritone; Harry Nolte, tenor; Herbert Spangler, violinist; Ralph Briggs, planist,

Mountain Time Stations

CNRR, Regina, Can. (435), 8 p. m., Queen City man KOA, Denver. Cole. (322.4), 6:39 p. m., Herbert White and his Silver State orchestra; 7:39, News-Times concert.

Pacific Time Stations KFOA. Scattle, Wash. (454.3), 6:45-8:15 p. m., Rhodes Department store; 8:30, program; 9:30-11:30, Eddic Harkness and his orchestra.

HELLO BOYS AMUSE LISTENERS AT WLW



Wednesday, October 21

(Continued from page 10)

HN, New York, N. Y. (361.2), 7:30-8 p. m., Caravan club orchestra; 10-10:30, Roseland dance orchestra; 11-11:30, Silver Slipper revue and orchestra; 11:30-12,

11-11:30, Silver Silpper revue and orchestra; 17:30-12, Ted Lewis and orchestra.

WJAR, Previdence, R. I. (305.9), 7:30 p. m., U. S. Army band, WRC; 9, Waterman's Points of Progress, WEAR; 10, musical program.

WJR, Detroit, Mich. (517), 7 p. m., studio orchestra, Jean Goldkette, director; 9, Burroughs hour.

WKAQ, San Juan, P. R. (340.7), 7-9 p. m., municipal band, Prof. Manuel Tizol, director.

WLIT, Philadelphia, Pa. (394.5), 4:30 p. m., Rosemary Ulrich, soprano; 7:30 p. m., Dream Daddy's bedtime storles; 8, concert, General Electric company; 10, Arcadia cafe dance orchestra; Chas. Master's dance box orchestra.

orchestra.

MCA, New York, N. Y. (349.7), 6-6:30 p. m., Olcott Vall; 6:30-7. Ernie Golden and his Hotel
McAlpin orchestra; 8:45-9, "Lord Allinhroke and
Rawstice;" Jack Smiles; 11:30-12, Jack Smith, whisper-

Rawstice." Jack Smiles; 11:30-12, Jack Smith, whispering baritone.

WNYC, New York, N. Y. (526), 7-7:10 p. m., market high spots; 7:10-7:30, dance program; 7:30-7:35, police alarms: 7:35-8, dance program; 8-9. Spanish lessons, V. Harrison Berlitz; 9-10, artist-pupil's redictal; 10-10:30, plano duets.

WOO, Philadelphia, Pa. (508.2), 7:30 p. m., dinner woo, Philadelphia, Pa. (508.2), 7:30 p. m., dinner housic, Hotel Sylvania orchestra: 8, U. S. Army band; 8:30, Pooley period; 9, Waterman's Points of Progress, Napoleon; 10, Mary E. Vogt, organist; 10:30, Hotel Sylvania orchestra.

WOR, Newark, N. J. (405.2), 6:15-6:17 p. m., "Words Often Mispronounced": 6:17-7:15, music, Hotel Shelton; 7:15-7:30, sports talk, Bill Wathey; 8-8:15, topics of the day; Spencer Armstrong; 8:15-8:35, Carmen string tric; 9-9:15, Sam Siesel, mandolinist; 9:30-9:45, talk, George W. Wadsworth; 11-11:30, Flo Richardson's Casino orchestra.

WTAM. Cleveland, Ohio (389.4), 8-9 p. m., Willard Ladies' ensemble; Nell Steck, director; 9-11, instrumental music.

WTCL Hartford, Conn. (475.9), 6:30 p. m., Hotel Bond

mental musle.

WTIC, Hartford, Conn. (475.9), 6:30 p. n., Hotel Bond trio and vocalists; 7:20, dinner music; 10, dance music, Bill Tasillo's orchestra.

WWJ, Detroit, Mich. (352.7), 6 p. n., dinner concert; 8, News orchestra; 9, dance program.

Central Time Stations

CNRW, Winnipeg, Can. (384.4), 8:10 p. m., Fort Garry hotel concert orchestra; 8:45, Transcona Shop's brass band; 9:45, supper dance, Fort Garry hotel; Al

Kilgour. Kelb. Lincoln, Nebr. (340.7), 5:30-6:30 p. m., Buick KABL Lincoln, Nebr. (340.7), 5:30-6:30 p. m., Buick Little symphony; Belshaw's orehestra; 8:30-10:30, Beatrice quartet; Earl Watson, tenor; Belshaw's chestra; Rolph Hall, ukulele soloist; Waiklki trio. KFMX, Northfield, Minn. (337), 9-10 p. m., musieale. KFNF, Shenandah, lowa (266), 7 p. m., concert, Henry

Field Seed company.

KFVE, University City, Mo. (240), 10 p. m., Paul and Jack Snyder, Radio entertainers, Orchestra Ro-

and Jack Snyder, Radio entertainers, Orchestra Romaine.

KMA, Shenandoah, lowa (252), 6:45 p. m., domestic science timely topics, Le Ona Toget, June B. Case; 9-11, Farnham trio.

KPRC, Houston, Texas (296.9), 7:30 p. m., Blanchard's dance orchestra; 8:30, Mrs. Robert B. Collier, lyric soprano; 9, Eddie Syncopators; 10, Frank Tilton, placetra and the contraction of the con

sopramo, 5, Education anist.

KSD, St. Louis, Mo. (545.1), 7 p. m., Rader's orchestra.

chestra. KTHS, Hot Springs National Park, Ark. (374.8), 9-9:20 p. n., concert, Meyer-Davis, orchestra, Lon Chassy, director; 9:20-9:30, contraits soles, Mrs. Byrd Rigsby; 9:30-9:45, New Arlington string trio; 9:45-10:15, dance concert

KYW, Chicago, III. (535.4), 6:35-7 p. m., bedtime story, Uncle Bob; 7-7:30, dinner concert, Congress hotel: 7:33, "Entertaining Plans," Vivette Gorman;

7:45, "Safety First"; 8-9, musical program; 10-12:30, revue; Coon-Sanders Original Nighthawks; organ recital, Albert May Malotte.

WAMD, Minneapolis, Minn. (243.8), 7 p. m., Garrick theater symphony orchestra; 7:30, Jack Melerick, organist; 8, Marion Bearman, violinist; Harold Janesky, tenor: 10:30, Radisson Rondevo.

WBBM, Chicago, III. (226), 6-10 p. m., Samovar orchestra; Fair and Warmer duo; Torrid two; Blue Deuces; George Marbach, tenor; 10-12, Montmartre orchestra; Bert Davis, clown of the air; Bernard Gamson, violinist; Corrine Jordan and Vera Gilbert; Devon Comedy four; Honky Tonk Gloom Chasers; Osceph Raieff, pienist; Leona Hayes, harpist, WCCO, Minneapolis-St. Paul Minn. (416.4), 6 p. m., Edison Day program, talks, R. F. Pack, E. W. Decker; 7, midweek church service, Rev. R. H. Newton; 8, program from WEAF, Points of Progress, Ipana Troubadours; 10:05, Golden Pheasant orchestra; 11:30, Eddie Dunstedtor; organist.

WDAF, Kansas City, Mo. (365.6), 6-7 p. m., address, speaker. Health Conservation association; address, speaker. Health Conservation association; address, and the conservation association; address, Speaker. Health Conservation association; address, orchestra; 11:45-1, Merry Old Chief; Eddie Kuhn's Orchestra; 11:45-1, Merry Old Chief; Eddie Kuhn's orchestra.

Kansas City Athletle club orcnestra; Earl Concentral orchestra; Chicago, Ill. (370.2), 7-8 p. m., Oriole orchestra; Florence Behrend, soprano; 9-10, Oriole orchestra; Correll and Gosden; Robert York, tenor; 11-1, Oriole orchestra; Correll and Gosden; Robert York, tenor; Oriole orchestra (Correll and Gosden; Robert York, tenor; Oriole orchestra WENR, Chicago, Ill. (266), 6-7 p. m., Rauland Iyric trio; 8-10, All-American Pioneers; J. E. Petersen, bass; John Papa; concertina soloist; Archie Rawls, tenor; Floyd Falch, Vincent Vallee, tenor; 12-2, All-American Pioneers.

tenor; Floyd Falch, Vincent Vallee, tenor; 12-2, All-American Pioneers.

WGES, Oak Parks. III. (250); 7-9 n. m., Richard Dale, baritone; Louwy Wyse, soprano; John MacFarlane, bass; John Stamford, tenor; 11-2 a. m., Kampus Kellerians ordestra; Rose Sweeney, soprano; Frank Gallery, tenor; Lew Russell, Sue Olmstead, ukulele soloist; DeWitt & Owen; Evans Lloyd, baritone. WGN, Chicago, III. (370.2), 6:30-7:30 p. m., Drake concert ensemble, Blackstone string quintet; 3-9, WGN string trio; 10-11, jazz scamper, Jack Chapman's and Blackstone ordestra.

WHAO, Milwaukee, Wis. (278), 6-7 p. m., Arthur Richter, organist; 8-10, Wisconsin Roof garden or chestra.

Richter, organist; 8-10, Wisconsin Roof sateds of chestra.

WHAS, Louisville, Ky. (399.8), 7:30-9 p. m., Barney Rapp's orchestra.

WHB, Kansas City, Mo. (365.6), 7-8 p. m., musical program; automotive talk, John Burns.

WHO, Des Meines, lowa (526), 6:30-7:30 p. m., Reese-Hughes orchestra; 7:30-9, Harry Armigido, banjoist; Sam Caplan, violinist; Jim Blacksmith, barmonica soloist; "Old King Cole" and Leonard Kirkwood, barmony singers; Cornellus Aher, bartione; 9-10, Corn Sugar orchestra; 10-12, dance program.

WKRC, Cinelmati, 10-12, quance program.

WKRC, Cinelmati, Ohio (422.3), 8 p. m., book review,
Alice B. Coy; 8:15, Marion McKay and his orchestra;
8:45, popular studio features; 9:15, Marion McKay
and his orchestra.

and his orchestra.

WLS, Chicago, III. (344.6), 6:30 p. m., Ralph Emerson, organist, 7, Juliaby time; 7:15, WLS trio; 7:45, Ruth Olt, soprano; 8, Poet's corner, Wallace Bruse Amsbary; 8:15, syncopation hour, dead quartet; 9, Abe Lyman's College Inn orchestra; 9:10, Better Music hour, Clemons A. Hutter; 10, Abe Lyman's College Inn orchestra; 10:10, Westminster quartet; 11, Ralph Emerson, organist.

son, organist.

WLW, Clncinnati, Ohio (422.3), 12:15 p. m., Irene Downing and Marjory Hebestreit, organ and piano duets; 4, "Shut-in Program"; 7, Hotel Gibson orchestra, Bobert Visconti, director; 10, "Pep" concert, Phi Delta Theta of University of Cindinati; 10:30, Trirdyn orchestra; 11:15, Johanna Grosse, organist.

WMAQ, Chicago, III. (447.5), 6 p. m., Chicago theater organ reeltal; 6:30, Georgene Faulkner, the story lady; 8, Northwestern university lecture; 8:30, General Electric night program; 9, WMAQ players.

wmbb, Chicago, III. (250), 7-8 p. m., Trianon duo, Beatrice Teller, J. Bodewalt Lampe, director; 9-11, Woodlawn theater orchestra, Armin Hand, conductor; Marquette banjo four, popular program,

WOC, Davennort, Iowa (483.6), 9-10 p. m., Ipana Troubadours; 10-11, Erwin Swindell, organist; Grace Huber-Lohmiller, sopramo Wok, Chicago, III. (217.3), 10-1 p. m., Ned Miller, tenor; Herman Sinaiko, violinist; Harriet Lee, contralto; Rita MoFawn, sopramo; Cy Berg, ukulele soloist; Banks Kennedy, organist; Harold Morava, tenor; LeRoy North, planist; Harold Morava, tenor; LeRoy North, planist, D. m., Webster hotel concert trio; 8:15, I. B. S. A. choral singers; 8:30, address, Calvin H. Swingle.
WOS, Jefferson City, Mo. (440.9), 8 p. m., address, George Pickens; musical program, Mrs. W. W. Bratton.

George Pickens; musical program, ears. ...
Bratton.

Wal, Chicago, III. (447.5), 7-8 p. m., dinner concert,
Ralph Williams and bis Rainbo Garden orchestra;
program, Van Higgens family; 10-1 a. m., Ralph Williams and his Skylarks; Medodians, Esther Trostrud,
mezzo-soprano; Fontella trio; Fred A. Jacobson,
monulogist; Tillie Miller, contralio; Clarence Theders,
tenor; J. Edwin Peterson, basso; Sandy Meek, Scotch
tenor; Harry Sosnick, planist, and artists; 1-2, Ginger
hour.

hour.

WSAI, Cincinnati, Ohio (325.9), 7-8 p. m., Edison hour of music; 8, WEAF Waterman Pen program; 9, WEAF Ipana Troubadours; 10, Congress Playing Card string quartet.

WSUI, Iowa City, Iowa (483.6), 7:45 p. m., college of the air, Carpenter, Porter Ruckmick.

Mountain Time Stations

FWA, Ogden, Utah (261), 9-10 p. m., program, Globe Milis; 10-11, musical program, Lion Coal company, Ellis Fuel company; 11-12, Olie Reeves and his orchestra.

Ellls Fuel company; 11-12, One Reeves and ans orchestra.

KOA, Denver, Cole. (322.4), 6:30 p. m., Herbert White
and his Silver State ouchestra; 8, scientific football,
Tom McNamara; 8:10, Edison Day, Blue Bell trio;
Public Service company saxophone band; "Electricity
on the Farm," Clare N. Stannard; Olinger male
quartet; "Civilization and Electricity," Howard S.
Robertson; Stewart A. Housman, reader; KOA orchestra.

Design Times Stations

Pacific Time Stations

Pacific Time Stations

KFOA, Seattle, Wash. (454.3), 6:45-8:15 p. m., Hopper Kelly company; 8:30-10, Times studio program.

KFPG, Hollwood, Calif. (238), 5:6 p. m., home hour with Georgia Simmons and the naborhood children; 8-9, Magzie O'Shea, the blarney girl, and her entertainers in an hour of ballads; 9-10, KFPG concert orchestra, arranged by C. Harold Ramey.

KFWB, Hollwood, Calif. (252), 6-7 p. m. children's hour, Big Brother of KFWB; 7-7:30, Mutral Motors mirth contest; 7:30, microphone brevilies; 8-9, Warner brothers' syncopators; Barbara Bunnell, blues singer; LeRoy Kulberg and his ukulei; 9-10, Kathryn Martin, soprano; Frank Pierce and Vic Beall, popular songs; Rogers' Hawallan trio; 10-11, Warner brothers' frolic, direction Norman Manning.

KGO, Oakland, Calif. (361), 6-7 p. m., dinner concert, Sherman, Clay and company; 8, Arion trio; Wigginton E. Creed, president.

KGW, Portland, Ore. (491.5), 8-10 p. m., electric night, Edison's birthday; 10-11, Sherman, Clay and company.

KHJ, Los Angeles, Calif. (405.2), 5:30-6:30 p. m., Leightnon's Arcade cafeteria orchestra, Jack Cronshaw, leader; 6:30-7:30, history story, Prof. Walter Sylvester Hertzog, Dick Winslow, iuvenile reporter; Mickey McBan, screen starlet; Helen Lem, singer; 8, Dr. Mars Baumgardt, scientific locturer; 8:30-10-30, program, R. B. Miller Hudson-Essex dealer, arranged by J. Heward Johnson; 10:30-11:30, Art Hickman's Biltmorhotel dance orchestra, Frank Ellis, leader; Radio orchestra, Pull Finslein, leader; 7-8, Ambassador listle concert orchestra, Pank Ellis, leader; 8-9, program, Security Trust and Savings bank; 9-10, program with a kick, Hercules Gasoline company; 10-11, hour of dance music.

KPO, San Francisco, Calif. (428.3), 6:40-7 p. m., Waldemr Lind and the States Restaurant orchestra;

Security Trust and Savings bank; 9-10, program with a kick, Hercules Gasoline company; 10-11, hour of dance music. KPO. San Francisco. Calif. (428.3), 6:40-7 p. m., Waldemar Lind and the States Restaurant orchestra; 7-7:30, Rudy Seiger's Fairmont hotel orchestra; 8-9, Atwater Kent artists; 9-10, Goodrich Silvertown Cord orchestra; 10-11, Waldemar Lind and the States Restaurant orchestra. KWSC, Pullman, Wash. (348.6), 7:30-9 p. m., Cougar Collegians; "Planning a Git's Room." Gladys Gallup; agricultural talk; hook reviews, Alice Lindsay Webb.

Thursday, October 22

Thursday, silent night for: CHIC, CHNC, CNRA, CNRE, CNRO, CNRR, CNRT, CNRV, KFAB, KFAU, KFDM, KFMQ, KFMX, KFOA, KFVE, KFWA, KGW, KOA, KOB, KSD, KTCL, KWSC, PWX, WAHG, WCEE, WEAO, WEBJ, WHAD, WJJD, WLIT, WOR, WOS, WSUI, WTAM.

Eastern Time Stations

Eastern Time Stations
KDKA, Pittsburgh. Pa. (309.1), 6:15 p. m., dinner concert; 7:45, "Through the Saragossa Sea and the Galapagos Island," Jay F. W. Pearson; 8, "History of Communication": 8:30, "Edward MacDowelt," Richard Kountz; KDKA Little symphony orchestra; 9, KDKA Little symphony orchestra; 11:15, midnight concert.
WBBR, New York, N. Y. (272.6), 8 p. m., Watchtower instrumental trlo; 8:10, Stanley Goblinghorst, baritone; 8:20, Sunday school lesson; 8:40, Stanley Gohlinghorst, baritone.
WBZ, Springfield, Mass. (333.1), 6:30 p. m., Leo Reis-

man's Hotel Lenox ensemble; 7:05, Max Zides and his ukulele; 7:30, Winston Sharples, planist; 7:45, to be announced; 8, program, Noyes-Butick company; 9, evening of opera, Madame Vincillo-Johnson.

WCAE, Pittsburgh, Pa. (461.3), 6:30 p. m., dinner concert, William Penn hotel; 8, Larkin period; 9, Alwater Kent Radto artists; 10, Goodrich Silverlown Cord orchestra.

WCAU, Philadelphia, Pa. (277.6), 6:30 p. m., Billy Hayes and his Cathay tea garden orchestra; 7:30, Snellenburg symphony orchestra; 8, Kenneth Carney, Hawaiian guitarist; 8:30, studio feature; 9, Barry O'Moore, Irish tenor; 9:15, Radio artists; 9:30, Frank Cook, old time songs; 10, Sesqui Centennial hour.

WCTS, Worcester, Mass. (268), 8-8:30 p. m., Larkinites; 8:30-9 program from WEAF; 9-10, program; 10-11, Silvertown Cord orchestra.

WCX, Detroit, Mich. (517), 6 p. m., dinner ceneert. Book-Cadillac hotel; 8, musical program.

WEAF, New York, N. Y. (491.5), 4-4:15 p. m., Julius Behrendt, baritone; 4:15-4:45. Famous Players orchestra; 4:45-5; talk, Leonard Barron; 6-7, dinner music, Waidorf-Astoria; 7-7:30, services, Greater New York Federation of Churches; 7:30-8, Cushman's serenaders; 8-8:30, "The Larkinites"; 8:30-9, talk, George Elliott Cooley; 9-10, WEAF concert ensemble; 10-11, Silvertown Cord orchestra; 11-12, Vincent Lopez and his orchestra.

WEAR, Cleveland, Ohio (389.4), 7 p. m., Mariorie Mears, Wears, N. Y. (315.6), 6-3:30 p. m., Lucle Geebec; 7-8, Voltatre hour of music; 8-8:0 p. m. Lucle Geebec; 7-8, Voltatre hour of music; 8-8:0 p. m., Lucle Geebec; 7-8, Voltatre hour of music; 8-8:0 p. m., musical Program.

WGR, Buffelo, N. Y. (315.6), 8-5:30 p. m., musical Program.

WGR, Buffelo, N. Y. (315.6), 8-5:30 p. m., musical Program.

WGCP, New York, N. Y. (315.6), 3-5-30 p. m., musical program, WGR, Buffalo, N. Y. (319), 2:30-4:30 p. m., Buffalo Radio show program, featuring the Erlenbach orchestra; 6:30-7:30, Vincent Lonez Hotel Statler dance orchestra, Harold Gieser, director; 8-11, jointly with WEAF, including the Larkinltes and the Goodrich Silvertown Cord orchestra. WGY, Schenestady, N. Y. (379.5), 2:30 p. m., Stephen E, Boisciatr, organist; 6:30, Ten Eyek trio; 7:45, Linda Noble, soprano; 8:15, U. S. Army band; 9:30, Royal hour, WJZ; 10:30, Stephen E, Bolsciatr, organist.

Royal hour, WJZ; 10:30, Stephen E. Bolschalr, organist.

WHAR, Atlantic City, N. J. (275), 7:30 p. m., lecture period; 8. Scaside hotel trio; 9, studio cencert.

WHN, New York, N. Y. (361.2), 3:15-4:30 p. m., lexing ton theater orchestra; 4:30-5, Miller, Piotal and Valsongs and plano; 7-7:30, Reland orchestra; 7:30-8. Cecll B. Kennedy's quintet; 8-8:30, Will Oakland's Chatheau Shanley; 10-10:30, Caravan cub orchestra; 10:30-11, Club Kentucky orchestra; 11-11:30, Swanes club orchestra; 11-30-12, Baudbox orchestra and revue; 12-12:30, Ted Lewis and orchestra.

WIAR, Providence, R. I. (305.9), 8 p. m., Larkinites; 8:30, muslcal program, Donald MacDonald, director and tener; vocal and instrumental solos, ducks; 10, Goodrich Silvertown Cord orchestra.

WIR, Detroit, Mich. (517), 7 p. m., studio orchestra, Jean Goldkette, director; 9, Jean Goldkette's serenaders; 10, Jean Goldkette's Victor Recording orchestra.

San Juan, P. R. (340.7), 7:30-9 p. m., music,

chestra.

WKAQ, San Juan, P. R. (340.7), 7:30-9 p. m., music,
La Cafeteria.

WLT, Philadelphia, Pa. (394.5), 2:30 p. m., Edua
Wyatt Webster, soprano; 7:30, Dream Daddy's bedtime stories.

WMCA, New York, N. Y. (340.7), 6-6:30 p. m., Oleott
Wail; 6:30-6:45, Lulu Quinn Weyant, uke; songs; 77:30, Sunnyside orchestra; 7:30-3, Lanson's orchestra;
8:30-9, Snedden Weir, buritone; 9-9:15, Uke Bob MoDonald; 10-10:45, Twelfth Street bund; 11-12, Ernie
Golden and his Hotel McAlpin orchestra.

WNYO, New York, N. Y. (526), 7-7:10 p. m., market
high spots; 7:10-7:30, Club Aready orchestra; 7:307:35, police alarms; 7:35-8, Club Aready orchestra; 7:307:35, police alarms; 7:35-8, Club Aready orchestra;
8-10, studio program; 10:10-10:30, talk, Dr. Sydney
N. Ussher; 10:30-11:30, orchestra.

WOO, Philadelphia, Pa. (506.2), 7:30 p. m., Adelphia
Roof Garden orchestra.

WOR, Newark, N. J. (405.2), 6:15-6:17 p. m., "Words
Often Mispronounced"; 6:17-6:30, sborts talk, Bill
Wathey; 6:30-7:15, Hotel Shelton ensemble.

WFG, Atlantic City, N. 1, (299.8), 6:30 p. m., sports,
Billy Rocap; 6:35, Arthur Scott Brook, organis; 7,
Hotel Ampassador dinner music; 8, world-wide excusions, Alfred James P. McClure; 8:16, studio program;
9, Hotel Traymore concert orchestra; 10:30, Silver
Silipper.

WRC, Washington, D. C. (469), 7 p. m., Shorehan hotel

Slipper.
WRC, Washington, D. C. (469), 7 p. m., Shoreham hotel orchestra; 8, Smithsonian talk; 8:15, concert, U. S. Army hand William Stoneyak (2017). Army band, William Stannard, leader, W.J.; 9:19, announced; 9:30, WJZ Royal hour; 10:30, Meyer Davis LeParadis roof band.

WTIC, Hartford, Conn. (475.9), 6:30 p. m., dinner music, Hub Restaurant trio; 7:30, "Fall and Winter Motor Travel," Hon. R. B. Stockel; 7:45, dinner

music. WWJ, Detroit, Mich. (352.7), 6 p. m., dinner concert; 8, concert from WEAF.

Central Time Stations

KFNF, Shenandaah, Iowa (266), 7 p. m., Bohemian band, E. L. Dorland, director.
KLDS, Independence, Mo. (441), 8 p. m., Annual Independence Chamber of Commerce banquet, speakers, Colvin Brown, Walter B. Weisenberger; Independence (Continued on page 12)

CELEBRATE EDISON'S BIRTHDAY; U. OF

Index to Popular Concerts

T ABULATED below is a time table of the stations giving popular concerts this week. Stations are divided into the four different standard times in use. The hours are given in the kind of time in use at each listed station. By using this table as an index and referring to the complete programs below, full information will be obtained.

Eastern Time Stations

Contract Contract

Eastern I ime Stations

Saturday, October 17: 8:30, WGBS;
8:45, WEAF; 9, WEAF, WGBS,
WNYC; 9:30, WGBS; 10, WREO;
10:30, WEAF, WRC; 10:45, WEAF.

Monday, October 19: 7:30, WHN;
7:45, WAHG; 8, WGBS; 8:30, WOR;
8:45, WAHG; 9, WCAU, WEAF,
WGR, WOO; 9:15, WAHG; 9:30,
WGR, WHAZ; 10, WGR, WMCA; 11,
WLIT; 11:30, WHN; 12, WAHG; 1,
WAHG.

Tuesday, October 20: 7, WMCA; 8, WEAR; 8:30, WMCA; 9, WBZ, WEAR; 11, WHN; 11:30, WHN.

Wednesday, October 21: 7:30, WAHG, WEEI, WHN; 7:45, WAHG; 8, WAHG, WEBJ, WEEI, WGCP, WMCA; 8:15, WAHG, WGCP; 8:30, WEBJ, WGCP; 9, WEBJ, WGCP, WNYC; 9:30, WAHG; 9:45, WAHG, WCAU; 10, WGCP; 11, WHN.

Thursday, October 22: 7:30, WEAF; 8, WCAE, WCTS, WEAF, WFI, WMCA; 8:15, WBZ; 9:30, WCAU; 10, WHN, WNYC; 10:20, WBZ.

Friday, October 23: 7:30, WEEI; 7:45, WAHG, WGY; 8, WGCP, WJR; 8:30, WEEI, WGCP, WHN; 9, WGR; 9:15, WBZ, WGCP; 9:30, WAHG, WHN; 9:45, WGCP; 10, WLIT; 10:30, WHN, WLIT; 11:30, WHN, WTIC.

Central Time Stations

Central Time Stations

Saturday, October 17: 6:30, WFAA;
7:20, WLS; 7:30, WMBB; 8, WBBM,
WENR, WLS, WMAQ, WTAS; 8:30,
WGN, WLS; 9, KPRC, WBBM,
WENR, WGN, WMBB, WTAS; 9:30,
WEBH; 10, KFVE, WBBM, WMBB,
WOK, WQJ, WTAS; 10:30, WEBH;
11, KOIL, WBBM, WLS, WOAW,
WOK, WQJ; 11:30, WEBH; 11:45,
WDAF; 12, WBBM, WEBH, WENR,
WOK, WQJ, WSAI; 12:30, WBBM,
WEBH, WENR, WOK, WQJ, WSAI;
12:30, WDAF, WOK, WQJ; 1, WBBM,
WENR, WQJ.

Sunday, October 18: 7:30, KOIL:

WENR, WQJ.

Sunday, October 18: 7:30, KOIL;

8. WBBM, WTAS; 9, WBBM, WTAS;

10:15, KTHS, WTAS; 11, KTHS,
WTAS; 12, WBBM.

Monday, October, 19: 6, WBBM;

6:30, WFAA, WOAW; 6:45, WCCO;

8, WTAS; 8:30, KFAB, WOK; 9,
WMBB, WOK; 9:25, KTHS; 9:30,
KFAB; 10, KFAB, KFVE, WMBB,
WOK, WTAS; 10:30, WHT; 11, KOIL,
WHO, WOK; 11:45, WDAF; 12, WHT,
WOK.

Tuesday, October 20: 6, WOAW; 7:30, KPRC, WBAP; 8, WBBM, WSB, WTAS; 9, WBBM, WMBB, WTAS, WOAW; 9:30 WOAI; 10, KFVE,

WBBM, WHT, WMBB, WOK, WQJ, WTAS; 10:15, WSB; 10:30, WGN; 11, KOIL, WBBM, WFAA, WMC, WOK, WQJ; 11:45, WDAF; 12, WFAA, WHT, WOAW, WOK, WQJ; 1, WQJ.

WHT, WOAW, WOK, WQJ; 1, WQJ.

Wednesday, October 21: 7. KFNF, WLS; 7:30, KOIL, WBAP, WHO; 8, WBBM, WTAS; 8:30, KFAB, WHO; 9, KPRC, WBBM, WHO, WMBB; 9:30, KFAB, WBAP, WTAS; 10, KFAB, KFVE, KYW, WMBB, WOK, WQJ, WTAS; 10:30, KYW, WGN, WGJ, WTAS; 10:30, KYW, WGN, WHT; 10:45, WSB; 11, KYW, WOK, WQJ, WSAI; 11:45, WDAF; 12, KYW, WBBM, WHT, WOK, WQJ; 1, WBBM, WOK, WQJ.

Thursday, October 22:6:30, WEAA.

WBBM, WOK, WQJ.

Thursday, October 22: 6:30, WFAA;
7, WOC, WSAI; 7:30, WBAP; 8,
WBBM, WHAD, WTAS; 9, KMA,
WBBM, WHAD, WMBB, WTAS;
9:30, KTHS, WOAI; 10, KMA, KYW,
WBBM, WMBB, WOK, WQJ, WTAS;
10:03, WLW; 10:30, WGN, WHT;
10:45, WSAI; 11, KOIL, WBBM,
WFAA, WOC, WOK, WQJ, WTAS;
11:20, WLW; 11:45, WDAF; 12, WHT,
WOK; 12:15, WLW, WQJ; 1, WQJ.

Friday. October 23: 6:30, WFAAA 8

Mountain Time Stations Wednesday, October 21: 10, KFWA. Friday, October 23: 10, KFWA.

Pacific Time Stations

Saturday, October 17: 8, KFWB, KNX; 9, KNX, KPO; 10, KFWB, KFI; 11, KNX; 11:30, KHJ, KTCL; 12, KNX; 12:30, KHJ; 1, KNX; 1:30, KHJ.

Sunday, October 18: 8, KHJ; 9, KFWB; 10, KFWB.

Monday, October 19: 9, KNX; 10, KFWB; 11, KFWB; 12, KFWB. Tuesday, October 20: 8, KFWB, KNX; 9, KNX, KPO; 10, KFWB, KNX; 11, KFWB.

Wednesday, October 21: 8, KGW, KPO; 9, KFWB, KNX; 10, KNX; 11, KFWB; 11, KNX.

Thursday, October 22: 8, KHJ; 9, KHJ, KTAB; 10, KFWB, KHJ; 11, KNX.

Friday, October 23: 8, KFWB; 9, KFWB, KHJ, KNX; 10, KFWB, KNX; 12, KFWB, KNX; 1, KNX.

7-7:30, Rudy Selger's Fairmont hotel orchestra; 8-9, George W. Caswell Coffee company; Radio Eight orchestra; John W. Miller, tenor; 9-10, studio program; 10-11, Jack Coakley's Cabirians.
KTAB, Oakland, Calif. (215), 8-10 p. m., studio program;

WGAE, Pittsburgh, Pa. (461.3), 6:30 p. m., dinner concert, William Penn hotel; 8, address, Current motor topics; 8:30, Sequilla club.

WCAU, Philadelphia, Pa. (277.6), 8 p. m., Leedom slsters, Radio song birds; 8:15, talk on chiropractic, Dr. Doughty; 8:30, Kathryn O'Boyle, planist; 9, Mr. Hill's Harmony four; 9:30, Rennie Cormack, popular

1-2. Ginger hour.

WSA1. Cineinnatt, Ohie (325.8), 7 p. m., Larkinites, WEAF; 7:30, "Pop" concert; 8, musical program; 9, Silvertown Cord orchestra, Joseph Knecht, director, WEAF.

Mountain Time Stations Mountain 1 ime Stations
CNRC, Calgary, Can. (455.8), 9 p. m., C. N. R.'s symphony orchestra; Andy Davidson, tenor.
KOA, Denver, Colo. (322.4), 6:30 p. m., Herbert White and his Silver State orchestra.
KUOM, Missoula, Mont. (244), 8 p. m., children's hour, Alberta Stone; Mrs. Lelia Paxson Hale, vocalist.

Pacific Time Stations

KFPG, Hollywood, Calif. (238), 9:30-10 p. m., Sylvin Szymanski, the blind cook; 5-6 p. m., home hour, Georgia Simmons and the naborhood children; 8-9, Harold Hynes, the wandering Jew, and his minstrel in baby blue hour; 9-10, Ruth Leonardi's golden melody hour.

Harold Egnice, in baby blue hour; 9-10, Ruth Leonard s by blue hour; 9-10, Ruth Leonard s by melody hour.

KFWB, Hollywood, Calif. (252), 7:30 p. m. mlcrophone brevities; 7:50, Jack Boaz, fishing sout; 8-9, program, Starr Plano company, Hollywood Rythma Kings and Ina Mitchell Bulter in arrangemits of Gennett records; 9-10, program, Don P. Smith, Inc. Diana-Moon dance orchestra, Salvine Balano, violinist, Sol Hoopli's junior Hawaiian trio, Dan Gridley, tenor; 10-11, Warner brothers' frolic, direction Norman Manning.

Moon dance orchestra, Salvine Balano, violinist, Sol Hoopii's junior Hawaiian trio, Dan Gridley, tenor; 10-11, Warner brothers' frolic, direction Norman Manning.

KGO, Oakland, Calif. (361). 8 p. m., "The Fortune Hunter," KGO players; Cremona trio; 10-12, Ben Black's orchestra.

KGW. Portland, Ore. (491.5), 7:45 p. m., Catholic Truth society.

KHJ, Los Angeles, Calif. (405.2), 5:30-6:30 p. m., Leighton's Arcade cafeterta orchestra, Jack Cronshaw, leader; 6:30-7:30, history story, Prof. Walter Sylvester Hertzog; Dickie Brandon, Joyce Coad and Jane Hughes, screen juveniles; 8-10, program, Padife Ready Cut Homes, Inc., arranged by Walter W. Biddick; 10-11, Art Hickman's Blitmore hotel dance orchestra, Frank

KNX, Hellywood, Calif. (336.9), 5:30-8-15, p. 20, W.

Ellis, leader.

KNX, Hollywood, Calif. (336.9), 5:30-6:15 p. m., WurRitzer pipe organ studio, Town Tattler; 6:15, travel talk,
W. F. Alder, 6:30-7, Atwater Kent Radio orehestra,
Paul Finstein, leader; 7-8, KNX dinner hour program; 8-9, program, Globe Ice Cream company; 9-10,
program, Weber Baking company; 10-11, Ray West,
Cocoanut Grove dance orchestra from Ambassador hotel.

KPO, San Francisco, Calif. (428.3), 6:40-7 p. m.,
Waldemar Lind and the States Restaurant orchestra;

Down in the lower left corner is Radio Roy and his "uke," both well known to WAHG listeners. Carabelle Johnson, above, has long been a favorite with the Radio public. Her soprano voice may be heard Monday during the light opera hour at WTAM. May Zoller, right, will play her xylophone and look just like this Monday evening at WGY. Art Gillham, lower right corner, is that famous "Whispersing Pianist." Although he whispers into the microphone thousands of people are able to hear him nightly. He is touring the middle west broadcasting stations at present.

song writer; 10:30, Loeser's dancing academy or chestra.

WCTS, Worcester, Mass. (268), 8 p. m., program.

WCTS, Detroit, Mich. (517), 6 p. m., dinner concert,

Book-Cadillac hotel; 10, Blue Room dance orchestra.

WEBJ, New York, N. Y. (272-6), 7-7:30 p. m., Blenhelm theater ensemble; 7:45-8, Phillip Krumholz,

tenor.

WEAF, New York, N. Y. (491.5), 8-7 p. m., dinner music, Waldorf-Astoria; 7-7:30, Gene Angraham's Great Note! Inn orchestra; 7:30-7:45, Sir Hobgoblin; 7:45-8, R. R. Peckham and Carl Roeder, planists; 8-8:30, Happiness Candy Boys; 8:30-9, Eagle Neutrodyne; 10-10:15, Walter Preston, barltone; 10:15-10:30, Helen E. Vogel, violinist; 10:30-11, Crescent male quartet; 11-12, Meyer Davis' Lido-Venice orchestra.

11-12, Meyer Davis' Lido-Venice orchestra.

WEAR, Cleveland, Ohio (389.4), 7 p. m., F. W. Roberts Kindergarten hour; 8, talks; 8:30, dance program.

WEEI, Boston, Mass. (476), 7:15 p. m., talk, Malcolm E. Nichols; 8, Neapolitan broadcast; 8:30, Sager's half hour of hospitality; 9:15, Dorothy Curtis, pianist; Alessando Niccoli, violinist; Edna Holmes, soprano; 10, American House marimba band and orchestra; 11, talk, Malcolm E. Nichols.

WEBS, New York, N. Y. (315.6), 6:6:30 p. m., Uncle Geebee; 6:30-7, Anzel's Perl House orchostra; 7-7:15, "Radio Problems," Herman Bernard; 7:15-7:45, orchestra.

"Radio Problems," Herman Bernard; 7:15-7:45, or-chestra,
WGCP, New York, N. Y. (315.6), 3-5:30 p. m., musical
program; 8-11, musical program.

WGR, Buffalo, N. Y. (319), 2:30-4:30, 6:30-7:30 and
8-10:30 p. m., Buffalo Radio show programs, including
Winger's Crescent Park entertainers; 9-30, broadcast
direct from the show studio; 10:30-11, Hewitt Rubber
company program; 11-1 a. m., Vincent Lopez Hotel
Staticr dance orchestra, Harold Gleser, director.
WGY, Schenectady, N. Y. (379-5), 7 p.
Strand theater orchestra; 7:40, "The Man on the Box,"
WGY players; 10:30, WGY orchestra; Joseph Culhane,
tenor; Cyril Cadieux, baritone.
WHAR, Atlantio City, N. J. (275), 7:30 p. m., fashion
talk; 8, Seaside hotel trie; 11:15, Strand theater
organ recital.

WHN, New York, N. Y. (361.2), 7:30-8 p. m., "Cheer-

WHAR, Atlantio City, N. J. (275), 7:30 p. m., fashion talk: 8, Seastde hotel trio; 11:15, Strand theater organ recital.

WHN, New York, N. Y. (361.2), 7:30-8 p. m., "Cheerful Philosopher," Burr McIntush; 10:30-11, Roseland dance orchestra; 11:11:30, Rodeo club orchestra; 11:30-12, Alabam club orchestra; 12:12:30, Silver Slipper revue nad orchestra.

WHAR, Providence, R. I. (305.9), 8 p. m., Phillip Bromstein nad his Brown University orchestra; 9, Maine Creamery entertainers; 11, Providence-Blitmore dance orchestra, Erwin White, director.

WIR, Detroit, Mich. (317), 7 p. m., studio orchestra, Jean Goldkette; 8, Summerfield and Hecht program.

WKAQ, San Juan, P. R. (340.7) and Hecht program.

WKAQ, San Juan, P. R. (340.7), 3-9 p. m., entertainment, Porto Rican Atheneum.

WLIT, Philadelphia, Pa. (394.5), 7:30 p. m., Dream Daddy's bedtime stories; 10, Morning Glory concert; Arcadia cafe dance orchestra; Rufus and Raskus, sougs; "A Night in Boltenda," Pen and Pened club.

WLWL, New York, N. Y. (283.3), 8 p. m., talks on Iterature; special talks.

WMCA, New York, N. Y. (340.7), 6-6:30 p. m., Olcett Valt and this Hotel McAbin string ensemble; 6:30-7, Ernie Golden and his Hotel McAbin string ensemble; 6:30-7, Ernie Golden and his Hotel McAbin orchestra; 9-10, Hardman hour of music: 10:03-10:15, "How to Drive Automobiles," Harry Raines; 11:15-11:45, Donald Flamm, dramatic critic.

WNYC, New York, N. Y. (526), 7-7:10 p. m., market high spots; 7:10-7:20, dance orchestra; 7:30-7:35, police alarms; 7:35-8, dance orchestra; 7:30-7:35, police alarms; 7:30-8, Casine orchestra; 1-11:30, Ciro's orchestra.

WOR, Newark, N. J. (405.2), 6:15-6:17 p. m., "Words Often Mispronounced"; 6:17-6:30, Sports talk, Bull Wathey; 6:30-7, Man in Moon; 7-7:30, Hotel Shelton ensemble; 7:30-8, Casine orchestra; 1-11:30, Ciro's orchestra.

WOR, Newark, N. J. (405.2), 6:15-6:17 p. m., "Words Often Mispronounced"; 6:17-6:30, Sports talk, Bull Wathey; 6:30-7, Man in Moon; 7-7:30, Hotel Shelton ensemble; 7:30-8, Casine orchestra; 1-11:30, Ciro's orches

DANCING

Central Standard Time
Saturday, October 17:
8. Ksyw Wgy, Wmbb,
Wpg, Wtas: 8:05, Wlp;
8:36, Wobh, Wgy, Wsmb;
9:30, Weeh, Wmbr, Wmca,
Vod, Wrc, Wreo, Wlas;
9:30, Weee, Wgs, Wgn,
Wlid, Wrc; 10, Kpo,
Kths, Wmbr, Wreo, Wpg;
10:30, Weeh, Wges; 11,
Kiwb, Koa, Wahg, Weee,
Wfaz, Wild, Wkre, Woc;
11:15, Wdaf; 11:30,
Wgs; 11:45, Wdaf; 12,
Kgo, Kgw, Khj, Knx.
Monday, Oetober 19:
8, Wkrc, Wmbb, Wtas;
8:30, Weaf, Wsmb; 8:45,
Wor; 9, Weae, Wgr,
Wmbf, Wtas; 9:05,
Wahg; 9:25, Kths; 9:30,
Weee, Wijd; 10, Kpo,
Wce, Wijd; 11, Kpo,
Wce, Wijd; 11, Who,
Wtas; 10:30, Weee,
Wid; 11:Who, Wkre;
Wid; 11:Who, Wkre;
Wid; 11:Who, Wkre;
Wid; 11:Who, Wkre;
Wid; 11:Who, Wcee,
Wid; Wush; Wdaf,
Weesh, Wid; 11:Who, Wcee,
Wid; 11:Who, Wcee,
Wid; Wush; Wdaf,
Weesh, Wid; 11:Who, Wcee,
Wid; Wid; 11:Who, Wcee,
Wid; Wall, Wash, Wdaf,
Weesh, Wid; 11:Who, Wkre;
Wmbh, Wtas; 8:30 Central Standard Time

KF KF KF KM KS KT

QU Le WC(Bi Co le: Pa WD/ Te Ha plz sas chu WEE

WGE

bar tra: 6:4 Bro Cos WGN

stri

Wijd; 11. Who, Wkre; 11:30, Wijd; 11:45, Wdaf. Tuesday, October 20: 8. Wmbb Wtas: 8:30, Wcau, Webh. Wip: 9, Wcx, Weaf, W. Wmaq, Wase, Wijd, Wtas: 9:30, Wse, Wijd, Wse, Wijd, Whit, Wijd, Wkre, Wob, Wijd, Kiwb: 11:30, Wijd, Wkre, Wmbb, Wijd, Who, Kiwb, Kiwbaf; 11:30, Wiaf; 12. Khi, Kpo, Wdif; 12. Khi, Kpo, Wdif; 12. Kibi, Kpo, Wdif, 12.

WJIG: 11:30, Wass, 11:35, Wdaf; 12, Knjj.
Kpo, Wqj.
Thursday, October 22:
8, Wfi. Wlp. Wjar,
Wmbb, Wre. Wtas: 8:30,
Wcau, Webh, Wmaq,
Wsmh; 9, Weaf. Wip,
Wmbf, Wmea, Wqj, Wrg.
Wtas; 9:25, Kths; 9:30,
Wgn, Weal, Wsmb; 10,
Wmbf; 10:30, Webh; 11,
Kfwb, Wfaa, Who,
Woe; 12, Kgo, Kgw, Khi,
Knx, Kpo, Wqj.

Kns, Kpo, Wql.

Friday, October 23:
8, Kyw. Weae, Wear,
Weel, Wmbb, Wtas, 8:30,
Kyw. Weau, Webh, Whn,
Wmaq, Woo: 9, Kyw.
Weae, Wex, Weaf, Wgr,
Wmbf, Woaw, Wqi; 9:15,
Wahg, 9:30, Wece, Wgn,
Wjid, Wtas:: 40, Kfre,
Whar. Wmbf; 10:30,
Wece, Webh, Wjid; 11,
K(wb, Who; 11:45, Wdaf,

Thursday, October 22

(Continued from page 11) Chamber of Commerce glee club; KLDS Radio er-chestra; Dorothy Cobb Murphy, reader; M. Dawson Stephens, bass. KMA, Shenandoah, lowa (252), 6-7 p. m., flower talk.

Chamber of Commerce gies ciuu; ALLIO Nation Chestra; Dorothy Cobb Murphy, reader; M. Dawson Stephens, bass.

KMA, Sheandoah, lowa (252), 6-7 p. m., flower talk, Lina Ferguson; 9-11, Delmonico Dreamers.

(PRC, Houston, Texas (296.9), 7:30 p. m., popular orchestra; 8:30, E. G. Rountree, bartione; 9, Richard A. Buck, accordion and harmonica specialty.

(THS, Hot Springs National Park, Ark. (374.8), 9-9:30 p. m., familiar organ tunes, Lawson Reld; 9:30-10:15, dance concert. New Arington orchestra. Lon Chassy, director; 10:15-10:30, celle and plano duets.

(YW, Chicago, III. (535.4), 6:30-7 p. m. bedtline story, Uncle Bob; 7-7:30, Congress hotel dinner concert; 7:33-7:33, "Monthly Analysis of Farm Markets"; address: 3-8:20, good reading, Rev. C. J. Pernin; 8:20-9:20, musical program; 9:20-10, "Putting the Thin Steak," John C. Cutting; 10-11:30, evening at home program; "Hollywood Headliners," Frank Clark; Aerial Ministrels, Shorty Fall and Sen Kaney, /AMD, Minneapolis, Minn. (243.8), 6 p. m., George Osborn's orchestra; 7, Curb's the Limit army, Warren M. Tingdale, commander; 10:30, Radisson Rondevoo.

'BBM, Chicago, III. (226), 8-9 p. m., Samovar or-chestra; Nate Caldwell, Jim Gleason, Charles Garland, Eddie Loftus; 9-10, Montmattro orhestra, Marie Mor-gott, harvist; Corrine Jordan, Vera Gilbert, Joseph Raieff, pianist; Devon Comedy four; 10-12, Paul Small, Doris Rayan, pfunist; Bert Davis, clown of the air; Four Crows quartet.

CBD. Zion, IR. (344.6), Sp. m., Ladics' chorns; harmonicas, celestial bell quartet; Alexander DePew, flufist; Mr. and Mrs. G. R. Sparrow, tenor and containt; Messrs. DePew and Mendall, piecol duedtists; G. R. Sparrow, tenor; Olive Wright, planist; Louise Burgess, Feader.

CCO, Minneapolis-St. Paul, Minn. (416.4), 7-7:30 p. m., "The LarkInites"; 8, program from WEAF.

DAF, Kansas City, Mo. (365.6), 6.7 p. m., address, Louis Mecker; Tell-Me-a-Story lady: Trianon ensemble; 11:45-1, Morry Old Chief; Carl Nordberg's Plantation players; Earl Coleman's Ambassador hotel orchestra; Eddie Kuhn's Kansas City Athletic club orchestra; Ted Meyn, organist.

EBH. Chicago, III. (370.2), 7-8 p. m., Oriole orchestra; recital; 9-10. Oriole orchestra; Katherine Frebess, soprano; Bendah Ladon, violinist; 11-1 a. m., Oriole orchestra; stories, Wayne Myers; Paul Small.

ENR, Chicago, III. (266), 6-7 p. m., Rauland lyrle rio; 8-10. All-American Pioneers. Ray Hibbeler, Rose Katta, Will Rossiter, Burt Davis; Strand Harmony out

FAA, Dallas, Tex. (475.9), 6:30-7:30 p. m., Baker utel orchestra: 8:30-9:30, Farmers' hour, Vaughan utel quartet: 11-12, Capitol theater players, GES, Oak Park, III, (250), 7-9 p. m., Kathorine J'Brien, reader; Elemor Kaplan, violinist; Margaret

Samuelson, pianist; Joy Small, whistler; Lueille Engel, violinist; 11-2 a. m., Sun Dodgers orchestra; Dorothy Knox, Reynertson sisters; Phil Wilcox, Walter Kirsch, Ben Kanter, Lew Buller, Parrish and Ward, Ch, Chicago, III. (370.2), 6:30-7:30 p. m., Drake concert ensemble, Blackstone string quintet; 8-9, WGN string trio; 10-11, Jack Chapman's and Blackstone dance orchestras.

whap, Milwaukee, Wis. (278), 6-7 p. m., Arthur Richter, organist.

Whas, Louisville, Ky. (399.8), 7:30-9 p. m., concert, auspices Samuel L. Riely: Sunday school lesson, WHB, Kansas City, Mo. (365.6), 7-7:30 p. m., organ concert, Morrell Moore: 8-9, program, Fred Kammer, Melody Makers.

concert, Morrell Moore; 8-9, program, fered Kammer, Shrine quartet; Hawaiian trlo; 9-10, Walt Wood's Melody Makers.

WHO. Des Moines, lowa (526), 7:30-8 p. m., Raleigh quintet; 8-9, Bankers' Life trlo; 11-12, Bankers' Life Little symphonic orchestra, Leon A. Dashoff, director, Kerg, Cincinnati, Ohio (422.3), 8 p. m., Pete Mincowsky, violinist; Al Kirschner, pianist; Pep Golden, sxxophonist.

WLS, Chicago, III. (344.6), 6:30 p. m., Ralph Emerson, organist; 7, lullaby time; 7:15, program, faculty Glenn Dillard Gunn College of Music.

WLW, Cincinnati, Ohio (422.3), 4 p. m., piano recital, Adelaide Apfel and pupils; 7, dinner concert, Hotel Gibson orchestra: Robert Visconti, director; 10, three-minute message, Civil Service department, United States government; 10:03, The Doherty Melody Boys; 11, The Cino male quartet, Musicone trio.

WMAQ, Chicago, III. (447.5), 6 p. m., Chicago theater organ recital; 6:30, Hotel Lasalle orchestra; 8, garden talk, James H. Burdott; 8:15, financial talk; 8:30, Association of Commerce talk; 8:40, tafk, J. T. Palmer; 9, U. of Chicago lecture, Dr. Will; 9:20, musical program, Goorge T. Rees.

WMBB, Chicago, III. (250), 7-8 p. m., Trianon duo, Beatrice Teller, Lindsey McPhall, Paul Cadicux, Jean Ballard, Babbi and Barr, Mildred Matejka, Clarence Jacobs; 9-11, Trianon orchestra, Del Lampe, conductor; Bille Hoff; Woodlawn theater orchestra, Armin Hand, conductor; Jimmy Eggert, popular program.

WMC, Memphis, Tenn. (499.7), 8:30 p. m., Cooper's Hawaiians.

Hawailans.

WOAW, Omaha, Nebr. (526), 6 p. m., elassical; 7,
Randall's Royal Fontenelle orchestra; 9, Sunshine

Randall's Hoyal Fontence of Careau,
program,
WOC. Davenport, lowa (483.6), 7-7:30 p. m., Larkinites;
7:30, WEAF; 9-10, Silvertown Cord orchestra; 11-12,
LeCtaire hotel orchestra; Peter MacArthur, baritone
WOK. Chicago, III. (217.3), 10-1 p. m., Sandy Meek,
tenor; Harry Sonsik, planist; Herman Sinako, violinist; Harriet Leo, contralto; Bill Bourke, Sonny Brown;
Wildey and Sheehan; Banks Kennedy, organist; Bill
Hav. bass.

Wildey and Sincerco, Hay, bass, Hay, bass, WORD, Batavia, III. (275), 8 p. m., Webster hotel concert trie; 8:15, Sunday school lesson; 8:30, Chicago

WORD, Baravia, III. (273), 8 p. in., websiter notal concert trie; 8:15, Sunday school lesson; 8:30, Chicago Musical college.

WGJ. Chicago, III. (447.5), 7-8 p. m., dinner concert, Raiph Williams and his orchestra; Kenneth Sterling, Barltone; Tula Miller, soprano; Peggy Walbank, contralio; 10-1, Raiph Williams and his Rainbo Skylarks; Jerry Sullivan; Rose Vanderbosch, soprano and pianist; Hal Lansing, ukulele solots; Bert Davis; Rulph Kelm, planologist; Anne Kelm, mezzo-soprano;

Friday, October 23

Friday, slient night for: CHIC, CHNC, CNRC, CNRM, CNRO, CNRR, CNRW, KFMQ, KGO, KLDS, KOB, KPRC, KUOM, WBBR, WCBD, WEAO, WFI, WGBS, WIP, WRC, WLW, WRC, WREO, WSAI, WSMB, WSUI, WTAM.

Eastern Time Stations

CNRA, Moneton, Can. (291). 8 p. m., beddime story, Aunt 3da; 9, Ladles' double quartet; CNRA dance orchestra; Mrs. J. Chyde Stevens.
CNRT, Toronto, Can. (336.9) (330 p. m., Luigi Romanelli nad his King Edward hotel concert orchestra: Hart House string quartet; 1, Luigi Romanelli nad his King Edward hotel dance orchestra.
KDKA, Pittsburgh, Pa. (309.1), 6:15 p. m., dinner concert; 7:45, Radio chat No. 11, G. A. Scott; 9, Taberry time.

Teaberry time.

WAHG, Richmend Hill. N. Y. (315.6), 7:30-7:45 p. m., Ruth Haym, soprano; 7:45-8. Ulrich, Prendergast and Webb; 8-8:15. William Towson Taylor, bartione; 8:15-8:30, Serenaders Pleetrum quintet; 8:30-8:45, "Ereyday Speech," Professor Richard E. Mayne; 8:45-9, Ulrich, Prendergast and Webb; 9-9:15. William Towson Taylor; 9:15-9:45, Serenaders Pleetrum quintet; 9:45-9:55, Ruth Haym; 10:15-11:15, Andy Asciutto's Paragon orchestra.

WEZ, Springfield, Mass. (333.1), 6:30 p. m., Leo Reisman's Hotel Lenox ensemble; 7:05, members, Harvard glee club; 8, Alice Ruth Mulnily, soprano; Alwyn E. W. Bach, bartione; Frederick L. Wade, tenor; Frederick L. Wade, tenor; Frederick L. Wade, tenor; Frederick L. Wade, tenor; Schalb Marker Cusbling, violinist; 10:50, Mc-Enelly's Singing orchestra.

WCAE, Pittsburgh, Pa. (461.3), 6:30 p. n., dinner.

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J. OF MINNESOTA "PEP" FEST AT WAMD



DANCING

Central Standard Time
Saturday, October 17:
8. Kgw. Wgy. Wmbb,
Wpg. Wtas: 8:05, Wlp;
8:30 Webh, Wgy. Wsmb;
9. Weaf, Wmbf, Wmca,
Wdj, Wre, Wrco, Wtas:
9:30. Weee, Wges, Wgn,
Wljd, Wrc: 10, Kpo,
Kihs, Wahg, Wcco,
Wkre, Wmbf, Wreo, Wpg;
10:30, Webh, Wges; 11.
Kfwb, Koa, Wahg, Wcco,
Wra, Wjid, Wkrc, Woc;
11:15, Wdaf;
11:30, Wdaf;
12. Kgo, Kgw. Khj, Knx.
Monday, October 19:
8, Wkrc, Wmbb, Wtas;
8:30, Weaf, Wsmb;
8:45, Wor;
9, Wcae, Wgr,
Wmbf, Wtas;
9:05,
Wahg; 9:25, Klbs; 9:30,
Wcee, Wjid; 10, Kpo,
Wcr, Who, Wmbf, Woaw,
Wtan; 10:30, Wcee,
Wjid; 11, Wbo, Wkrc;
11:30, Wjid; 11:45, Wdaf.
Tuesday, October 20: Central Standard Time

Tuesday, October 20:

8. Wmbb, Wtas; 8:30, Weat, Webh, Wiji: 9, Wex, Weat, W. Wmaq, Whas; 9:30, Wrie. Wgs, Wgn, Wijd, at; 10. Whar, Wml 10:30, Webe, Webh, Wjid, Kfwb; 11:30, Wjid, Kgo.

Wednesday, Visber 21:

8. Kgw, Whad, Whi, Wats; 9:30, Krw, Weat, Webh, Wats; 9:30, Kft, Wee, Wgn, Wijd, Whre, Woat, Who, Wats; 3:30, Kyw, Weat, Webh, Wijz, Whre, Wmaq, Woo; Krw, Kyw, Weat, Wgs, Wgn, Wijd, Wtas; 10, Kfve, Kfwb, Kgw, Kgw, Weo, Who, Wmbf, Wtam; 10:30, Wes, Wgn, Wijd, Wijd; 11:30, Wges, Wgn, Wijd, Wijd; 11:30, Wges, Wgn, Wijd, Whas; 10, Kfve, Kfwb, Kgw, Kgw, Weco, Who, Wmbf, Wtam; 10:30, Wca, Wgs, Wgn, Wijd, Wijd; 11:30, Wges, Wgn, Wijd, Whas; 10, Kfve, Kfwb, Wes, Wgn, Wijd, Wree, Wgs, Wsmb; 11, Wijd; 11:30, Wges, Wgn, Wijd, Who, Wijd; 11:30, Wgn, Woat, Webh, Wmaq, Who, Wmbf; 10:30, Wca, Wsmb; 9, Weaf, Wsmb; 10:30, Wgn, Woat, Wsmb; 10:30, Wgn, Woat, Webh, Whn, Kin, Kpo, Wd.

Friday, October 23:

8. Kyw, Weae, Wear, Wear, Wear, Wear, Weat, Webh, Whas, 10:30, Kyw, Weau, Woo; 9, Kyw, Weau, Woh, Whas; 3:0, Kyw, Weau, Webh, Whn, Whas; 300, Kyw, Wear, Wer, Wear, Wribf; 10:30, Webh; Min, Whas; 30, Wgn, Won, Wcn, Wcn, Wen, Wijd, War, Wijd; 11:50, Waff, Waff,

espal Atlantic City high school; 8:15, studio program; 9, Hotel Ambassador concert orchestra; 10:30, Silver

Slipper.
WRC, Washington, D. C. (469), 5 p. m., WRC's foolish entertainers; George F. Ross and Ellsworth Tompkins;

entertainers; George F. Ross and Ellsworth Tompkins; 6, book roviews.

WTIC, Hartford, Conn. (475.9), 6:30 p. m., Young People's half hour; 7, dinner music, Emil Heinberger's Hotel Bond trio; 7:30, dinner music: 8:30, Travelers Laddes' quartet; Sylvia L. Richard, planist; Mary Zoller, Erlau H. Wilcox, sylophonists; 10:05, Hotel Bond orchestra; 11:30, popular period; Mary Zoller, xylophonist; Ed. F. Mahoney, tonor; Helen I. Dischert, ukulele soloist.

WWJ, Detroit, Mich. (352.7), 6 p. m., dinner concert; 8, News orchestra; 9, dance program.

Central Time Stations KFAB, Lincoln, Nebr. (340.7), 5:30-6:30 p. m., Bulck Little symphony; Belshaw's orchestra; 8:30-10:30, Utica

band. KFMX, Northfield, Minn. (337), 10-11 p. m., organ

recital.

KFNF, Shenandoah, Iowa (266), 7 p. m., Sunday school
lesson; 7:30, concert. Wichney sisters.

KFVE, University City, Mo. (240), 10 p. m., Olla
Gibson and Henry Miller, entertainers; Orchestra

Gibson and Henry Milier, entertainers, Ordersean Romaine,
KMA, Shenandoah, lowa (252), 9-11 p. m., musicale,
May Seed and Nursery company.
KSD, St. Louis, Mo. (545.1), 7:30 p. m., "Commerce
Hour," John Herget, 8:30, Nolte's dance orchestra.
KTHS, Hot Springs National Park, Ark. (374.8), 9-9:10
p. m., football results; 9:10-10, Meyer-Davis saxophone
tra; Lawson Reid, organist, Meyer-Davis saxophone
trio; 10-10:30, Southerners' orchestra.

trio; 10-10:30. Southerners' orchestra.

KYW, Chicago, Ill. (535-4), 6:35-7 p. m., bedtime story, Uncle Bob; 7-7:30, dinner concert, Congress hetel; 7:30-8:30, Home Lovers' hour; 10-12:30, rovue; Coon Sanders Original Nighthawks; Albert Hay Malotte, organist.

WAMD, Minneapolis, Minn. (243.8), 6 p. m., George Osborn's orchestra: 7, musical program, Minneapolis public schools; 8, football pep fest; 8:15, Minnesotal male quartet; 10:30, Radisson Rondevoe.

quartet; 10:30, Radisson Rondevoo.

WBBM, Chicago, III. (226), 8-10 p. m., instrumental quartet; Leona Hayes, harpist; Devon Comedy four; Lew Russell; Pete Kules; Montmartre orchestra.

WCCO, Minneapolis-St. Paul, Minn. (416.4), 6:10 p. m., Biley's St. Paul hotel orchestra; 7:30, Minneapolis Community fund talk; farm lecture, dairy ferming, lesson 1; 8, musicale; 10:05, Arnold Frank's St. Paul hotel orchestra.

WDAF, Kansas City, Mo. (365.6), 6-7 p. m., address; Tell-Me-a-Story lady; Trianon ensemble; 8-9:30, Star's Radlo orchestra; Trianon ensemble; 8-9:30, Star's Radlo orchestra; Eddio Kuhu's Kansas City Athletic club orchestra; Earl Coleman's orchestra; Earl Coleman's orchestra; Earl Coleman's orchestra; Earl Coleman's orchestra; C

chestra.

WEBH, Chicago, III. (370.2), 7-8 p. m. Oriote orchestra; Uptown theater; 9-10, Oriote orkatherine Forbes, soprano; Beulah Ladon, violinist;
10-1 a. m., Oriole orchestra; tstories, Wayne Myers;
Paul Small.

Richerine Forbes, soprano; Beulah Laiton, violinist; 10-1 a. m., Orlote orchestra; Stories, Wayne Myers; Paul Small. II. (266), 6-7 p. m., Rauland lyric tho; Russell Hendrickson, cellist; Mario Tulley; 8-10, Frank Westphal nad ihis All-American Pioneers; Grace Hegseth; Floyd Fatch; 12-2, midnight frolic. WFAA, Dallas, Texas (475.9), 6:30-7:30 p. m., Hauulea School of Hawaiian Music; 8:30-9:30, Daisy Polk, soprano; Mrs. Juanita Blair Price, pianist. WGES, Oak Park, III. (250), 7-9 p. m., John Rankel, baritone; Ruth Kalthoff, soprano; Emma Butler, contralto; Gladys Welge, violinist; John Stamford, tenor; 6:45-7, lecture, E. L. Richards; 11-2 a. m., Novelty Broadcasters' orchostra; Mario Wright, Evans Lloyd, Coyne Banjo trio; Kenneth Nelson. WGN, Chicago, III. (370.2), 6:30-7:30 p. in., Drake concert ensemble, Blackstone string quintet; 8-9, WGN string trio; 10-11, jazz scamper program, Jack Chapman's and Blackstone dance orchestras. WHAD, Milwankee, Wis. (278), 6-7 p. m., Arthur Richter, organist; 7:05, Bill Juhre's Radio Cartoon game; 8:30-10, Wisconsin thoater revue.

WHAS, Louisville, Ky. (399.8), 7:30-9 p. m., concert, Louisville Music and Radio company; Gene Klingman, director; Sara King, piantst.
WHB. Kansas City, Mo. (365.6), 7-8 p. m., Sweeney orthorizm

who, Katsas City, wo. (505.0), 7.8 p. ii., Sweeney orchestra;

WHO, Des Moines, Iewa (526), 7.30-9 p. m., program, Palo Alto Grange orchestra; 11-12, dance program.

WLS, Chicago, Ill. (344.6), 6.30 p. m., Raiph Emerson, organist; 7, lullaby time; 7:15, "Southern Sonras," Rex Maupin, director; 7:45, Ruth Olt, soprano; 8, R. F. D. program; Evans Brothers quartet; 9, Abe Lyman's College Inn orchestra; 10; Rodelieaver hour, Vivian Tripp, director; 10, College Inn orchestra; 10:10, Alice LaTarte, planist; 10:25, Evans Brothers' quartet.

WMAQ, Chicago, Ill. (447.5), 6 p. m., Chicago theater organ; 6:20, Family Altar league; 6:30, Wide-Awake club program; 8, musical lecture, Mr. and Mrs. Marx E. Obendorfer; 8:30, Whithey trio; 9, U. of Chicago lecture; 9:20, Ellzabeth Stokes, soprano.

WMBB, Chicago, Ill. (250), 7-8 p. m., Trianon duo. J. Bodewalt Lampe, Beatrice Teller, Florence Rush, Joel Lay, Jean St. Anne; 9-11, Trianon orchestra, Dell Lampe, conductor; Edward Hines, Morey Alswang, Jack Murnane, Cecil and Esther Ward, Stokes and Agne.

Agne.

MMC, Memphis, Tenn. (499.7), 8:30 p. m., Atwater
Kent Radio company; 11, midnight frolic.

WOAW, Omaha, Nebr. (526), 6 p. m., music review,
Hester Bronson Copper; 6:40, Gilbert Jaffy and his
Bittle symphony; 7:10, sport talk, Ivan L. Gaddis; 9,
DeLuxe program.

Bittle symphony; 7:10, sport talk, Ivan J. Gaddis; 9, DeLuxe program.

WOC. Davenport, lowa (483.6), 8:10 p. m., musical program, Schmidt Music House concert orchestra.

WOK, Chitago, III. (217.3), 10-1 p. m. Harry Davis, tenor; Hermun Sinaiko, violinist; Harriet Lee, contralio; Haymakers trio; Berger Wedberg, tenor; Arnold B. Stephenson, musical saw solds!; Rosemary Hughes, soprano; Ed Kemp, tenor; Banks Kennedy, organist; LeRoy North, planist.

WORD, Batavia, III. (275), 8 p. m., Webster hotel concert trio; 8:15, WORD Radio study club; 8:30, 1. B. S. A. orchestra.

WOS, Jefferson City, Mo. (440.9), 8 p. m., "The How and Why of Radio Market News," Homer L. Gobble; musical program, Helen Tolson.

WOJ, Chicago, III. (447.5), 7-8 p. m., Ralph Williams and his Rainbo Gardens orchestra; Everett G. Mitchell, bartione; Blanche Robinson, pianist; Maryl Larson, soprano; 10-1, Ralph Williams and his Rainbo Skylarks; West brothers, Hawaiian guitarists; H. Luelle Long, harmonica player; Parrish and Ward, harmony singers; Larry Shay; Keithley and Kauffer, singing



and playing; Electa Kind, soprano; Ed McGinnis, piano-accordionist; Lean Terrill, baritone; 1-2, Ginger hour,

Mountain Time Stations
CNRE, Edmonton, Can. (516.9), 8:30-10:30 p. m., studio concert, Mrs. Hale, director, mandolin, guitar and banjo orchestras.

KFAU, Boise, Idaho (278), 8 p. m., recital, Mrs. Leslie

KFWA, Ogden, Utah (261), 9-10 p. m., studio program KOA, Denver, Colo. (322.4), 6:30 p. m., Herbert White and his Silver State orchestra; 7:30, Sunday school lesson; 8, scientific football, Tom McKamara; 8:10, dramatic features, Denver Community players; "The Man In the Stalls," "The Wonder Hat," "Her Tongue."

Pacific Time Stations

CNRV. Vancouver, Can. (291), 8 p. m., "Big Game Hunting in Canada," H. H. Melanson; 8:30, Signey G. Horton, barthone; Durothly Notizel, planist; Betty Newton. violinist; Betmont Cabaret orchestra.

KFOA, Seattle, Wash. (454.3), 6:45-8:15 p. m., Sherman, Clay and company studio program; 8:30-10.

Times studio program; 10-11:30, Eddio Harkness and biscontinuous.

this orderstra. Calif. (238), 5-6 p. m., home hour. KFPG. Hollywood, Calif. (238), 5-6 p. m., home hour. Georgia Shumnons and naborhood children; 8-9. KFPG concert hunr; 9-11, Freeman Lang and bls playmates.

a frolic.

KFWB, Hollywood, Calif. (252), 7:30 p. m., microplone brevittes; 8-9, California serenaders' dance orchestra, George Cronk, leader; Ray Kellorg and Bill Hatch, the Jacz twins; 9-10, program, Paralla Photostrupic studios, Paralla orchestra, Drove Norton Lindsay, baritone; 10-11, Warner brothers' frolic, directing, Charlie Wellman.

KGO. Oakland, Calif. (361), 6-7 p. m., dinner concert, Sherman, Clay and company, Company, 10:30-12, Hoot Owls; Rose City trio, Partuges acts.

Clay and company; 10:30-12, Hoot Owls; Rose City trio, Partages acts.

KHJ. Los Angeles, Calif. (405.2), 5:30-6:30 p. m.. Leighton's Areade cafeteria orchestra, Jack Cronshaw, leader; 6:30-7:30, history story, Prof. Watter Sylvester Hertzog, Simon Waronker, 10-year-old violinis; Bottlemae Pfefferkorn, readings; Mickey DeLano, pianlst; 8-10, program, Western Auto Supply company, arranged by J. Howard Johnson in memorium to father of Joseph Heindle, concert cellist; 10-11. Art Hickman's Biltmore hotel dance orchestra, Frank Ellis feader.

(Continued on page 14)

Index to Classical Concerts

T ABULATED below is a time table of the stations giving classical concerts this week. Stations are divided into the four different standard times in use. The hours are given in the kind of time in use at each listed station. By using this table as an index and referring to the complete programs below, full information will be obtained.

Classical

Eastern Time Stations

Saturday, October 17: 6, WCX, WEAF, WMCA, WREO; 6:17, WOR; 6:30, WCAE; 7, WEAR, WNYC, WRC; 7:15, WEAF; 7:35, WEAF; 8, WBBR, WNYC; 8:15, WRC; 8:30, WCAE; 8:40, WBBR; 9:30, WEAF; 10 WEAF 10. WEAF.

Sunday, October 18: 6, WCAU; 6:30, WCAE, WOR; 7, WEAR; 7:20, WCAE, WCTS, WEAF, WEEI, WWJ; 8, WEIS, WEAF, WEEI, WWJ; 8, WBZ, WEAR, WGBS, WGCP, WKAQ; 8:30, KDKA, WBZ, WGCP; 9, WBZ, WEAR, WGY, WHAR, WNYC; 9:15, WCAE, WCTS, WEAF, WEEI; 9:20, WNYC; 9:45, WCTS, WGCP; 10, WNYC; 11, WHN; 11:15, WHAR.

WNYC; 11, WHN; 11:15, WHAR.

Monday, October 19: 6, WCX, WEAF, WMCA, WREO, WWJ; 6:05, WIP; 6:30, CFCA, WBZ, WCAE, WGY, WTIC; 7, WEAF, WEAR, WJR, WOO; 7:15, WEAF, 7:30, WEEI, WGY, WMCA; 8, WBBR, WBZ, WCAU, WCX, WHAR, WTIC; 8:15, WBZ, WHAZ, WNYC; 8:30, CHNC, KDKA, WBBR, WBZ, WGCP; 8:45, WEAF, WOO; 8:55, WBBR; 9, WBZ, WCAE, WEEI; 9:10, WLIT; 9:15, WGCP; 9:30, WBZ; 10, CHNC, WEAF, WOO; 10:10, WEEI; 10:15, WOO; 10:30, KDKA; 10:40, WEEI; 11, WHN.

WHN.

Tuesday, October 20: 6, WBZ, WCX, WEAF, WMCA, WREO, WWJ; 6:05, WIP; 6:17, WOR; 6:30, WCAE, WGY, WTIC; 7, WEAR, WEBJ, WGBS, WJR, WOR, WTIC, WWJ; 7:20, WTIC; 7:30, WCAU, WEAF, WOO; 7:45, WEBJ; 8, WBZ, WCAE, WCAU, WCX, WEAR, WEEI, WGR, WHAR, WRC, WTIC; 8:05, WNYC; 8:15, WEBJ; 8:30, KDKA, WBZ, WCAE, WCTS, WEAF, WEEI, WFI, WGR; 9, WCAE, WCTS, WEAF, WEEI, WFI, WGR; 9, WCAE, WCTS, WEAF, WEEI, WFI, WGR; 9:15, WREO; 9:30, WBZ, WHN, WRC, WTIC; 10, WCAE, WCTS, WEAF, WEEI, WFI, WMCA; 10:30, WGR; 11:15, WHAR.

Wednesday, October 21: 6, WCX, WEAF, WMCA, WREO, WWJ; 6:05, WIP; 6:30, WBZ, WCAE, WTIC; 6:45, WGY; 7, WEAR, WJR; 7:20, WTIC; 7:30, WEAF, WEEI, WOO; 8, WBZ, WCTS, WCX, WEAF, WEEI, WKAQ, WMCA, WWJ; 8:05, WNYC; 8:15, WCAU, WOR; 8:30, KDKA, WBZ, WCAU, WOR; 8:30, KDKA, WBZ, WCAE, WEAF, WOO, WOR; 8:45, WBZ, WCAU, WEBJ; 9, WBZ, WEEI, WGR, WOR; 9:15, WBZ, WCAU; 9:30, WNYC; 9:45, WOR; 10, WEAF, WEEI, WGR, WNYC, WOO; 11, WCAE.

WCAE.

Thursday, October 22: 6, WBZ, WCX, WEAF, WMCA, WREO, WJ; 6:05, WIP; 6:17, WOR; 6:30, WCAE, WGBS, WGY, WOR, WTIC; 7, WEAF, WEAR, WGBS, WJR, WWJ; 7:30, WCAU, WEEI, WHN, WOO, WRC; 7:45, WGY, WTIC; 8, WBBR, WBZ, WCAU, WCX, WEAR, WEEI, WHN, WIP, WTIC; 8:15, WNYC; 8:30, KDKA, WBZ, WCTS, WEEI, WHN, WMCA, WBZ, WCTS, WEEI, WHN, WMCA, WBCO; 8:40, WBBR; 8:45, WBZ; 9, WCAE, WCAU, WEAF, WEEI, WFI, WGR, WHAR, WNYC, WREO; 9:30, WREO; 10, WCAE, WCAU, WCTS, WEAF, WEAR, WEEI, WGR, WGY; 10:15, KDKA; 11:30, WGY.

Friday, October 23: 6, WCX, WMCA, WREO, WWJ; 6:05, WIP; 6:30, CNRT, WBZ, WCAE; 7, WEBJ, WGY, WJR, WOR, WTIC; 7:30, WEEJ, WOO, WTIC; 7:46, WEBJ; 8, WAHG, WBZ, WCAU, WCTS, WCX, WEBJ, WEEJ, WTIC, WWJ; 8:05, WNYC; 8:10, WHAR; 8:30, KDKA, WCAE, WEBJ, WOO; 8:45, WAHG, WBZ; 9, CNRT, WBZ, WCAU, WEEJ, WMCA, WOO: 9:30, WEEI; 10, WEEI, WNYC, WOO; 10:30, WGR, WGY; 11:15, WHAR. WHAR.

Central Time Stations

Saturday, October 17: 6, KFAB, WENR, WMAQ, WOAW, WOK; 6:15, WCCO; 6:30, WGN; 7, KOIL, KSD, KYW, WGN, WMBB, WQJ; 7:30, WEBH, WHAS; 8, KFNF, KPRC, KYW; 8:15, WCCO; 8:30, KYW, KPRC, WFAA, WHAS, WMC; 9, WKRC, WMAQ, WOAW, WOC; 9:15, KPRC; 9:30, WOC.

Sunday, October 18: 6:30, KLDS, WHT; 6:45, WORD; 7, KYW, WLS, WORD; 7:30, WHO; 8, KFDM, KPRC, WCBD, WFAA, WGN, WQJ; 8:30, WLW; 9, WQJ; 9:10, KTHS; 9:15,

KLDS, WCCO, WHT; 9:25, KTHS; 9:30, WFAA, WOC; 10, KFVE, KTHS, WOC; 10:30, WHT; 11, WOC.

Allen Ager parter

Monday, October 19: 6, KFAB, KMA, WHAD, WOAW, WOK; 6:30, WGN; 6:45, WOAW; 7, KFNF, WHT, WLW, WMBB; 7:30, KOIL, KPRC, WBAP, WHO; 8, KPRC, WHAD, WHO, WLW, WORD, WOS; 8:30, KPRC, WBAP, WFAA, WMC, WOAI; 9, KFKX, KMA, KPRC, KSD, KTHS, WHAD, WOAW; 9:30, KTHS; 9:45, KTHS; 10, KFKX, KMA, KTHS, WSAI; 11, WBAP, WSAI.

WSAI; 11, WBAP, WSAI.

Tuesday, October 20: 6, KFAB, KMA, WHAD, WMAQ, WOK; 6:05, WCCO; 6:30, WFAA, WGN, WLW; 6:45, KSD; 7, KFNF, KYW, WHT, WLS, WMBB, WQJ; 7:30, KOIL, WCCO, WHAS, WHO, WOC; 7:45, WSAI; 8, KFDM, KLDS, KYW, WCBD, WCCO, WLW, WMAQ, WOC, WORD; 8:30, KPRC, WGN, WLW, WMC, WOAI, WORD; 8:45, KYW; 8:50, WMAQ; 9, KFDM, KFMQ, KMA, KPRC, KTHS, WCCO, WHAS, WLW, WOC, WSAI; 9:25, KTHS; 9:30, WBAP; 10, KMC, KYW, WSAI; 11, WHO.

WHO.

Wednesday, October 21: 6, KMA, WHAD, WMAQ, WOK; 6:15, WLS; 6:30, KOIL, WGN, WHO; 7, KFNF, KPRC, KYW, WHIT, WLW, WMBB, WQJ; 7:30, WHAD; 8, KPRC, KYW, WCCO, WDAF, WHAD, WMAQ, WOS, WORD; 8:30, PWX, KPRC, WGN, WOAI; 9, KMA, WCCO, WHAD, WLS, WMAQ, WOC; 9, KTHS; 9:25, KTHS; 9:30, PWX; 9:45, KTHS; 10, KMA, KTHS, WLS, WLW, WOC, WSAI; 10:10, WSAI; 10:30, WLW; 11, WHAD, WLW; 11:20, WCCO, WLM; 11:45, WLW,

Thursday, October 22: 6, KMA, WHAD, WMAQ, WOAW, WOK; 6:30, WGN; 7, KYW, WHT, WLS, WLW, WMBB, WOAW, WQJ; 7:30, KFNF, KOIL, WHAD, WHO, WSAI; 8, KLDS, WBAP, WCBD, WCCO, WOC, WORD, WSAI, WSB; 8:20, KYW, WMAQ; 8:30, KPRC, WFAA, WGN, WHAD, WMC, WOAI; 8:35, WMAQ; 9, KPRC, KTHS, KYW, WCCO, WHAD, WOAW, WOC, WSAI; 9:10, KTHS; 9:30, WBAP; 9:45, KTHS; 10, WBAP; 10:40, WLW; 11, WHO.

Friday, October 23: 6, WHAD, WMAQ, WOAW, WOK: 6:15, WCCO; 6:30, WGN: 6:50, WMAQ; 7, KYW, WHT, WLS, WQJ; 7:30, KFNF, KOIL, KSD, KYW, WBAP, WHAD, WHO: 8, KFDM, WCCO, WDAF, WHAD, WMAQ, WMAQ, WMAQ, WMAQ, WMAQ, WMAQ, WMAQ, WMC, WORD; 9, KFDM, KFKX, WHAD, WMAQ; 9:05, WCCO: 9:10, KTHS: 9:30, KFAB, KTHS, WBAP; 9:45, KTHS; 10, KFKX.

Mountain Time Stations Monday, October 19: 6:30, KOA; 8:10, KOA.

Tuesday, October 20: 6:30, KOA; 7:30, KOA.

Wednesday, October 21: 6:30, KOA; 8:10, KOA. Thursday, October 22: 6:30, KOA; 9, CNRC.

Friday, October 23: 6:30, KOA; 8:10, KOA; 8:30-10:30, CNRE.

Pacific Time Stations

Saturday, October 17: 6, KFOA, KHJ; 6:30, KNX; 6:45, KFOA; 7, KNX; 7:30, KNX; 8:10, KGO; 8:15, KHJ.

Sunday, October 18: 6:30, KHJ; 6:35, KPO; 9, KHJ, KNX; 10, KNX.

Monday, October 19: 6, KFOA, KGO; 6:30, KNX; 6:45, KFOA; 7, KPO; 7:30, KNX; 8, KGW, KHJ; 9, KGW; 10, KHJ.

Tuesday, October 20: 6, KFOA, KGO, KHJ: 6:30, KNX; 6:45, KFOA; 7, KNX; 8, KGO, KHJ; 8:30, KFOA; 9, KGW, KPO.

Wednesday, October 21: 6, KFOA, 8:30, KNX; 7, KNX; 8, KGO, KGW, KPO; 9, KGW, KPO.

Thursday, October 22: 6, KHJ; 6:30, KNX; 7, KNX; 8, KGO, KPO; 9, KGW, KPO.

Friday, October 23: 6, KEOA, KGO, KHJ; 6:15, KPO; 6:45, KFOA; 7:30, KFAE, KNX; 8, KHJ, KNX, KPO; 8:30, KFAE; 9, KPO.

STATIONS IN ORDER OF WAVE LENGTHS USED

Meters Call	Meters Call Met	ers Call Meters Cal	l Meters Call	Meters Call
215 KTAB	275.3 WJAS 315.	6 WGBS 365.6 WHI		475.9 WBAP
21,7.3 WOK	278 KOLL 319	WGR 370 CY		475.9 WTIC
226 WBBM	278 WCAU 319	WSMB 370.2 WEBE		475.9 WFAA
226 WIBO	278 WOQ 322.			
240 KFVE	280.2 WNAC 325.			480 CYL 483.6 WOC
240 WOAX	282.8 WOAN 330	CYX 379.5 WGY		483.6 WSUI
243.8 WAMD	285.5 WKAR 333.	1 WBZ 379.5 WHAZ		491.5 KGW
250 WGES	285.5 WREO 336.	9 KNX 384.4 CKY		491.5 WEAR
250 WMBB	288.3 KFKX 337	KFMX 384.4 KJF		499.7 WMC
252 KFWB	288.3 WLWL 340.	7 KFAB 384.4 WMBE		508.2 KLX
252 WGCP	293.9 KJS 340.	7 WKAQ 389.4 WEAT		508.2 WIF
266 KFNF	293.9 WBAV 340.	7 WMCA 389.4 WTAM		508 2 WOO
266 WBCN	293.9 WEAO 344.	6 WCBD[394.5 WF]		516.9 CJCA
268 WCTS	296.9 KPRC 344.	$6 \mathrm{WLS} 394.5 \mathrm{WLTT}$		
272.6 WBBR	299.8 KFMQ 348.	6KOB 394.5 WOA	. 271.0 WALMQ	
272.6 WEBJ	299.8 KSL 348.6	KWSC 399.8 WHAS	441.0 WQ.I	516.9 WJR
272.6 WFBH	299.8 WPG 348.0	WEEI 399.8 WHT	(494.5 KFOA	526 WHO
273 KWKH	302.8 W.IJD 352.7		454.3 WJZ	526 WNYC
273 WRW	305.9 KTCL 356.9		455 KTW	526 WOAW
275 WHAD	305.9 WJAR 356.9		461.3 WCAE	535.4 KYW
	309.1 KDKA 361.2		467 KFI	535.4 WHA
	315.6 KFDM 361.2	2 WHN 406 WEAR	468.5 WCAP	545.1 KFUO
275 WORD	315.6 WAHG 365.6	WDAF 410.7 CKAC		
<u> </u>				545.1 KSD

WORLD COURT TALK NEW WLIT FEATURE

"CRIME PSYCHOLOGY" ALSO EDUCATIONAL SUBJECT

Philly Station Maps Out Several Big Educational Projects for Coming Radio Season

PHILADELPHIA .- Station WLIT, one of this city's five big broadcasting sta-tions, has completed arrangements for the broadcasting of a number of big educabroadcasting of a number of big educational features during the coming winter. One of the biggest, will be the broadcasting of six talks on the "World Court and Its Present Status in the Senate," under the auspices of the Women's International League for Peace and Freedom. The speakers will be of national and international prominence, and authorities on this particular subject

ternational prominence, and authorities on this particular subject.

Then, there will be a series of lectures on the "Psychology of Crime," conducted by Robert Edwin Pride, author, who has spent a number of years investigating various prisons and penitentiaries. One of the speakers will be "Bob" M. Mc-Kenty, former warden of the Eastern penitentiary, who has carned a national reputation through his fair dealing in penal matters. It is also hoped that Clarence Darrow, the famous Chicago lawyer, will be able to broadcast a talk on the psychology of crime. He was to have talked through WLIT's microphone last year, but the Loeb-Leopold case necessitated the cancellation of the engagement. gagement

Current Events and Forum

Current Events and Forum
Dr. George Earl Raiguel, lecturer at
Columbia university, will continue his
series of talk on "Current Events." Dr.
Raiguel is an international traveler, noted
for his clear, concise talks about things
happening today.
The Sunday avening for

happening today.

The Sunday evening forum will again come into being with the beginning of the winter season. These meetings, so popular last year, are conducted along the lines of the "round table" idea. A subject is chosen, and then the speakers "round the table" give their individual and extemporaneous views, without referring to specially prepared papers on the subject. Everything is spontaneous and more or less argumentative.

to specially properties.

ject. Everything is spontaneous and more or less argumentative.

The establishment of a Friendly Aid bureau for people in distress, is another feature, to say nothing of a series of five concerts by the Friends of Chamber

There will also be a Radio study class on music and music appreciation, to be broadcast biweekly. The classes will be conducted under the auspices of the National Endoportion of tional Federation of Music, and it is hoped that Francis Elliot Clark, of the Victor Talking Machine company, will be able to conduct these classes.

Plan Half Hour Programs to Feature Famous Composers

FEMALE FAMOUS COMPOSETS
PITTSBURGH.—"Half hours with
famous composers," a weekly program
taking up the life story of noted musicians and giving some of their best
loved music, is being given over Westinghouse Station KDKA on Thursday eve-

Friday, October 23

(Continued from page 13)

(Continued from page 12)

KNX, Hollywood, Calif. (336.9), 5:30-6:15 p. m., Wurflizer pipe organ studdo. Town Tatiber: 6:15, traveitalk, W. F. Alder: 6:30-7, Alwaler Kent Radio orchestra, Paul Finstein, leader: 7-7:30, dinner music.
7:30, program, Eastern Outfitting company; S-9, West
Coust theaters by remote control: 9-10, Order of
Optomistic Donuts: 10-11, dance music: 11-12, Ray
West's Coconnut Grove dance orchestra from Amhassador hotel.
KPO, San Francisco, Calif. (428.3), 8-11, Palace hotel
dance orchestra.

dance orehestra. KTAB, Oakland, Calif. (215), 8-10 p. m., program

KTAB, UARMIN, Carl. (1975). Reuner's.

Breuner's.

KTCL, Seattle, Wash. (305.9), 7-8 p. m., Simonds Saw and Steel company; 9-10, Western Auto Supply company; 10:15-12, Jackie Souder's dance orchestra.

KWSC, Pullman, Wash. (348.6), 7:30-9 p. m., Cooper sisters, marimba trio; talk, Rev. Norman McCay; 'Dressing up the Farmstead for Winter,'' M. D. Armstrong.

Daggett and Artists Go on Hawaiian Trip

Chose KHJ Entertainers to Accompany Chamber of Commerce

LOS ANGELES.—Another honor has been conferred upon KHJ, Los Angeles Times station. "Uncle John" Daggett, veteran studio director of that station, and four musicians who appear regularly there have been selected by the Los Angeles chamber of commerce to accompany them on their annual excursion to the Hawaiian islands.

Hawaiian islands.

The lucky ones, in addition to Mr. Daggett, are Mary Newkirk Bower, soprano; Bernice Neal, cellist; Helen Mead Little, flutist, and Carolyn Le Fevre, violinist.

This annual excursion by the world's most energetic chamber of commerce is one of the big events of the southern California fall season. The party set sail on October 10 on the steamship City of Los Angeles which arrives at Honolulu October 16.

During their stay on the beautiful

During their stay on the beautiful islands the KHJ party will broadcast over KGU, the Honolulu broadcaster heard regularly on the Pacific coast.

WDAF POWER GOES IN 1,000-WATT CLASS TOO

Double Old Strength of Kansas City Star Plant

KANSAS CITY, Mo.—The Kansas City Star has announced the installation of a new and more powerful broadcasting sta-tion. The new transmitter now being

new and more powerful broadcasting station. The new transmitter now being installed is one thousand watts power, twice the power of the present WDAF set. The 1,000-watt station will be entirely new. The towers and antenna above the Star building will be the only part of the old equipment to remain. The 500-watt station now used by WDAF has been sold to the Hotel Lassen at Wichita, Kan. The old transmitter has an enviable record for distance. It was heard five times in London last year. It has also been received in South America, Australia and Alaska.

Something New for Kiddies in CNRW Radio Mystery Bag

WINNIPEG, Canada.—Youthful Radio inghouse Station KDKA on Thursday evenings at 8:30 eastern time.

Richard Kountz, a Pittsburgh composer, is telling the Radio audience about the life of the different composers taken up in this series, while the KDKA Little Symphony orchestra and vocal soloists

The Royal of the Mission of the Canadian national states of the Canadian national state fans found a new interest in listening station in the Fort Garry hotel.

The party was limited to children under

Install Radio Amplifiers

in Italian Senate Building

ROME.—Radio amplifiers have been installed in the Italian senate. The speeches from the government bench will be heard in the antercoms and notices broadcast throughout the building indicating the beginning of each speech with the subject and name of the speaker.

The party was limited to children under eight years of age, and was the first of many to be held during the next few asent to Station CNRW during the broadcast is all that is necessary in the way of entrance fee, and the initial experiment along this line brought a flood of messages to the studio which kept Aunt Aimee busy for hours distributing prizes to the little fans.

AN EVENING AT HOME WITH THE LISTENER IN IN CENTRAL TIME

5							TITAL	I IIVIL			. `
2	11-	Call	Location	Me	Saturday	Sunday	Молday	Tuesday	Wednesda	y Thursday	Friday
7	0	T9 FCA	Fort Bragg, N. Toronto, Ont	356.	9 Silent	5:00- 6: 7:00- 8:		Silent	Silent	7:00- 8:5	Silent
I		FCN HNC		356.	5 11:00- 1:0 9 Silent		SIlent 7:00- 8:0	Silent	7:15-10:4 Silent	9:00-10:00	Silent
7	c	JCA KAC	Edmonton, Can Montreal, Que.,	516. 410.	9 10:00-12:0 7 6:30-10:0	00 8:30-9;	30 8:30-10:3 Silent	0 Silent 0 8:30-9:		8:00-9:00 0 10:00-12:00	9:00-12:00
	ن ا	NKO K^	Winnipeg, Man Ottawa, Ont	384.	4 6:30 - 8:1	5 7:00- 9:	45 Silent Silent	8:30-10:	i5 Silent	7:30-10:00 8:00- 9:00	8:30- 9:45
)	C	YE.	Mexico City, M Mexico City, M	ex 370	10:30-11:4		Silent	Silent 9:15- 10:		Silent	Silent Silent
] c	YX DKA	Mexico City, M	6x 330	Silent	Silent	9:15-10:3		Silent Silent	Silent	8:00- 9:30 9:15-10:45
t)	K	FAB	Lincoln, Nebr	340.	7 5:30- 6:3	0 4:00- Б:	00 5:30-10:3			5 7:00-10:30	7:45- 8:55
,	K	FDM Fl	Los Angeles, Ca	tiii. 467	8:45- 2:0	8:00- 9:0 0 6:00- 1:0		8:00-10:3 8:45-1:0	80 Silent	Silent	5:30-10:30 8:00-10:30
7	K	FKX FMQ	Hastings, Nebr. Fayetteville, Ar			Silent Silent	9:00-11:00 Silent		Silent	Silent	9:00-11:00
	K	FNF	Shenandoah, 1a. Seattle, Wash	266	7:30-9:3		7:30-9:30 8:00-12:00	7:30-9:8	0 7:30-9:30	7:30-9:30	
)		FVE	St. Louis, Mo Univ'ty City,		Silent	8:15- 9:1	8:00- 9:00	Silent	9:15-10:1		8:00- 1:30 Silent
_	K	FWB GO	Hollywood, Cali Oakland, Calif	1 252	10:00- 1:0	0 11:00- 1:0	9:00-1:00	9:00-1:0	0 10:00-12:0 0 9:00- 1:0		10:00-12:00 10:00- 1:00
	∐ ĸ	GW FMX	Portland, Ore	491.	12:00- 2:0	0 9:45-11:0	0 8:00-9:00		0 8:00- 9:0) 10:00-2: 00	8:00- 9:00 11:00-12:30
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or. ie	· 🗀	NX NX	Oakland, Calif Hollywood, Calif	336.9	7:80- 4:00	Silent 9:00-12:5	8:00- 1:00 8:30- 2:00	Silent	8:00- 1:30	Silent	Silent 8:00-12:30
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141 11-	K1	CL.	Seattle, Wash	305.9	Silent 8:50- 2:00		0 Sllent	9:00-10:0	0 11:00- 1:00	11:00- 1:00 Silent	10:00-12:00 9:00- 2:00
er	KI	rH8 rw	Hot Springs, Arl Seattle, Wash		9:25-11:00 Silent	9:25-11:0		9:25-10:4	9:25-10:45	9:25-10:45	9:25-11:00
D.	100		Shreveport, La Pullman, Wash.	261	9:00-12:00 Silent		10:06- 3:00 9:30-11:00	Silent 9:00-12:00	CITOTIC	Silent 8:00-9:00	Silent Silent
		rw	Chicago, III Radie, Va	535.4	7:00-10:00	4:00-9:30	Silent	Silent 7:00-12:30		Silent 7:00-11:30	9:30-11:00 7:00-12:30
	Þ٧	٧X	Havana, Cuba Richmond, N. Y.	400	Silent 7:30-10:00		6:45- 7:00 Silent	6:45- 7:00 Silent	6:25- 7:40 7:30-10:00	6:45- 7:00 Silent	6:45~ 7:00 Silent
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-	WE	BBM	Columbus, O Chicago, III	226	Silent 8:00- 2:00	Silent 4:00-2:0	7:00-9:00 Silent	Silent 8:00-12:00	Silent	Silent	7:00~ 8:00
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s s	WE	AE	Springfield, Mas: Pittsburgh, Pa	461 2	Silent 7:30-8:30	6:00-8:4	5:00-8:55	5:00-8:55 7:00-10:00	5:00-8:55	9:00 - 2:00 5:00 - 8:55	9:00- 1:00 5:00- 8:55
t,			Washington, D. (Philadelphia, Pa	468 5	Silent Silent	3:00- 8:10 4:00- 5:15	G:00- 9:30	Sllent 6:20-10:30	6:00- 9:30	8:00-10:00 Silent	7:00- 8:30 6:00- 9:00
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ė	l	AF	Detroit, Mich Kansas City, Mo.	365.6	5:00- 6:00 6:00- 1:00				5:00-8:00	5:00- 8:00	5:00-10:00 6:00- 1:00
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,	WE	AR	Columbus, Ohio Cleveland, Ohio	389.4	Silent 6:00-7:00	Silent 2:30-9:00		Silent 6:00-10:00	7:00- 8:00	7:00-8:00	Silent
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ĺ	WF	AAI	Dallas, Tex	475.9	8:30-12:00	6:30-11:00	6:30- 9:30	6:00-10:00 6:30-12:00	G21A	6:00·10:00 6:30-12:00	6:00-12:00
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1	WRC WRE	0 La	ashington, D. C nsing, Mich	285.5	3:00-10:30 3:00-11:00	Silent Silent	Silent	3:00-10:00 :15- 9:00	Silent	:00-10:00	Silent Silent
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FOLLOWING SPORTS THROUGH MIKE

CARLIN, McNAMEE IN TWIN BROADCASTING

FAMOUS PAIR AT MIKE FOR BIG FOOTBALL GAMES

New Techniquie Will Enliven Radio Accounts of Exciting Eastern Gridiron Battles

NEW YORK.—The WEAF twin announcers, Phillips Carlin and Graham McNamee, will alternate in broadcasting descriptions on the WEAF schedule of the important intercollegiate football games, employing for the first time in sport announcing a new technique of co-

sport announcing a new technique of co-operative observing and announcing. On Saturday, October 17, Phillips Carlin will be at the microphone at the Yankee stadium to describe the Army-Notre Dame game, while McNamee will work with him in observing the details of the play, which one man cannot possibly see for himself.

for himself.

WEAF has the unique distinction of having two announcers equally capable of handling a sport assignment and the advantages of having both on the scene are many. In the first place since both are experienced announcers and know what is necessary for a vivid description of the game, the one acting as observer will be able to pick out the essential details much more effectually than the ordinary observer who might be carried away by the excitement of the game or by a feeling of partisanship.

by the excitement of the game or by a feeling of partisanship.

How Two Will Work

Next, since each will see all the games on WEAF's schedule, the familiarity and knowledge of the teams will grow accumulatively with each succeeding game. For example, following the Army-Notre Dame game, Carlin will announce the Yale-Army contest and so will be extremely familiar with the Army line-up. It is evident that the success of the announcing will be practically dependent

announcing will be practically dependent on both men. The man at the "mike" will observe the distance gained and the type observe the distance gained and the type of the play, while the observer will pick out the name of the man carrying the ball, the opponent who tackles him and the other details necessary for a clear understanding of what is going on.

Football Broadcasts

Saturday, October 17

Army-Notre Dame, WEAF (491.5), WGR (319), WGY (379.5), WJZ (454.3). Chicago-Northwestern, KYW (535.4), WBBM (226), WMAQ (447.5).

Cincinnati-Otterbien, WSAI (325.9). Harvard-Holy Cross, WBZ (333.1). Iowa-Illinois, WSUI (483.6).

Michigan-Wisconsin, WGN (370.2). Navy-Princeton, WCAP (468.5).

New Mexico State College-State Teach College, KOB (348.6)

Ohio State-Chicago, WEAO (293.9). Oregon Aggies-Whitman, KGW (491.5). Pittsburgh-Gettysburg, KDKA (309.1). Rolla-Missouri, WOS (440.9).

Wahash-Minnesota, WCCO (416.4). Washington-Nebraska, KFOA (454.3), KFAB (340.7).

MORE STATIONS LIST **GAMES ON SCHEDULES**

KOB, KFOA and WSUI Announce Football Broadcasts

Three more stations have announced full schedules of football game broadcasts to be added to the already long list. casts to be added to the arready long list.
Indications are that every progressive
Radio station located anywhere near
schools where the great autumn game
is played is endeavoring to tie up with
the athletic department in order that the the athletic department in order that the less fortunate followers of the sport may see the games through the eyes of "Mike," the popular sport describer. The latest broadcasters to fall in line are KOB, the station of the New Mexico Colege of Agriculture; WSUI, whose call stands for the State University of Iowa, and KFOA, the Seattle Times plant.

Followers of the gridiron games via air will be exceedingly fortunate if they

air will be exceedingly fortunate if they have receivers that will pick up KFOA in the daytime, because that station will broadcast the games of the University of Washington team. This organization has been making quite a name for itself during the past few years and the 1925

schedule includes every important eleven

on the western slope.

The schedules of the three stations mentioned above follow:

New Mexico, KOB (348.6)

Oct. 17, New Mexico Aggies-New Mex-ico State Teachers college. Oct. 24, New Mexico Aggies-Sul Ross

Nov. 14, New Mexico Aggies-Junior col-lege, El Paso. Nov. 26, New Mexico Aggies-New Mex-

ico Military institute.

Iowa State, WSUI (483.6) Oct. 17, Iowa-Illinois. Oct. 31, Iowa-Wabash. Nov. 1, Iowa-Wisconsin

Washington, KFOA (454.3)
Oct. 17, Washington-U. of Nebraska.
Oct. 24, Washington-Whitman.

Oct. 24, Washington-Wishington State. Nov. 7, Washington-Stanford U. Nov. 14, Washington-U. of California. Nov. 26, Washington-U. of Oregon.

Announcer Gets Autograph of Author for His Reading

NEW YORK.—The world is small and with the modern means of Radio communication it is getting smaller day by

Announcer John B. Daniel is conducting a series of readings for the benefit of the blind and invalid of the Radio audience from Station WJZ here. On the morning following one of his recent readings, he found in his mail a very pleasant letter from the author of the story which he had read the afternoon before. The author thanked him for the splendid manner in which he had handled the reading and notified Daniel that he would receive an autographed copy of the story in the near future.

Seattle Has Interference Trouble

SEATTLE, Wash.—Difficulty is experienced by Seattle fans in eliminating the two local stations, KTCL and KJR, when attempting to get KGO, Oakland, Calif. There is also difficulty noticed in cutting out KFOA, Seattle, when searching the air for KPO, San Francisco. The increased power of the former station adds to the difficulty. to the difficulty.

The progress of Radio was at first rather slow in Norway, but it is now taking rapid strides forward. The main soing rapid strides forward. The main society, "Kringkastingselskapet," has at present one broadcasting station at Oslo and is constructing two relay plants.

Here's How to Eat to Be Football Star

Tom McNamara, KOA Gridiron Coach, Gives Sidelights on Training -Outlines Menus

DENVER .- Secrets wif physical fitness —an essential in tr_{5.10}, a for the gridiron or any other gru and physical test—are knowing how and what to eat, according to Tom McNamara, internationally known

football coach at KOA here.
"Drink plenty of water, don't hurry
your meals and refrain from eating while fatigued," are a few of his tips to foot-ball players. "Another thing, warnings of certain theorists regarding overeating should not be considered too seriously."

In prescribing a diet for football players, Mr. McNamara favors the following: Morning: Fruit, cereal, milk or cocoa, bread, toast, rolls or biscuits and a protein food, either eggs, bacon or meat.

Noon: Vegetable or chicken soup, meat or meat substitutes, two green vegetables, potatoes, rice or macaroni, plenty of bread, one glass of milk or cocoa, fruit desserts and rice or bread puddings with

Night: Steak, lamb, fresh fish or roast beef, two green vegetables, potatoes, rice or macaroni, plenty of bread, milk, fruits in season and sometimes a salad or ice

ream. Mr. McNamara's discussions are featured by KOA every Monday, Wednesday and Friday evening at 8 o'clock, mountain time.

Bureau of Standards Warns About Misuse of Its Name

WASHINGTON, D. C.—The attention of the bureau of standards has again been called to the frequent misuse of its name in connection with the sale of dry bat-teries for Radio receiving sets.

Claims have been made by some dealers that the superiority of their particular brands of batteries has been shown by tests made at the bureau of standards. These tests are made to aid the government in the purchase of batteries. The bureau does not publish the results.

Therefore, statements that any make or

brand of battery is superior as shown by tests made at the bureau of standards are unwarranted.



Patented Mar. 31, 1925

The Doubletoroid Coil

"Doubletoroids" can be mounted at any angle or spaced at any distance.

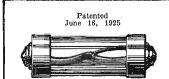
"Doubletoroids" make more selective sets possible, since they do not form miniature loop aerials.

'Doubletoroids" hold static and other disturbances to a minimum since no current from an external source can influence them.

Outstanding Features of the

Both primary and secondary are

The magnetic path is shortest. It is the most compact.



It's Variable

The Nonoise Gridleak improves reception because it can be adjusted for every station. Fits standard brackets. Absolutely noiseless. At all

Nonoise Gridleak

Radio Foundation, Inc.

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New York

Building a Super? Ryan's Simplest Possible Super-het श्राविद्यानिव्यक्तिका anua Radio Digest Publications 510 N. Dearborn St. - Chicago

Full Size Drilling Templates-**Loop Aerial Construction**

NYONE who has built a crystal set or single-tuber can follow Mr. Ryan's concise, simply worded instructions and enjoy the range available only from a super-heterodyne. Every wire, every lug, is placed his directions and you cannot go wrong.

The construction of loop aerials, storage "B" batteries, a charger and even the cabinet are gone into thoroughly. This manual covers the complete installation of a selective, quiet, long range Radio outfit. Send money order, stamps or currency to

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510 North Dearborn Street
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E. C. RAYNER, Publisher

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

Member of the Audit Bureau of Circulations 241 PUBLISHED WEEKLY

SUBSCRIPTION RATES

Yearly in U. S. and Possessions and Canada, \$5.00 Foreign postage, \$1.00 additional. Single copies, 10 cents

Saturday, October 17, 1925

That Fourth Radio Conference

THE fourth national Radio conference will be held at Washington beginning Monday, November 9. Many important problems are to be discussed. The three previous conferences, without aid of the much HE fourth national Radio conference will be held delayed legislation (which is still delayed), solved many of the problems confronting broadcasting and helped Radio's progress to a great extent. It is believed that the fourth conference will do even more in the way of accomplishments than its predecessors.

Why should representatives of the public and all concerns interested in the Radio art, send their representatives to a conference at the national capital? What is to be gained by these representatives sitting at meetings lasting for a week of entire days? What is the good of all this talk when action is what we need?

We shall defend the national Radio conferences We do not say that each of the three so far held have been of equal success, but at least much worth while has been achieved at each. If we were to summarize them, we would say that the first conference, held before individuals or organizations could predict what Radio would be like today, did all that it could and all that was expected of it. The second conference, the most successful to date, accomplished more than was expected, and as a result, the Radio industry prospered and listeners were able to hear what they wanted when they wanted it, for the whole year following. The third conference, held last fall, however, was in our opinion a most miserable and hardly excusable failure.

The conferees last year met in good faith with a plan of action before them, as was the case in years previous. The biggest part of that plan was to provide an allocation system by which the present (at that time) broadcasters and the future stations would be assigned to wave lengths which would not conflict. The conference did not terminate that business, else we would not have that same problem before us at the fourth meeting. As a result, throughout the past winter, listeners were compelled to submit to the worst broadcast congestion and interstation interference it has ever had the misfortune to know. Did all this

help Radio? Hardly.

It is conservatively estimated by several well-known authorities that eighty per cent of the many sets returned last winter to dealers as unsatisfactory-lacking in selectivity-were not at all unsatisfactory or non-selective, but that the broadcast congestion was the root of all trouble. Think of it! Eighty per cent of returned sets were faultless, but returned nevertheless, just because the third Radio conference did not visualize the winter season and the results of an overcrowded air.

The limitation of stations and allocation of wave lengths is to be discussed (and acted on, we hope) at the fourth conference. Methods of doing that which will be proposed will no doubt number about the same as the number of representatives at the conference. Regardless of what plan is accepted, the conferees unable to have their plan accepted must remember that any plan is better than none at all, as was the

case this last year. Let us say, before someone accuses us of attacking Secretary Hoover, under whose jurisdiction Radio falls, that we think he has proved himself the most capable executive ever to hold a cabinet position. He has kept Radio level, despite its rapid growth, and has done it with hardly a law to help him. He has done all by obtaining the cooperation of the public, broadcasters and Radio manufacturers. If you have ever tried to get cooperation out of such a mixed group, you

know his task.
We still believe in the national Radio conferences, regardless of the failure to overcome a serious difficulty which loomed before the nation last year. Many other topics are to be thrashed out at the fourth of these meetings besides limitation of stations and the systematic allocation of wave lengths, and we hope that, in the rush, none of these which may prove vital during the ensuing year, is overlooked and left

to paralyze broadcasting.

Let's all get behind our various representatives to the coming meeting in Washington, and instruct them not to be spellbound, but TO ACT.

RADIO INDI-GEST

The Voice in My Radio

Tonight, in the magic of midnight In my study alone; Around my heart entwines a song,— Sung through a megaphone.

The singing sounds like an angel,—
I dream of other years, As through the air the dead days rise And fill my eyes with tears.

Atuned to the memory of long ago When she sang the old songs; And though she is far away from me Amidst the cities throngs Tonight, she seems to be singing to me; O God if she could know,-That I am tuned in on the ether Across the hills of snow.

Through misunderstanding we parted Tonight, my heart's in tune; Thrilled to hear the songs from her soul Carols she used to croon: Who knows but God in heaven,— Sends her message to me That we might be united through love,-That binds Eternity.

RHEA SHELDON.

His Home Companion

It was a dark and stormy night. Alone, seated by the comfortable fire in his well appointed home, sat a man. He paid little heed to the raging and tearing gale without; he sat deep in thought. His train of thought centering on the beautiful music that filled the room.

Over in the corner she did her best to produce

melodlous tones that would take his mind off the day's work and carry him to the opera, organ recital, dance hall, musical comedy and finally off to Dreamland. He turned toward her. She was pretty. He admired her, not only for the sweet voice that she possessed but for the beautiful effect she caused with the light falling on her that way. Not a blemish and such extractive approximation. beautiful effect she caused with the light falling on her that way. Not a blemish and such attractive curves. She was so very versatile, too. Just when he was about to nod off to sleep she broke in with a lively dance tune that set his foot a-tapping.

He was ready to admit that he was well pleased and did not begrudge the price he had reid for the program.

did not begrudge the price he had paid for her.

Tomorrow he would tell the boys in glowing terms all about his new loud speaker.

D. N. M.

After that, Dave, we guess you had better fill the paste pot, there might be some more bears in them mountains!

Stanley, Shall I Jump? (Continued from the other time)

Synopsis—(Last week's copies contain the story in full, so why should we waste space to tell you something for nothing when we might sell it to you for money? Yah, shure!)







"We were happy—Mae and I—and after a while the baby came. Oh how happy we were—Mae, the baby and I. But I could not leave my secret vice. Every night when all were sound asleep I stole off into the attic and made Radio sets. One night, after many trials, I hit upon the great idea—the superblooper. Flushed with success I dashed to the office of the Radio Corporation of Columbia and offered it to them in exchange for Radio tubes for the rest of my life. But alas! the slickers done me out of my idea and threw me out in the streets. After that drink got me—Coca-cola and Peruna soon made a mockery of what was once a proud man."

6

"But what become of your wife?" asked the baby, a tear in her blue eye as she kicked the family cat, "what become of the wife, I say?"

"She is now eking out a miserable existence winding low-loss coils for the self same soulless corporation

that done me out of my idear."
"And the baby?" added Ma Rayjo, scarcely able to hold the cork back on a bottle of orange crush, "what becomes of baby squawker?"
"The baby is now posing for ads for this same cor-

"The baby is now posing for ads for this same corporation showing how happy home life can be made with electrical appliances."

"Here, kid," said Baby Rayjo, "here's a doughnut coil for you thickly powdered with arsenic trioxide. And the next time you invent something have your lunch checked at the baggage station. Then you can always get your feed back."

Similarly yours.

Simianly yours, THE THIRD TROMBONE PLAYER.

Ending the Worst Announcer's Contest

a certain New Orleans announcer by nominating him for a place in the Worst Announcers' contest. Since then the mail has been crowded with contest. Since then the mail has been crowded with letters telling us that the Louisianian who took said crevice was all wet. Maybe so, we don't know. He slammed the announcer for the long winded ballyhoo he gave the station owners. Since then we have been able to tune in this station ourselves on many occasions and find that the announcements are now short, thus automatically eliminating the man from the Worst Announcers' contest. But what we wanted to say was this: The contest is closed. We made a short announcement over the air the other night! The cup therefore goes to Indi-himself. There will be no recount.

Pointing the Wav



Condensed BY DIELECTRIC

WCAP, Washington, put on the air a concert from the Wardman Park little symphony orchestra which I found to be one of the most enjoyable programs of the week. Those seated in the hall from which it was broadcast apparently entertained the same sentiments, for applause was generous and often spontaneous. Gretchen Hood pleased with her rendition of Gounod's Ave Maria, singing with expression and warmth. Grieg's familiar Peer Gynt suite was likeable if lacking in precision, while Mr. Landon's clear diction was another instance of what may be done by singers to enhance their favor with listeners. should tune to more of them.

Does the broadcasting of fistic encounters between world reknowned boxers make a dent in the box office receipts or not? That is a question which does not require a lengthy answer, I think. If one liked that sort of entertainment and could attend, would he be content to hear only? No. I do not know the percentage of listeners who desire such a feature on their programs, but seldom it is nowadays that the wish is granted. WHN, New York, broadcast the altercation between Dave Shade and Mickey Walker. The static was bad that night, yet the exciting progress of the scrap kept one on edge. Mickey knew I would be listening in-so he won the decision.

Whether has flown the cleverness and originality that marked the paid advertising programs from the Los Angeles and Hollywood stations? It used to be we could turn to them with the assurance that the paid programs would be the best on the air and the advertising features presented in such a way that it did not detract from the musical part. Lately these programs seemed to be quite bald of originality and we miss the sugar coating. Perhaps it is just a summer slump and KHJ, KNX and KFWB will soon be with us again better and bigger than ever.

Scotch dialect has a fascination for most of us whether we be from Bonnie Scotland or not and Scottish airs have a lilt to them which breathes optimism. The majority of the programs broadcast by WNAC, Boston, find some interested listeners to each feature, while few can willingly miss their special broadcasting from theater, opera house, or the Checker Inn. One especially agreeable feature presented not long ago was the concert given by the Royal Scottish entertainers. That deserves mention.

Only admiration is possible when tuned to WTAM, Cleveland, for the splendid transmission from that station—regardless of the form of entertainment. There have been singers appearing before their mike whose contributions added little to the enjoyment of Radio auditors, though few occasions when orchestra concerts fell within that class. Rubenstein's Kammenoi Ostroff has a haunting charm all its own and loses none of it when heard chestration is at fault, which it certainly was not the other evening when presented through the Willard

Time spent in listening to one of the Quaker City broadcasting stations, WIP, was not wasted when we were treated to a well-balanced program of piano, violin, 'cello, and vocal selections by artists of attainment. Bertrand Austin knows his instrument (the 'cello) as Will Rogers knows his lariat; both compel their mediums to obey implicitly. A repitition of this style of program could displease no one.

The Dos and Don'ts of Antenna Construction

Part III—Construction of Outdoor Masts

By William Fenwick

No THE present article, the construction of a suitable support for either or both ends of an outdoor antenna or both ends of an outdoor antenna as to take the strain of the aerial. For relation to the strain of the aerial for respect to the strain of the aerial for respect to the strain of the aerial. For relation the above, are those composed of the strain of the aerial for relation to the aerial for relation to the strain of the aerial for relation to the aerial for rel shall be described in detail. One which the amateurs, and which is also very strong, durable and—one of its best points-quite inexpensive, the total cost being well under \$10, is constructed as

It consists mainly of three two-byfour's supported by guy wires (see figure 1). Although in the sketch a 41-foot mast is shown, this may be made higher or lower according to the builder's fancy but it is advisable not to lower it below

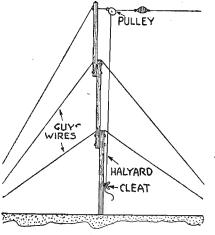


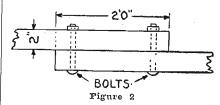
Figure 1

30 feet. The first and second sections are 18 feet in length and the top one, 10 feet. Each joint is bolted together with 4½-inch bolts and the overlapping at each joint is two feet, as shown in figure 2

Stranded Galvanized Guys Stranded Galvanized Guys

Stranded galvanized iron, clothesline wire is excellent for the guy wires, as it possesses good strength and will not rust quickly. Four guy wires are fastened to each of the first two joints and one wire for wood to withstand for a very long

ceiving purposes, one insulator is suffi-cient in each guy wire, although it is best to insert one every 20 feet if the antenna



is to be used for transmission as the absorbing power of the metal wires is much greater for the latter purpose.

Erecting Mast

Erecting the above mast, it should be remembered, is not a one-man job nor can it be erected in the usual half hour. A hole one foot deep should be dug where it is to stand and the end slipped into place. Next, your two or three assistants should stand a small distance away, each having hold of a guy wire, finally hoisting it into place, and then fastening each guy to a firm peg or stake driven into the ground, a fence, or to other surrounding objects which you consider strong enough.

The pulley should not be forgotten nor should the halyard, as it will mean an unpleasant climb to the top later, or possibly the undoing of the complete mast merely to secure the pulley in its proper

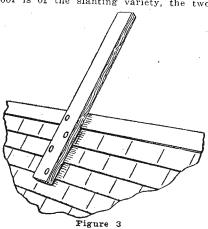
Why Not Iron Pipe?
Although the beginner will perhaps fancy an iron pipe being better than a scantling, he will find on erecting that it is a much biser. is a much bigger proposition to install a 30- or 40-foot length of the former on account of its wabbliness; also it is more costly than wood.

lattice-work.

cial station sometimes uses the type sketched in figure 1, having them several hundred feet in height mb. hundred feet in height. The reason is that the guying necessarily has to be very elaborate and generally has to be very elaborate and generally is beyond the capabilities of the average listener. More-over, there is seldom sufficient space around the mast's location for the fastening of the numerous guy wires.

Slant Roof Mast

If the opposite end of the antenna is to be attached to the roof top and if the roof is of the slanting variety, the two

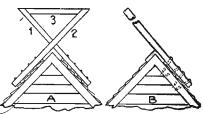


methods illustrated in figures 3 and 4.4 show about the easiest ways of doing it.

If the peak runs at right angles to the If the peak runs at right angles to the antenna, a piece of wood, preferably a two-by-four, is fastened as in figure 3 with 5-inch screws. To add more strength, the screws should be driven in slanting as in figure 4B.

The exact length of the piece will a continual buzzing sound will a depend on just how steep an angle the roof slants; the steeper, the shorter (TO BE CONTINUED)

If the peak runs in the same direction



ross pieces (1 and 2) may be of two-by-

four's or smaller stock in this case.

The best length for these is approximately five feet as the aerial wires can be stopped a few feet from them thereby providing ample clearance of the roof with the consequence that the support need be only two or three feet high.

The cross piece (3) at the top may be

Figure 4

omitted if two wires are used, but is necessary if the antenna is a 1- or 3-wire

Precautions in Aerial Stringing When installing your antenna keep the following foremost in your mind:

Do not under any circumstances run the aerial near to any wires which happen to be in the vicinity. If there are some such wires, have the aerial not less than such wires, have the aerial not less than 20 feet away from them, are more if possible. It is bad practice to cross wires at right angles, for should the top wires, carrying high voltage perhaps, collapse, the receiver may be damaged and ruined, and if the operator has the phones on he may receive a serious shock. This is impossible of course if the impossible, of course, if the antenna is disconnected from the set.

Remember, if the antenna is run close and parallel to power or telephone wiros, a continual buzzing sound will always be

Underground Aerial Aid

I do not know whether I am original in this idea but I have never seen it pub-I tried the underground aerial Issied. I tried the underground aerial described in Radio Digest, and made an addition to it which improves it very much. I have a 75-foot long piece of No. 14, rubber and braid covered wire and a No. 14 bare copper wire buried with it, 18 inches deep in the ground. (Editor's Note.—The depth should be 4 feet.) I insulated the end of the covered wire by putting the end in a small bettle and fill. putting the end in a small bottle and fill-ing with battery wax. The bare wire is

and to the set I wound the bare wire around the other one.

While this does not completely cut static, it muffles it and cuts the harsh crackling. It is not directional and there seems little if any difference in volume crackling



The Reader's View

Favors Superpower

In reply to the article written in the columns of the Radio Digest, issued columns of the Radio Digest, issued August 29, pertaining to unnecessary interference, written by a professor of Rensselaer Polytechnic Institute and pertaining to WHA? we experiments in regard to Radio reception. will state that I beg to differ with him.

He states in his article that Radio noises cannot be entirely eliminated except by sacrifices. He is correct, so to

cept by sacrifices. He is correct, so to speak, in one sense of the word, but not as he states. He says that the problem consists in obtaining a low power level and that there is no need of superpower as the 500-watt station can be heard consistently throughout the cold weather all across the continent. He also states that to limit this noise they must limit the amount of power in the broadcasting medium and states that problem consists

in the low power level.

I differ with Professor Williams by upholding that superpower is far superior to any broadcasting since stations took First, because it produces Radio reception clearer with less static and more volume. In linking several broadcasting stations together when there is something of national importance to be broadcast, instead of a benefit in any way, it is a hindrance to clear reception as it distorts the signals, whereas coming from one superpower station it has a direct force back of the broadcast and renders reception clear and distinct.

Static and all the other atmospherics are in the air and always will be, and the only way to eliminate this trouble-some bugbear to Radio reception is to build a receiver that will receive only the

broadcasts clear and distinct.
You may say this cannot be done, but it is done as I have a set of my own con-struction which will receive all broadcasts through static and all other atmospheric conditions. As I stated, static and all other atmospheric conditions exist and always will and I can hear the same on this set, but it does not interfere with the reception inasmuch as the set sifts all reception right through this bugbear to Radio.—E. A. Lamb, Waterbury, Conn.

Against Chicago Silent Night

I am a listener in to Chicago on the socalled "silent night" and I hope the Chicago stations keep on the air every night of the week.

I have a five-tube set. It is not a superselective one, but can tune out both KDKA and WCAE at any time although about nine miles distant and they hog the air sometimes the entire evening. If I want to hear them I have to tune them in

the same as other stations.

We do not have silent nights here in the East and I for one do not want any.

One writer has said that there were tens! of thousands of fans in the Chicago district who had costly sets that would like to have a silent night. I suppose he is to have a silent night. I suppose he is right, but there are hundreds of thousands of fans that do not have costly sets that would not be able to get any good entertainment at all.
I am for entertainment every night.

I do not care to listen to the local stations, I cut them out and get the ones I want. My vote is cast that way.

I have been a constant reader of Radio Digest for a long time and have obtained some very valuable information from reading it, some of which told how to cut out local station interference.—W. J. L., New Kensington, Pa.

Football's Not So Bad

Allow me to take exception to the published view of P. C. H., Stanford, Conn., in e the relative dangers of football and baseball.

I played four years in both sports while in high school and have played as a semi-professional in both for four years since. In my opinion it is fifty-fifty as to in-

There are just as many players hit by balls, spiked and run into, just as many break a leg sliding, take hard falls in base running and fielding in baseball, and the injuries, taken as a whole, are just

as serious as in football.

How to fall in football and how to slide in baseball are the chief points players must know to avoid injury. Ask anyone who has played both. K. C. R., Mason, Mich. Mason, Mich.

Football Must Be Good

In the "Reader's View" column recently, P. C. H., Stanford, Conn., says he is correcting an erroneous statement that you made about football not being any more dangerous than baseball. You were right at first. P. C. H.'s statement is very

much in error.

If you will look at statistics you will see that about four men are killed in baseball every year to one in football. Does that sound as if football is more

dangerous?

Tell P. C. H. to watch the number of fatalities in football and baseball and then change his statement. P. L., Russellville, Ark.

An Undeserved Bouquet

Ever since your paper came on the news stands I have faithfully followed each issue with increasing enjoyment. Whenever I desire to have company listen

An Undeserved Bouquet

The edges of the segments are rounded to prevent cutting of the wires.

The finished form will be the same as each issue with increasing of the node.

worth a year's subscription alone.

More recently I have chuckled over "Distilled by the Third Trombone Player," for he certainly takes a crack at "Dielection" who county to furnish playty of who seems to furnish plenty of ma-

I always read everything on the editorial pages and believe they represent the future aim of listeners in and broadcasters—at least you are doing your share to help Radio broadcasting.

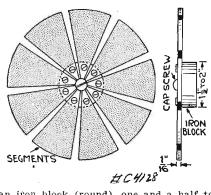
With best wishes for Radio Digest. W. V. C., Philadelphia, Pa.

Removable Spider Web Former

I am herewith describing an improved spider web coil form. The coil, instead of being wound on a cardboard or fiber form, is wound on an iron form (brass or aluminum would do as well), the segments of which can be removed with great ease. Besides removing the segments with greater ease, this form has the advantage of being able to withstand the use of large size wire such as Nos. 16 or 18, whereas other forms break when this size is used.

The segments, cut from a circular disk

as shown in the sketch, are mounted to



an iron block (round), one and a half to two inches in diameter. A cap screw holds each segment to the center block while another screw in the exact center further holds all the segments in place. Bolts ex-tending through the block can be used instead of cap screws which, of course, require threading of the holes in the block.

to a good program, Radio Digest supplies similar coils. When a coil is wound, bind the station and date.

That advance program material is worth a year's subscription alone.

When a coil is wound, bind the connections with thread or apply a little collodion on the places where the wires cross. This will hold the coil together. The screws are then taken out and the segments removed with ease. A finished low loss coil remains.-Allen Bartlett, Milwaukee, Wis.

Bus Bar Eyelet Forming

This is an easy method of making a good connection at the ends of bus bar wiring which is much better looking at least than the soldered variety. Turn a well-formed eye in the end of the wire, the eye to be a little smaller than the threaded portion of the terminal post over which it is to go. With a smooth faced hammer, on a smooth iron surface, flatten the eye. It may be hammered down as thin as you may wish. This will give you a good flat surface.—W. C. VanNess, Fayette, Iowa.

It is better to get moderate, clear signals than loud, distorted ones.



Become a Radio Expert

THIS is the time to get into Radio—the new, fast growing, uncrowded profession. Stop working long hours for small pay at work that is drudgery. Men from all walks of life are taking advantage of the big opportunities now open in this wonderful new industry. Salaries of \$100 a week—and more—not at all uncommon!

Learn at Home

You can train for this "big money" field right in your own home—in spare time. No matter how little you know about electricity or Radio, the National Radio Institute—the largest and oldest home-study Radio school in the world—established 1914—can quickly make you an expert through a marvelous method of practical instruction—which includes all necessary parts for building up-to-date receiving sets.

Big Demand Now

Almost every day we get urgent calls for our graduates. The big jobs hunt you when you are a Radio expert. Radio offers you more money than you ever dreamed possible—a chance to travel or to take any one of the many Radio positions all around you at home. Offers you a glorious future!

Send for FREE Book

Write today for free book "Rich Rewards in Radio." Tells all about

this great new money-making field
— and describes our — and describes our amazing practical method which trains you for the which trains you for the bigger paying jobs in Radio. No obligation. Mail coupon now. National Radio Institute, Dept. 55MB, Washington, D. C.

The National Radio Institute, Dept. 55MB, Washington D. C.

I am interested in Radio as a profession. You may send me, free and without obligation, your interesting book, "Rich Rewards in Radio," all information about your spare time, home-study plan and about your free or spare time. Also, the details of your Special Offer.

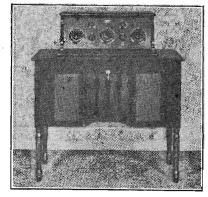
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Complete with Loud Speaker

"Makes Radio a thing beautiful in your home"



One pull of the handle opens the front for adjustment of batteries or Loud Speaker Unit.

A magnificent table on which to stand your Radio Set with ample space to hold and conceal all batteries, charger, wires, etc. The Loud-Speaker is built-in, like a phonograph, and is vastly superior in tone to the old fashioned horn speaker.

No more ugly horns, or wires, or batteries visible, everything concealed—shut out of sight. Yet—everything instantly accessible! One pull of the handle opens the whole front for adjustments, etc. Ours is the only Console Speaker with this feature.



This is why the CONSOLE MASTER SPEAKER is the most practical Console Speaker built. Refuse imitations. sist on the genuine.

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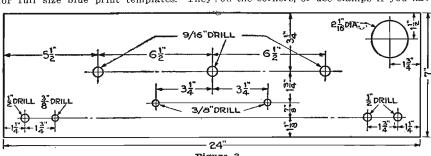
4236 Wrightwood Ave., Chicago, U.S.A Originators and World's Largest Man-ufacturers of Self Pluxing Solder

'Traveler' Doughnut Coil Tuned R.F. Receiver

Part II—Drilling and Assembly

By John G. Ryan

The parts listed in the first article of this series are all at hand we are now ready to drill the front and subseepanels and mount the various pieces apparatus on them. The reader has two ternatives at this stage of construction; the directions and diagrams given below in be followed to lay out three full size eight through the opportunity that the distances these marks are from be followed to lay out three full size of the front panel, as we are later going to take half an inch off the sub base which amounts to ¼ inch are each hole. This is the method used by the writer. Then, with a sharp the sub base which amounts to ¼ inch are each hole. This is the method used by the writer. Then, with a sharp the sub base which amounts to ¼ inch are each hole. This is the method used by the writer. Then, with a sharp the sub base of the sub base which amounts to ¼ inch are each hole. This is the method used by the writer. Then, with a sharp the sub base of the sub base which amounts to ¼ inch are each hole. This is the method used by the writer. Then, with a sharp the sub base of the sub base. You can will disk should drop out. Now with a half the sub base. You can will drive any or the sub base the template to the back of the panel. Measure the sub base which amounts to ¼ inch are each hole. This is the method used by the writer. Then, with a sharp the will sall the way round and the thin walls all the way round and the thin walls all the way round and the distances these marks are from bout on the edges of the holes necessary for mounting parts are necessary to show the holes trought the sub base. You can will drive any or the total part of the sub base. You can will drive any or the total part of the sub base. You can will drive any or the total part of the sub base. You can will drive any or the total part of the sub base. You can will drive any or the total part of the sub base. You can will drive any or the holes trought the sub base. You can will drive any or the total part of the sub base. You can will drive any of this series are all at hand we are now ready to drill the front and subbase panels and mount the various pieces of apparatus on them. The reader has two alternatives at this stage of construction; the directions and diagrams given below can be followed to lay out three full size drilling templates, or, he can write in to Department 5, Radio Digest, 510 N. Dearborn street, Chicago, Ill., and enclose 25c for full size blue print templates. They



will be sent promptly on receipt of this amount in stamps, silver, or money order. If the former course is chosen, figure 3 shows the exact location of all holes necessary on the front panel. To get these holes marked on the panel, first cut a sheet of paper to 24 by 7 inches for a template and then, with ruler and pencil, Now drill according to figure 3, starting



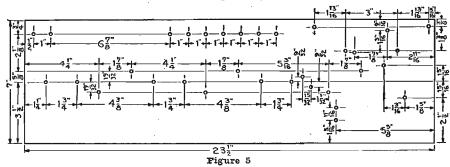
Figure 4

Bracket holes have not been shown in this illustration as these will vary de-pending on the brackets used. To get pending on the brackets used. To get them just right, lay the front panel face down on the table; on it set the panel which is to be the sub base, with one long ficulty if you have never installed a meter them just right, lay the front panel face down on the table; on it set the panel

make a small cross where each hole is to go, following figure 3.

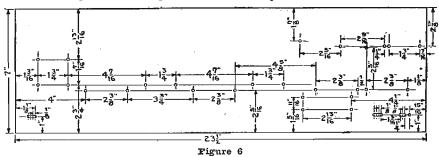
Bracket Holes

Bracket holes have not been shown in this illustration as these will vary dedenser mounting holes, a reamer is necessian.



edge down and so that one surface of the sub base is $\sqrt[7]{8}$ inch from the edge of the front panel that will later be the bottom. The upper surface of the sub base will then be $\frac{8}{18}$ inch thick. Now place the brackets in the angle just formed on a panel before. There are two ways of doing this. You can either use the fly cutter made for the purpose by the Jewell company, which is perhaps the easiest way, or, you can draw a circle $2\frac{1}{18}$ inches in diameter and drill about twenty small holes just inside this line. They are to be





four-spring two-circuit jack; that in the lower left corner is the filament control jack. The one next to it is the second two-circuit jack. It will be noted that the writer hung his baseboard on the underside of the brackets. These brackets were bought from the Chicago Salvage Stock Store, 509 S. State street, Chicago, at 15c each.

The sub base panel should now be cut to $23 \, \frac{1}{2}$ inches long by taking $\frac{1}{2}$ inch off

four-spring two-circuit jack; that in the lare for 6-32 screws and a No. 27 drill lower left corner is the filament control jack. The one next to it is the second two-circuit jack. It will be noted that the writer hung his baseboard on the underside of the brackets. These brackets were bought from the Chicago Salvage Stock Store, 509 S. State street, Chicago, at 15c cach. place the sub base under the brackets so that the rear edge is 9 inches from the (Continued on page 20)

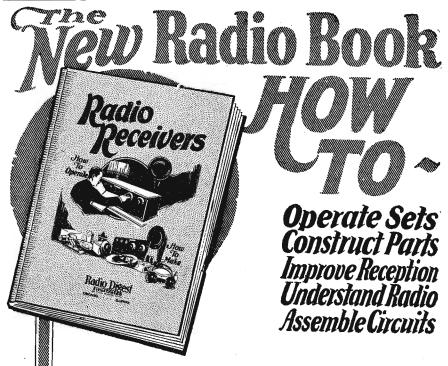
Tuning Through Static

The deafening effect of static when the sensitivity of a receiver has been increased to the utmost and one is tuning through for a distant station, may be decreased considerably by placing the phones just in front of the ears instead of directly over them. The fact is, that, even if the phones are placed completely off the ears, in front of them, the desired signals can be heard.

phones are placed with the edge just over the ear opening, the desired program and announcements can be heard very distinctly, and the static will be found to be decidedly diminished not only causing less shock to the ear, but, in addition, causing much less interference to the reception.—H. A. Fanckboner, Terre Haute,

gnals can be heard.

However, for ordinary stations, if the if a crystal detector is used.



The greatest assemblage of facts and hints, from actual everyday practice, ever gotten together. Edited by the technical staff of Radio Digest, it supplies the demand for a book covering every Starts at the beginning with simple explanation of Radio reception, with technical explanations of the different parts and leads right on to the more advanced instruction. A complete handbook serving as a ready reference in the Radio field. It gives suggestions on parts and sets which will prove to be a money saver. Blue prints and diagrams are essentially an important part of this book. Special chapter is devoted on "How to Operate," which gives detailed information on the operation of many well known sets.

A general information is vital to the knowledge of anyone interested in Radio. It gives a complete list of all broadcasting stations with a colored map showing their location. The workshop kinks will save you time and money. Now is the time to take advantage of this exceptional offer. Mail coupon today!

-	
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	Enclosed find \$5.00 for one year's subscription to Radio Digest. The new Radio Book, "Radio Receivers," will be mailed FREE, postage prepaid. This offer only good on subscriptions sent directly to this office, not through agents or agencies.
	Name
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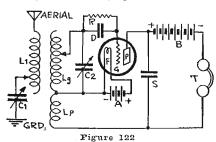
A. B. C. Course in Radio Fundamentals

Chapter XXX—Applications of the Electron Tube Oscillator—Continued

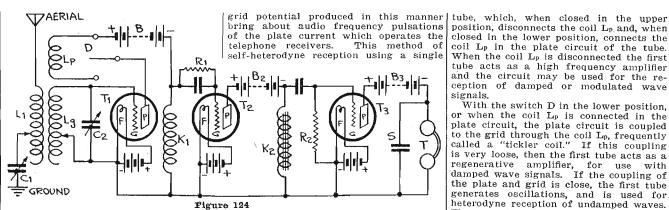
By David Penn Moreton

THE three electrode vacuum tube oscillator elecuits have found wide application in undamped we ve Radio telegraph receiving as well elegraph undamped waves is the heterolycic meaned. most efficient methods of receiving un-damped wave is the heterodyne method, which involves the generation at the re-ceiving station of a high frequency alterretiving station of a high frequency after-nating current, having an adjustable fre-quency near that of the incoming un-damped oscillations. The generation of this high frequency current may be effected by means of a three electrode vacuum tube connected as an oscillator. It is possible to use a single vacuum tube for both detection of the incoming oscillations and for the generation of the local oscillation.

An arrangement operating with a single tube is shown in figure 122. The grid and plate circuits of the tube are coupled to each other by means of the coils $L_{\rm f}$ and $L_{\rm g}$. The locally generated oscilla-



tions are set up in the circuit $\mathbf{L}_g C_2,$ and the circuit is thus seen to be similar to the one shown in figure 113, in a previous chapter. The plate circuit is energized by the battery B and includes the telephones T. The incoming signals are received on a tuned antenna circuit coupled to the grid circuit of the tube. The grid circuit also contains a condenser D shunted by a high resistance R.



briefly as follows:

The antenna circuit is tuned to the frequency of the waves to be received. These waves then set up in this circuit, strong oscillations of their own frequency which by induction, produce corresponding oscillations of the grid potential of the tube. But the tube being in an oscillating con-But the tube being in an oscillating condition, locally generated oscillations are also set up. The locally generated oscillations are of the frequency of the circuit L_gC_2 , which is adjusted to a frequency slightly different from that of the antenna circuit. There are, thus, two alternating electrical pressures of slightly different frequencies impressed upon the grid. The operation of the tube resulting from these two frequencies in such that a from these two frequencies in such that a plate current having a beat frequency equal to the difference of the two frequencies is produced.

For suitable values of grid, plate and filament battery voltages, it is then possible to bring the direct current operating point of the tube where it will act as a rectifying detector for incoming oscilla-The tions while still oscillating. Variations in

pperation of this circuit may be described or the operations of detection and oscillation generation is called the autodyne method of reception. The purpose of the condenser S is to bypass the locally generated high frequency oscillations which would otherwise be absorbed in the plate battery and telephone receivers.

The audo frequency, that is, the pitch of the sound in the telephone receivers, is directly dependent upon the original oscillating frequency. By using an audio frequency tuned telephone circuit, it is possible to increase greatly the intensity of the received signals and to increase considerably the selectivity of the re-ceiving circuit by the use of several tuned oscillatory circuits in succession.

A circuit illustrating this suggestion is shown in figure 123, which differs from the circuit shown in figure 122, only in that the telephone receivers instead of being directly connected to the plate cir-cuits of the tube, are connected to an oscillatory circuit coupled to the plate circuit, and tuned to the beat frequency, that is, to the difference between the frequency of the locally generated currents and of the incoming oscillations.

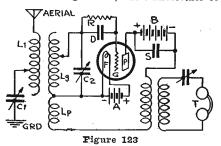
A circuit that might be called a universal receiving circuit is shown in figure

quency of the locally generated currents and of the incoming oscillations.

A circuit that might be called a universal receiving circuit is shown in figure stations so that interference from other stations is reduced to a minimum. A slight difference in the frequency of the signal waves being received, and three vacuum tubes in cascade. The first tube T₁ is coupled to the antenna circuit through its tuned grid circuit. There is a switch D connected in the plate circuit of the first

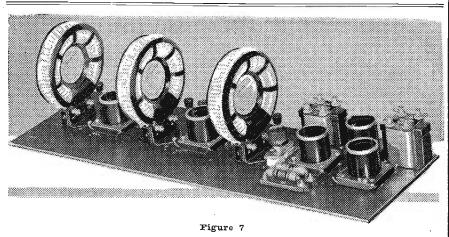
position, disconnects the coil L_p and, when closed in the lower position, connects the coil L_p in the plate circuit of the tube. When the coil L_p is disconnected the first tube acts as a high frequency amplifier and the circuit may be used for the reception of damped or modulated wave

With the switch D in the lower position or when the coil L_p is connected in the plate circuit, the plate circuit is coupled plate circuit, the plate circuit is coupled to the grid through the coil L_p, frequently called a "tickler coil." If this coupling is very loose, then the first tube acts as a regenerative amplifier, for use with damped wave signals. If the coupling of the plate and grid is close, the first tube generates oscillations, and is used for heterodyne reception of undamped waves. The second tube To is a rectifying de-The second tube T_2 is a rectifying detector and the third tube T_3 is an audio frequency amplifier. Choke coil coupling is shown in figure 124, but transformer or



resistance coupling may be used equally

With the heterodyne method, the note in the telephone receivers may be adjusted as desired to correspond to the frequency at which the telephone receiver diaphragm is most sensitive, or to suit the ear of the receiving operator, or to be easily read



"TRAVELER" RECEIVER

(Continued from page 19)

front surface of the front panel. Now mark with a pencil through the bracket boles and drill for 6-32 screws. The positions of the parts on the sub base are shown in the photograph figure 7.

o, the writer found a way of simplifying the writing at the right end of the sub base which makes necessary three holes not shown in figure 6. To get their locations, mount the two audio frequency shown in the photograph figure 7.

(Continued on page 21)

Since first building and testing this set, and making the template drawing figure 6, the writer found a way of simplifying



The only man who doubts that a 3-tube set can give better results than a 5-tube set, is the man who has never made a performance comparison between the Crosley Super-Trirdyn and the best 5-tube set built.

Super-Trirdyn Regular, \$45

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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 operating sets that are discovered every day. Radio Digest is very much interested 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

that, for the good of all fandom, you will send it in to your favorite Radio magazine that all may try it. Nothing happens for several weeks, then suddenly you get an avalanche of mail to the extent of over 600 letters in a week. It is manifestly impossible for you ever to answer all that correspondence; you're not Sears-Roebuck nor Montgomery Ward. You hate to seem unobliging, yet you naturally can see no reason why you should be burdened with the work and expense of answering that pile of mail.

That is what happened to Mr. Joseph Stevenson when he contributed his kink and it was published in the August 29 issue. Mr. Stevenson sent in the data with his kink but the technical editor purposely omitted it for two reasons. First, it did not appear necessary since it seemed to the editor that by this time most of the experimentally inclined knew the size condenser to use with certain coils, etc. Second, he wanted to see what the readers would do with it. The necessary information was all in Radio Digest copies of this year, particularly the issues of February 28 and March 21. This action is sincerely regretted now, and apologies are extended Mr. Stevenson for the inconvenience this may have caused





31 Badio or All

15 x 31 x 29". Substantial, rigid table that ean be used for a thousand purposes.

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Made in a variety of sizes sold knocked down, easily set up. Holes bored for every screw. No other cabi-nets offer such unusual

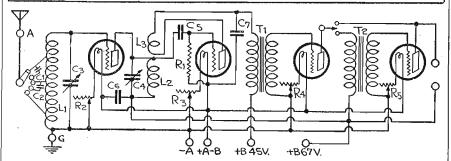
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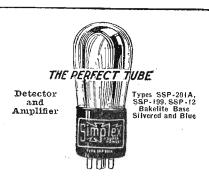


Here is the list of values for the various parts used in this circuit:

If the builder has two variable condensers of .00025 mfd. capacity for use as C3 and C4, the coils L1 and L2 should contain 99 turns of No. 22 dcc. or 82 turns of No. 24 dcc. wire if wound on 3-inch tubing. If the condensers available are .00035 mfd. the coils should contain 70 turns of No. 22 dec. or 66 turns of No. 24 dcc. on this same size tubing. Should the condensers be of the .0005 mfd. size, the coils are to have either 55 turns of No. 22 dcc. or 51 turns of No. 24 dcc. wire on 3-inch tubes.

The fixed condensers C1 and C2 are to be of .00025 mfd. capacity, as is condenser C5. This latter unit may also be .0005 mfd. if you have it. C6 is a bypass condenser of .5 mfd. capacity and C7 is another of .001 infd. or .002 mfd. capacity. The tickler L3 will contain from 20 to 40 turns depending on the size tubing used and the coil (among those listed above) with which it is to be used.

The grid leak R1 should preferably be variable, but if of the cartridge type, will be between 3 and 5 megohms depending on the tube used as detector. R2, R3, R4 and R5 are each 30-ohm rheostats. When choosing the audio frequency transformers T1 and T2, use care not to get two of too high a ratio nor two of too low a ratio. For example you could have the first be a 6 to 1 and the second 2 to 1, or you could have both be 4 to 1 or 3½ to 1. Both should not be 6 to 1 or 2 to 1.



THE ELIXIR OF Set LIFE

JUST as the mean of the most vital organ of the UST as the heart is the human body-the tube is the most vital part of the radio set. The Simplex Super Power Tube performs its function in the radio set with the same sensitiveness, accuracy and regularity as a healthy heart in the human body.

Rejuvenate your set with the Simplex Super Power tubes, they mean longer life and better reception.

PRICE

Silvered tube \$2.00 Blue tube 2.50

GUARANTEE: Your dealer is authorized to exchange or return money for any defective tube within ten days.

Titania Manufacturing Company makers of the

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There you have it all, readers, and let the technical department know how you come out. A number of those who took the trouble to figure out the probable constants themselves have advised splendid results. You can use either the 201A or the 199 tubes; the antenna can be of any length between a 40-foot indoor and a 110-foot outdoor installation. You do not necessarily have to use tube wound coils; space wound, spider web, basket weave, honeycomb or bank wound inductances may be employed.

"TRAVELER" RECEIVER

(Continued from page 20)

transformers and the socket which goes between them. The Fil. and Grid terminals of each transformer go toward the rear while the P and G terminals on the socket also go to the rear. It will be noted that mounting holes for the right hand transformer have been drilled only for the transformer have been drilled only for the holes in the transformer in the rear right and front left corners. With the pencil, mark through the hole in the rear left corner onto the sub base. Now mark a small cross on the sub base ¼ inch to the left of the rear left mounting hole of the left hand transformer. Another cross is to be marked just to the right



Bass Note **Amplification** —at last!

AS THE world's oldest and largest exclusive transformer builders, we have led for years in extending the amplifying range of transformers to lower and lower frequencies. In the lower and lower frequencies. In the Autoformer we have finally perfected an instrument capable of (1) giving full amplification of those bass notes hitherto largely "lost"; (2) greater clarity on all signals; (3) improved reception of distant programs; (4) better volume control. Autoformer amplification is for those who seek the finest reproduction of programs to be had. It may be used with any set in place of the regular audio transformer hook-up. Full directions, with diagrams, supplied with each Autoformer. Dealers everywhere. everywhere.

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Unconditionally Guaranteed



All Frequency Amplifier

and slightly in front of the P terminal of the socket between transformers. Take off these three pieces of apparatus and drill holes at the spots just marked.

Now with the sub base in front of you and the front edge nearest you, mount the Thorola C on the two holes at the left end with G and GN to the right; the first radio frequency amplifier socket comes rext with P and G at the rear; then Tijorola T-1 with G and A to the right; then another socket with P and G to the rear; next comes Thorola T-2 with G and rear; next comes Thorola T-2 with G and A to the right; then the detector socket with P and G at the rear; then the second audio frequency amplifier socket with P and G to the right. These units are all in a straight line across the panel. The three instruments previously mounted and taken off can now be put on again The three instruments previously mounted and taken off can now be put on again. The Bradleyleak is mounted between Thorola T-2 and the socket to its right; the Bradleyleak terminals and condenser go to the right. It will be necessary to use two 4-36 machine screws one inch long for this. The Amperite units are mounted, each with a single flat head 6-32 machine screw, in the two holes in front of the detector socket.

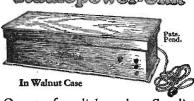
The antenna and ground binding posts go in the two holes at the rear left corner of the sub base, while the other seven go in the seven holes about midway the length of the panel near the rear edge. Insert them, from left to right, plus 90, plus 45, minus B, plus A, minus A, plus C and minus C.

C and minus C.

C and minus C.

It will be noted from careful examination of figure 7 that the two sockets between the Thorola coils, and the one to the right of Thorola T-2, are raised above the sub base about ¼ inch. The reader can do this or not, as he pleases. The writer slipped binding post nuts over (Continued on page 22)





Operates from light socket. Supplies the uniform voltage necessary for perfect reception. Absolutely noiseless. Guaranteed not to set up the slightest hum. No acid to spill. No moving parts to get to out of order. Requires no attention. As easy to operate as switching on a light. Convenient and dependable. The least expensive plate current supply because of its long life. In handsome walnut case. Price complete, \$35.

Your dealer can supply you.

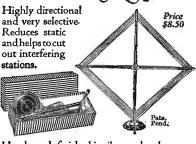
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Improves tone quality. Increases selectivity, range and volume. Losses are negligible. Has exceptionally high ratio of inductance to resistance with minimum distributed capacity.

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Duo-Spiral Tolding Loop



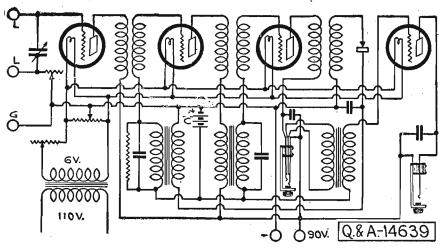
Handsomely finished in silver and mahogany. Easily portable. Has long handle and graduated dial. A special model for every circuit.

See these standard units at your dealer's or write for complete information.

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Questions and Answers



110 Volts on Acme Reflex

(14639) BKR, Cleveland, O.

I have a four tube Acme reflex receiver

I have a four tube Acme renex receiver that has been giving me good service for some months. Your recent article on the use of 110 volts lighting current for the filament supply looks good to me but I cannot work out the circuit for applying it to my set. Will you please set me right on this? The diagram of my set is

A.—While it may be subject to a few changes, we believe the diagram shown above will be correct for combining your set with the Cope unit described. The chief change lies in the potentiometer used to get the correct bias on the grid of the first tube. Since we no longer have of the first tube. Since we no longer have a D. C. line with 6 volts, this potentiometer cannot be put across the filament circuit for securing grid bias.

It is now in the filament return of the

first grid circuit where it introduces losses sufficient to keep the first tube

Make \$100 WEEKLY in spare time. Sell what the public wants—long distance radio receiving sets. Two sales weekly pays \$100 profit. No big investment, no canvassing. Sharpe of Colorado made \$955 in one month. Representatives wanted at once. This plan is sweeping the country—write today before your county is gone. OZARKA, Inc., 128D West Austin Ave., Chicago.

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SEND NO MONEY wanted and we will ship day order in received. Extra Offer: 4 batteries Inseries (65volta), \$12.76. Pay expressman after examining batteries. 6 per cent discount for cash with order. Mail your order now! Cash with order. Mail your order now!

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Makere of the Famous World Radio "A" Storage Battery

Prices: 6-voit, 100 Amp. \$11.25; 120 Amp. \$11.25; 100 Amp. \$14.00.

All equipped with Solid Rubber Case.

Set your Radio Dials at 210 meters for the new 1000 wat World Storage Battery Station, WSEC, Chicago. Watch for announcements.

from oscillating. Its use here may broaden the tuning slightly but not a great deal. The key wire to which all grids return and to which the negative B is connected may or may not have to be grounded but we believe it will, as shown shown.

B Battery Eliminators

(14591) GG, Johnsonburg, Pa.
I would like to have your opinion of B battery eliminators and if there is one on

Better Edison Elements 7½c pair. Sample 10c. Chapelle, Woodburn, Oregon.

Long Distance Radio \$2.95. Lambert's newest crystal success. No tubes. No batterles. No grief. Always ready. Works 600 miles. Fully guaranteed. We pay postage. Order direct from this ad. Leon Lambert, Wichita, Kansas.



Station after station pops in as you turn one dial. More selective, distance and volume. Daytime service from distant sta-

Proof on request.

F. C. BRADLEY, Union, Miss.

Manufacturers! A Service You Need

A director of sales and adver-

A personal producer with the following credentials.

Wide experience with manufacturers' problems and how met, gained through manufacturing, advertising agency and publishing training.

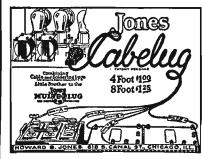
Ability to create sales plans, that sell goods, knowledge of how to coordinate advertising and sales departments to produce maximum results.

Thoroughly versed in radio, pub-

Thoroughly versed in radio, publisher and agency service.
Willing to demonstrate ability.
Will accept modest salary and share of increased profits. Only well financed proposition

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Manufacturers invited to cor-respond with Box 200, care of Radio Digest, 247 Park avenue, New York, N. Y.



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binding posts required. HOWARD B. JONES CHICAGO 618 S. Canal St.

-You can, we are sure, buy with confidence the Balkite, Freshman, Gould, Philco or Cooper. The last named two also make combinations of A and B elimi-

"TRAVELER" RECEIVER

(Continued from page 21)

the mounting screws on those sockets, be-tween the sockets and the sub base to raise them and reduce any dielectric absorption of energy by the sub base from the socket springs, and reduce the tendency of dielectric placed close to them to cause greater capacity between plate and grid springs.

(The wiring of the sub base and the

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With World Radio Stamp Album and Log. Contains ruled spaces for stamps of stations in U. S., Canada, Europe, etc. Stick stamps in proper spaces as stations are heard. Also contains convenient Log and complete list of stations, call letters, wave lengths, etc. Send 35c for Album and get 25 genuine radio stamps. FREE.

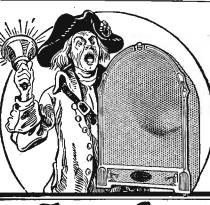
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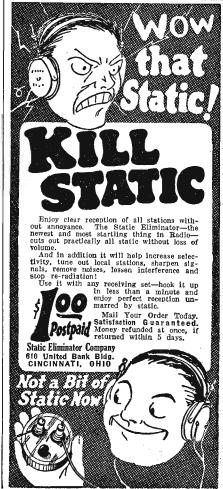
the market that you would advise me to wiring between the sub base and front buy. Ryan. This will complete the construc-tion, and the fourth article will contain adjusting and tuning instructions.—Editor's Note.)

Telegraphy—Both Morse and Wireless taught thoroughly. Big salaries. Wonderful opportunities. Expenses low; chance to earn part. School established fifty years. Catalog free. Dodge's Institute, Sixth St., Valparaiso, Ind.





It's OUT—Complete everlasting ready to run non-acid, non-sulphating 22½-volt rechargeable "B" storage battery, \$2.95. Includes chemical. Does not lose its charge standing idle. Special 2-22½ volts (45 volts) \$5.25; everlastically standing idle. Special 2-22½ volts (45 volts) \$5.25; everlastically standing idle. Special 2-22½ volts (45 volts) \$5.25; everlastically standing volts \$12.50; 135 volts \$14.75; 157½ volts \$16.80. Nearly 3 years sold on a non-retape, 30-day trial offer, with complete refund if not thoroughly satisfied. Further guaranteed years. Knockdown kits at still greater savings. Complete ready to run "B" battery charger \$2.75. Sample cell 35c. Order direct—send no money—simply pay expressman its cost on delivery, or write for my free literature, testimonials and guarantee. Same day shipments. My large 36-page radio goods catalogue 10c. B. D. Smith, 31 Washington Ave., Danbury, Conn.



Radiophone Broadcasting Stations

Corrected Every Week-Part III

FIND MISTAKES AND YOU'LL GET DOLLAR

NE DOLLAR will be paid to the Radio fan reader of Radio Di-gest submitting the most errors in any one station's listing in the Directory of Radiophone Stations, which appears in five parts, serially continuously on the next to last page. Letters must reach Radio Digest's office not later than one week from date of issue later than one week from date of issue corrected. Readers are not limited to correcting one station, but such corrections must be verified by the stations themselves, and NOT by comparison to other so-called accurate Radio directories or lists. Verifications must accompany corrections. Turn in corrections for as many stations as you can find—if you can find errors! Use separate sheet of paper for each station submitted and place name and address on each sheet. In case of tie, duplicate awards will be made. Asterisks have been placed in front of corisks have been placed in front of corrected listings and new stations in order to distinguish them.

United States (Cont'd)

NOTE.—The third part of the schedule list appears below. The fourth part which consists of the remainder of the list will appear next week.

Beloit, Wis. 268 meters, 500 watts. Beloit e. Announcer, Glenn Armstrong. Sun, 4:30 pm,

webw. Beboit. Wis. 288 meters. 500 watts. Beloit. *College. Announcer, Glenn Armstrong. Sun, 4:30 pin, Central.

WEBZ, Savannah, Ga. 263 meters. 500 watts. Savannah Radio Corp. Mon. Wed. Fri. 8:30 pm. Eastern.

WEBZ, Savannah, Ga. 263 meters. 500 watts. Edison **Elec. Illuminating Co. Announcer, C. R. Emery. Slogan: "The Friendly Voice." Daily ex Sun, 6:43 am, exercises; 7:45, watch. Mon. 4 pm, 5:30, 6:30-10:30. 10:30. Thers. 3 pm. 4, 6:39-10, 10. Wed. 4 pm, 6:30-10, 10. Sun, 7:20 pm, 9:20. Eastern.

WEBS, Boanston, Ill. 205.4 meters. 20 watts. Robert Daily ex Sun, 6:43 amile Savanston, Ill. 205.4 meters. 20 watts. Robert D. Hughes.

WEMC, Berrlen Springs, Mich. 285.5 meters. 500 watts. **Emanuel Missionary College. Slogan, "The Radio Lighthouse." WENR, Chicago, Ill. 266 meters. 1,000 watts. All-American Radio Corp. Amouncer, Frank Westphall. Wed. Fri. Sat, 6-7 pm; 8:10; 12-2. Tues, Thurs, 6-7 pm; 8:10. Sun, 3:4 pm; 9:30-11:30.

WEW, St. Louis, Mo. 248 meters. 100 watts. St. **Louis University. Daily ex Sun, 9 am, 10, 2, 5 pm, reports. Tues, Thurs, 7 pm, lectures, music. Sun, 7:30 pm. Central.

WFAA, Dallas, Tex. 475.9 meters. 500 watts. Dailas News and Dallas Journal. Announcer, Adams Colhoun. Slogan, "Working for All Alike." Daily, 6:30-7:30 am, exercises. 10:30 am, reports; 12:30-1 pm, address; 2:30-3, 3:30-4, 4:30-5, reports, news; 5:30, children's hour; 8:30-9:30, concert, weather service; 9:30-11, music. Central.

WFAA, Dallas, Tex. Slogan: "Granite City of the World." Announcer, Otto A. Rupp. Daily ex Sun, 4:45 pm, markets. Central.

WFAA, Dallas of the Slogan: "Granite City of the World." Announcer, Otto A. Rupp. Daily ex Sun, 4:45 pm, markets. Central.

WFAB, Choxville, Tenn. 250 meters. 50 watts. First Baptist church. Announcer, 424 pm, sacred music. Central.

WFBB, Philadelphia, Pa. 234 moters. 5 watts. Geth-seman Baptist church. Off the air in the summer.

10:45 am; 7:30 pm, services; 4 pm, sacred music. Central.

WFBD, Philadelphia, Pa. 234 moters. 5 watts. Gethsemane Baptlist church. Off the air in the summer.

WFBE, Seymour, Ind. 226 meters. 10 watts. Van de

Walle Music and Radio company. Announcer, John
Vun de Walle.

WFBG, Attoona, Pa. 278 moters. 100 watts. The Wm.

F. Gable Co. Announcer, Roy F. Thompson. Slogan,

"The Original Gateway to the West." Daily ex Sat.

Sun, 11:45 am, music; 3:45 pm; 6:15. Mon, 7:15 pm,

3:30, 10:30, Bri, 7:15 pm; 7:30, 8:30, 11:15. Sat,

7:30 pm, Eaştern.

WFBH, New York, N. Y. 272.6 meters. 500 watts. Consourse Radio Corp. Announcer, Alvin E. Hauser.

Slogan, "Voice of Central Park." Mon, Tues, Fri, 2-7

pm. Wed, Thurs, Sat, 2-8 pm. Mon, Sat, 11:30 pm,

Sun, 5-8 pm. Eastern.

*Radio Supply Co. Minn 236 meters. 500 watts, Galvin

*Radio Supply Co. Minn 236 meters. 50 watts, Ski

Sun, 5-8 pm. Eastern.

WFBI, Camden, N. J. 236 meters. 500 watts, Galvin
*Radio Supply Co.

WFBJ, Collegerille, Minn. 236 meters. 50 watts. St.

*John's university. Announcer, Hilary Doerfler, Slogan,
"In the Heart of the Landscape Paradise." Sun, 7
7:30 pm. Central.

WFBL, Syracuse, N. Y. 252 meters. 100 watts. Onondaga Hotel company. Announcer, Ernest E. Chappell.

Datly cx Sun, 12-1 pm; 6:15-7:15. Tues, Thurs, Sat,
10:12 midnight. Fri, 9-9:45 pm. Sun, 5-6 pm; 6:15
7:15. Eastern.

WFBM, Indianapolis, Ind. 268 meters. 250 watts.
Merchants Heat and Light company. Announcer, John
Merchants Heat and Light company. Announcer, John
C. McPhee. Slogan, "The Convention City of America." Closed for the summer.

WFBR, Baltimore, Md. 254 meters. 100 watts. Fifth
Infantry, Maryland National Guard. Slogan, "Home
of the Star Spangled Banner." Announcer, H. J.
Lepper. Mon, Wed, Fr. matinee programs. Thurs,
Thurs, Sat, evening programs. Sun, morning program.
Eastern.

WFBE, Galesburg, Ill. 254 meters. 20 watts. Knox
college.

wfDF, Flint, Mich. 234 meters. 100 watts. Frank D. Falleln. Slogan, "The Vehicle City." Fri, 8 pm.

WFOF, Flint, Mich. 234 meters. 100 watts. Frank D. Fallichn. Slogan, "The Vehicle City." Fvi. 8 pm. Eastern. WFI, Philladelphila, Pa. 394.5 meters. 500 watts. Straw-bridge & Clothier. Announcer, John Vandersloot. Daily & Sun, 10.15 an, reports; 10.30, music; 10.40, home service; 1-1.50 pm. ovchestra; 1.50, reports; 3-4.30, concert. 8 m, 10.30 am, 7.30 pm, church services alternating. Eastern.

FKR, Chicago, Ill. 317.3 meters. 500 watts. Francis "K. Bridgman, Announcer, Horace Kchm. Daily ex Sun, 10.70 pm. Central.

WFRL, Brocklyn, N. Y. 205.4 meters. 100 watts. "Robert Morrisson Lacey."

WGAL, Lancaster, Pa. 248 meters. 10 watts. Lancaster Elec. Supply & Construction Co. Announcer, J. R. Gaintner. Slogan: "World's Gardens at Lancaster. WGAL, Lancaster, Pa. 545-615 pm, dinner concert. Wed, 1:1.5-1 am, organ. Eastern.

WGBA, Baltimore, Md. 254 meters. 100 watts. Jones Elec. & Radio Mfg. Co., Slogan, "Watte Greater Baltimore Advance." Announcer, Winters Jones. Club "Staying up with the Jones. Daily ex Sun, 12-1:30 pm. Mon, 7-8 pm, 9:30-12. Thurs, 7-12. Sun, 9:30-11:30 pm. Every other Sun, 2-4 pm. Eastern. WGBS, Herport, N. Y. 244 meters. 100 watts. Harry H. Garman. Sun, 10:43 am, church. Eastern. WGBC, Hemphis, Tenn. 256 meters. 10 watts. First Baptist church. Announcer, M. L. Martin. Slogan, "Radio Bible Class." Sun, 9:35 am, 7:30 pm. Central.

WGBF, Eranville, Ind. 236 meters. 100 watts. The Fines Purmiture Co. Amouncer. Rando Pinks. Daily markets, news; 5:290 buseball. Tues. Pris. 8-10 pm. States. States. States. States. Pris. 8-10 pm. States. S WGBX, Orono, Me. 252 meters. 100 watts. University of Maine.

WGCP, New York, N. Y. 252 meters. 500 watts. Grand Central Palace. Anniouncer, Alfreit Hall. Slogan, "Four Left Prince Station," Daily ex Sun, 3-5 pm. 261 pm. 262 pm. 2

WHB, Kansas City, Mo. 365,6 meters. 500 watts.
Sveeme Auto & Electric School. Announcer, John T.
Sveeme Auto & Electric School. Announcer, John T.
Sveeme Auto & Electric School. Announcer, John T.
Sveeme Auto & Electric School. Announcer, Dally ex Schilling. Slogan, "The School. 12.2, 12.10 pm, 12.25, 12.3, 21.5 pm, 12.30 pm, 12.25, 12.3, 21.0 pm, 12.25, 21.

tral.

WIBP, Meridian, Miss. 209.7 meters. 5 watts. First
Presbyterian church.

Presbyterian church.

WBR, Welrton, W. Va. 246 meters. 50 watts. TriState Radio Co. Announcer, W. D. Johnston. Slogan,

"The Town Where Everybody Works." Fr1, 8:30-11
pm. Sun, 2-3 pm. Eastern.

WBS, Elizabeth, N. J. 202.6 meters. 20 watts. New
Jersey National Guard.

WBT, New York, N. V. 211.1 meters. 100 watts.

Orlando Edgar Miller.

WBU, Poynette, WIs. 222 meters. 20 watts. The
Electric Farm.

WBV, Henderson, N. C. 263 meters. 20 watts. Jewell
Radio Co.

Electrio Farm.

WiBV, Henderson, N. C. 263 meters. 20 watts. Jewell Radio Co.

WiBW, Logansport, Ind. 220 meters. 100 watts. Dr. L. L. Dill.

WiBX, Utica, N. Y. 205.4 meters. 5 watts. Grid-Leak, Inc.

WiBZ, Montgomery, Ala. 231 meters. 10 watts. Powell Elec. Co.

WiL, St. Louis, Mo. 273 meters. 250 watts. St. Louis.

Star and Benson Radio Co. Announcer, Billy Knight. Slogan, "Watch It Lead." Mon, Sat, 10-12 midnight. Wed, Fri, 9-11 pm. Thurs, 8-10 pm. Central.

WIP, Philadelphia, Pa. 508.2 meters. 500 watts. Gimbel Bros. Announcer, E. A. Davies. Slogan, "Watch Its Progress." Daily ex Sun, 7-7:30 am, 1-2 pm, 3-4:30, 6-6:45, music; 7-7:30, pm. Tues, Thurs, Sat, 8-12 pm, concert. Sun, 10:45-12 m, 4:15-6:30 pm, 7:45-9, 10-12. Eastern.

WJAD, Waco, Tex. 352.7 meters. 500 watts. Frank P. *Jackson. Mon, Fri, 8:30-10 pm. Central.

WJAG, Norfolk, Nebr. 276 meters. 250 watts. Norfolk Daily News. Announcer, Karl Stefan. Slogan, "The World's Greatest Country Daily, and Home of Printer's Devil." Daily ex Sun, 12:15 pm; Sun, 3:30-6 pm, music. Central.

WJAK, Greentown, Ind. 254 meters. 100 watts. Clifford VIAK.

WJD, Granville, O. 217.3 meters, 10 watts. Denison Univ. Announcer, Richard H. Howe. Fri, Sat, 5-6 pm, music, educational lectures. Athletics. Eastern. WJID, Mooseheart, Ill. 302.8 meters. 500 watts. Loyal Order of Moose Station. Announcer, Jack Nelson. Slogan, "The Call of the Moose." Dally ex Sun, Mon. 3:0-4:39 pm. Stillen's program; 6:45-8 pm. 10:70-71. Sun, 8:45-10 am, services; 10:45-12, services; 12-2. Capttri.

WJR, Detroit, Mich. 516.9 meters. 5,000 watts. Jewelt Radio and Phonograph Co. Slogan, "Where Joy Reigns." Announcer, Leo Fitzpatrick. Daily ex Sun, 7-8 pm, 9-10. Thurs, 16-11 pm. Eastern.
WJY, New York City. 405.2 meters. 1000 watts, R.C.A. Announcer, J. Lewis Reid. Thes. Thurs, Fri, 7:30-11:30 pm, concert. Sun, 8:15-10:30 pm. Eastern. WJZ, New York, N. Y. 494.3 meters. 1,000 watts. ** L. C. A. Announcer, Milton J. Cross. Daily ex Sun, 10-11 am. 1-2 pm. 4-6 entertainment: 7-11:30 pm, special program. Sun, 11 am-1 pm, church services; 2:30-5 pm, 7-10:30 pm. Eastern.
WKAA, Cedar Rapids, Ia. 278 meters. 500 watts. H. P. Patr, announcer. Mon, Wed, Fri, 4-5 pm; 8:30-10; MAF Milton J. Cross. Daily ex WAF Milton J. 10-11 am. 1 pm. church services; 2:30-5 pm, 7-10:30 pm. Eastern.
WKAP Broadcasting Co. WKAP, Cranston. R. I. 234 meters. 500 watts. Dutee Willows Flint, Inc.
WKAQ. San Juan, Porto Rico. 340.7 meters. 500 watts. WAF Broadcasting Co. WKAP, Cranston. R. I. 234 meters. 500 watts. Dutee Willows Flint, Inc.
WKAQ. San Juan, Porto Rico. 340.7 meters. 500 watts. Fadilo Corp. of Porto Rico. Announcer, Joaquin Agusty. Siloxan, "The Irland of Enchantment, Where colonial.
WKAR, East Lansing, Mich. 285.5 meters. 1,000 watts. **Mich. State College. Announcer, Joaquin Agusty. Siloxan, "The Irland of Enchantment, Where colonial."
WKAY, Laconia, N. H. 209.7 meters. 50 watts. Laconia Radio Club (Portable).
WKEG, Chicago, Ill. 215.7 meters. 100 watts. **Shirley Katz.**
WKAC, Chichnatl, Ohio. 422.3 and 325.9 meters, alternate months, 1,000 watis. Kodel Radio Corp. Announcer, Eugene S. Mitchedorf. Mon. 6:15-7 pm.

Thurs, 8 pm. Central.

WLIT, Philadelphia, Pa. 394.5 meters. 500 watts.

Lit Bros. Announcer, Harry E. Ehrhart. Club, "Morning Glory." Dally ex Sun, 12:02 pm, muslc: 2, music. Mon, 4:30 pm, 7:30 pm, 8, 10, 11. Fri, 7:30 pm, 8:45, 10. Eastern.

WLS, Chicago, Ill. 344.6 meters. 500 watts. Sears, Roeshuck & Co. Announcer, George D. Hay. Slogan, "World's Largest Store." Dally ex Sun, 9 am, 10, 11, 12, 1-2. Tues, 6:30-7:35 pm. Wed, 6:30-12:30 am. Fri. 6:30-11:30. Thurs, 6:30-8:55. Sat, 12-12:45 pm, Junior R. F. D. program; 7:46-1, Sun, 7:30-8:55.

12. 1-2. Thes. 6:30-7:35 pm. Wed, 6:30-12:30 am. Fr1, 6:30-11:30. Thurs, 6:30-8:55. Sat, 12-12:45 pm, Junior R. F. D. program; 7:46-1. Sun, 7:30-8:55. Central.

WLTS. Chicago. Ill. 258 meters. 100 watts. Lane "Technical High school. Thurs, 1-2 pm. Central.

WLW. Cincinnati, O. 422.3 meters. 5000 watts. The "Crosley Radio Corp. Announcer, William Stoess. Daily ex Sun, 10:45 am, 11:55, time; 1:30 pm. Daily ex Sun, Fr1, 7, dinner hour; 7:30, baseball; 6:55, markets. Daily ex Sat, Sun, 7:45 am, morning devotions; 8, exercises; 12:15, program; 3, 4, reports. Mn. Tues, 8-10 pm. Wed, Thurs, 10-12 mid. Sun, 9:30 am, 11, 7:30 pm, 8:30. Central.

WLWL. New York. N. Y. 288.3 meters. 1,000 watts. "Missionary Society of St. Paul the Apostle. Announcer, Junes F. Cronin. Slogan, "For God and Country," Sun, Tues, Fr1, 8 pm. Eastern.

WMAG, Cazenovia, N. Y. 275 meters. 100 watts. C. B. Meredith. No definite schedule.

WMAF, South Dartmouth, Mass. 440.9 meters. 1,000 watts. Round Hills Radio Corp.

WMAK, Columbus, Ohio. 278 meters. 500 watts. Norton Laboratories. Announcer, I. R. Lounsberry. Thurs, 11 pm, midnight serenaders. Eastern.

WMAN, Columbus, Ohio. 278 meters. 50 watts. First Raptist church. Announcer, Dr. D. F. Rittenhouse. Sun, 10:30-12 m, 7:30-9 pm, ehurch services. Eastern. WMAQ, Chicago, Ill. 447.5 meters. 500 watts. The Chi-"ango Daily News. Announcer, Roberty Whitney. Daily ex Sun, Mon, 12-3 pm, 4-7. Daily ex Sun, Mon, 8-10 pm. Central.

WMAY, Macon, Ga. 261 meters. 500 watts. Mercer university. Announcer, Carey O. Pickard. Mon, Thurs, 8-9 pm. Yed. 11-12. Eastern.

WMAS, Chicago, Ill. 450 meters. 500 watts. American Rond & Mortgage Co. Trianon. Announcer, Clyde ex Sun, Mon, 12-3 pm, 4-7. Daily ex Sun, Mon, 8-10 pm, Central.

WMAY, Macon, Ga. 261 meters. 500 watts. American Rond & Mortgage Co. Trianon. Announcer, Clyde WMS, Most Beautiful Bailroom." Daily ex Mon, 7-8 pm; 9-11. Sun, 3-5 pm. Central.

WMCA, Memphis, Tenn. 499.7 meters. 500 watts. The Com-"neretal Appeal. Announcer, Francis S. Chamberllo. Slogan, "Wa

Santr. 17-12. Sant. Sant. 17-12. Sa

Central.

WNAR, Butler, Mo. 231 meters. 20 watts. First Christian church. Announcer, Perry V. Riley. Sun. 11 am, 8 pm. Central.

WNAT, Philadelphia, Pa. 250 meters. 100 watts. Lensing Bros. Co. Announcer, Jess Brinton Young. Slogan, W. W. Never Are Tired." Wed, 6:50 pm. Eastern. WNAX, Yankton, S. D. 244 meters. 100 watts. Dakota Radio Apparatus Co. Dally ex Sun. 11:30-11:45 am, markets, weather; 5-6 pm, music. Central. (Note—The fourth part of the directory will appear next week.)

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